Introduction

The COVID-19 pandemic has had a profound impact on U.S. manufacturing over the past year. In the short term, the pandemic has curtailed demand for many manufactured goods and interrupted supply chains en masse. Yet, it has also provided opportunities for manufacturers to pursue creative and adaptive strategies, for example shifting production to personal protective equipment (PPE) and medical devices. The scale of these manufacturing gains or losses have not rested entirely on the decision-making capacity or resourcefulness of a few individual firms, but also on the institutional support and coordinated assistance that manufacturers receive now and throughout the post-pandemic recovery period. The 2020 CARES Act recognized the potential of manufacturers to implement creative strategies in response to the pandemic, and distributed $50 million in support to manufacturing adaptation efforts coordinated by the U.S. Manufacturing Extension Partnership (MEP).

Established in 1988 by the National Institute of Standards and Technology (NIST), MEP is a decentralized network of 51 centers, representing each state and Puerto Rico. In 2019, MEP centers interacted with more than 28,000 manufacturers. That support generated $15.7 billion in new and retained sales, $1.5 billion in cost savings and created or retained more than 114,000 U.S. manufacturing jobs. This project assesses how our federally-funded manufacturing extension system is delivering support to manufacturers that need assistance in responding to the COVID-19 pandemic using these institutional supports as well as the re-purposing of existing resources.

In the Fall of 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.

Research Team

**PROJECT TEAM LEADS**
Nichola Lowe, Ph.D. (nlowe@unc.edu)
Olivia Raines (oraines@live.unc.edu)

**RESEARCH AND DATA VISUALIZATION ASSISTANCE**
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Todd Owen (towen@email.unc.edu)
Methodology

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.

Description of Contents

This profile package opens with a matrix that shows the responses of each center across 12 categories:

- Apprenticeships & Youth Engagement
- Cybersecurity Protection
- Displaced Worker Support
- Industry 4.0 & Technology Uptake
- Informational Webinars
- Layoff Aversion
- Needs Surveys & Consulting
- Online Worker Training
- PPE Product Testing & Technical Assistance
- PPE Retooling & Technical Assistance
- Product & Supplier Matching
- Return to Work Guide(s)

Next, we organized the responses into related strategic categories, presenting several examples in order to highlight their significance. Following this, the package contains the 51 profiles for each MEP center, which provide a more detailed view of the range of adaptive and innovative responses.

Funding

This project was supported by the North Carolina Policy Collaboratory at The University of North Carolina at Chapel Hill with funding from the North Carolina Coronavirus Relief Fund, established and appropriated by the North Carolina General Assembly.

Report Citation

TECHNOLOGY
Cybersecurity Programs and Industry 4.0/Technology Uptake

22 states implemented a cybersecurity program, either as a direct response to the pandemic, or as a complementary program. (AR, CA, CT, GA, ID, IL, KY, ME, MI, MO, NE, NH, NY, ND, PA, SC, TX, UT, VA, WA, WV, WY)

5 states either augmented an existing Industry 4.0/Technology Uptake program, or utilized CARES funding to support these initiatives. (AR, IL, OR, PR, UT)

RESPONSE HIGHLIGHTS

IMPACT WASHINGTON announced it is using $1 million in Department of Defense grant funding to provide no-cost, self-paced cybersecurity training programs to help manufacturers achieve cybersecurity maturity and compliance. Additionally, Impact Washington is launching a Cybersecurity Pilot Program, which will match 19 companies with cybersecurity advisors that provide one-on-one consulting services.

In August 2020, THE ILLINOIS MANUFACTURING EXCELLENCE CENTER (IMEC) was awarded funding to deliver Advanced Manufacturing Technology Services (AMTS) to small and mid-sized manufacturers. IMEC announced a new Industry 4.0 program that will help manufacturers meet current challenges, such as workforce gaps and declining sales, and develop innovative techniques and skills to respond and rebound after the pandemic. Through targeted assistance provided by IMEC, 80 selected companies will identify and implement Industry 4.0 technologies such as robotics and automation technology to advance their competitiveness on a global scale.

In April 2020, THE OREGON MANUFACTURING EXTENSION PARTNERSHIP (OMEP) announced its plans to launch the Factory of Tomorrow Virtual Lab. The lab is intended to empower manufacturers to adopt emerging technologies, increase efficiency and competitiveness, and meet the challenges brought on by the pandemic. The Factory of Tomorrow Lab launched in September 2020, and serves as Oregon's first advanced technologies lab dedicated exclusively to small and medium manufacturers, and will help position companies to rebound from the pandemic with advanced technologies and skillsets.
Layoff Aversion, Displaced Worker Support, Online Worker Training, and Apprenticeships & Youth Engagement

WORKFORCE

8 states implemented layoff aversion strategies to prevent or minimize job loss.
(HI, ID, ME, NV, NH, NC, RI, VA)

4 states provided support for displaced workers.
(NV, NJ, OK, RI)

3 states identified opportunities to provide apprenticeships and youth engagement opportunities during the pandemic.
(FL, IL, MA)

RESPONSE HIGHLIGHTS

FloridaMakes announced the launch of the Industrial Manufacturing Technician (IMT) Apprenticeship Program in April 2020. The program is fully available on-line and on demand to provide more flexible access and overcome geographic barriers to training, while meeting the challenges presented by the pandemic. The program offers a focus on entry-level skills and offers IMT and Certified Production Technician (CPT) credentials, as well as access to the Manufacturing Skills Standards Council’s (MSSC) Certified Production Technician training curriculum.

RHODE ISLAND’S POLARIS MEP launched the Rhode Island Manufacturing Talent Exchange in April 2020. The exchange supports employers that are hiring during the pandemic by providing matchmaking services that identify workers with applicable experiences and skillsets, as well as supports employers that are currently displacing workers due to layoffs brought on by the pandemic.

NEVADA INDUSTRY EXCELLENCE launched the Manufacturing Technician (MTI) Express Online Certification Prep program in September 2020. The program is free to recently displaced workers, and includes two self-paced, college-level online courses as well as post-certificate interview opportunities. This program provides an entry level pathway to careers in manufacturing.
PPE & SUPPLY CHAIN
Product & Supplier Matching, PPE Retooling, and PPE Product Testing

42 states provided product and/or supplier matching services. (AK, CA, CO, CT, DE, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MS, MO, MT, NE, NV, NH, NJ, NM, NY, NC, ND, OH, OK, OR, PA, PR, SC, TN, TX, UT, VT, VA, WI)

29 states have provided assistance with retooling to produce PPE. (AK, AR, CA, CO, CT, FL, GA, HI, ID, IL, IN, IA, KS, ME, MA, MT, NJ, NY, NC, OH, OK, PA, PR, RI, TN, TX, VT, VA, WA)

13 states have assisted manufacturers with PPE product testing and development. (CT, ID, IA, ME, MA, MS, MO, NC, OH, RI, TN, TX, VT)

RESPONSE HIGHLIGHTS

NORTH CAROLINA MANUFACTURING EXTENSION PARTNERSHIP (NCMEP) has a statewide team of regional managers who are trusted advisors to North Carolina manufacturers. For those manufacturers who completed NCMEP's Emergency Assistance Program (EAP) survey, the regional managers reached out to them to determine how the pandemic impacted their business and what services NCMEP might offer to help them pivot to producing PPE temporarily or long-term, reshore products, and develop business continuity plans to minimize supply chain disruption. Assistance includes advanced product testing, medical device/FDA support, supplier scouting, market development, business continuity, and disaster recovery.

THE VERMONT MANUFACTURING EXTENSION CENTER (VMEC) became involved as a key partner in efforts to bring to market an innovative new product that addresses critical supply needs. Over the spring of 2020, researchers at the University of Vermont (UVM) developed an innovative new ventilator, named the "Vermontilator." This emergency ventilator provides a mode of ventilation called "airway pressure release ventilation," or APRV, which is different from most emergency ventilators that are based on resuscitation of squeeze bag ventilation. The Vermontilator is simpler to manufacture than comparative equipment. The research team engaged the assistance of VMEC to recruit several Vermont manufacturers to be involved in the design for manufacturing process. These manufacturers produced parts and assemblies for test units. VMEC's assistance allowed the research team to be ready to manufacture and bring the Vermontilator to market pending FDA Emergency Use Authorization Approval.
OUTREACH & NEEDS ASSESSMENTS

Needs Surveys & Consulting, Informational Webinars, and Return to Work Guide(s)

48 states provided new or expanded consulting services or performed needs surveys.
(Al, AK, AZ, AR, CA, CO, CT, DE, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MI, MN, MO, MT, NE, NV, NH, NJ, NY, NC, ND, OH, OK, OR, PA, PR, RI, SC, SD, TN, TX, UT, VA, VT, WA, WV, WI, WY)

42 states conducted informational webinars.
(Al, AK, AZ, AR, CA, CO, CT, FL, GA, ID, IL, IN, IA, KS, KY, LA, MD, MA, MI, MN, NV, NH, NJ, NY, NC, NH, OK, OR, PA, PR, RI, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, WY)

31 states created return to work guides.
(Al, CA, CO, CT, DE, FL, GA, IL, IN, IA, KS, LA, ME, MD, MI, MO, NJ, NY, OH, OK, OR, PA, PR, RI, SC, SD, TN, TX, VT, VA, WA)

RESPONSE HIGHLIGHTS

ENTERPRISE MINNESOTA conducts a State of Manufacturing Survey each year. This comprehensive survey of Minnesota’s manufacturers "reveals their perceptions and opinions on the economy and other issues impacting business." This year, the annual survey was particularly unique as it was held in March, and included responses from both before and after the pandemic hit. To account for these differences, Enterprise Minnesota conducted a second survey in September to assess the impact of COVID-19. Results were released in November 2020. Enterprise Minnesota interviewed over 500 manufacturing executives across the state and incorporated data from Minnesota's six regional initiative foundations.

NEW YORK MANUFACTURING EXTENSION PARTNERSHIP subcenter, Fuzehub, was granted $350,000 in CARES Act funding to roll out the "Manufacturing Reimagined Program," which provides webinars and online workshops to manufacturers. The program has prioritized training focused on topics related to the pandemic and beyond. In addition providing these online training opportunities, FuzeHub is providing up to $10,000 in funding for project implementation for select manufacturers that participated in a webinar or workshop.
ELEVATING EXISTING PROGRAMS

22 states elevated an existing program as part of their response to the pandemic. (AL, AK, AR, CO, FL, CA, ID, IL, KY, MA, MI, MN, MT, NH, NC, ND, OR, PA, SD, TX, VA, WY)

RESPONSE HIGHLIGHTS

FloridaMakes has expanded upon their Connex Florida database tool, initially established in the aftermath of Hurricane Irma in 2017. Connex Florida is a statewide manufacturing supply chain, workforce, and R&D connection solution offered free of charge to manufacturers, educational institutions, and those performing manufacturing research and development in Florida. Connex Florida streamlines connections between manufacturers and those businesses in need of their products, which is particularly timely as businesses seek out critical PPE. Additionally, the service can connect companies workforces to training, and R&D teams to ongoing research.

Massachusetts Manufacturing Extension Partnership officially launched its partnership with Holbrook Middle-High School (HMHS) in early March 2020. The partnership provides students with the All Made Possible (AMP) learning program, an innovative STEM enrichment program, in an entirely virtual format. All Made Possible is an education and workforce development program created by MassMEP to introduce students to the multitude of career paths and employment opportunities available using advanced manufacturing technologies. Though the program was developed prior to the pandemic, its virtual format has helped meet some of the major barriers students have faced over the past year.

Arkansas Economic Development Commission Manufacturing Solutions (AEDC MS) has an ongoing partnership with CoreValue Advisor Software, a business consulting services firm, to provide business assessments for manufacturers that are looking to assess the true value of their firm. Core Value Assessments help companies determine what their business is worth and provides key insights for firms considering selling or transferring their business. Though this service was provided prior to the pandemic, assessments that focus on selling or transferring a business are an important service to provide during the pandemic as manufacturers face challenges such as declining sales and supply chain disruption.
PROFILES
## Frequency of MEP Center COVID-19 Responses

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<th>Product &amp; Supplier Matching</th>
<th>Informational Webinars</th>
<th>Return to Work Guide(s)</th>
<th>PPE Retooling &amp; Technical Assistance</th>
<th>Cybersecurity Protection</th>
<th>Online Worker Training (Le. Tooling U-SME)</th>
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COVID-19 RESPONSE PROFILE:

ALABAMA TECHNOLOGY NETWORK (ATN)

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 9/18/2020

ALABAMA MANUFACTURING AT A GLANCE (2020)

- 5,813 manufacturing establishments in the state
- 269,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Automotive manufacturing
  - Chemical manufacturing
  - Primary metals manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

COVID-19 VIRTUAL WEBINARS AND TRAINING*

Prior to the pandemic, ATN offered an existing online platform for manufacturers to access training materials. The website offers both workshops, which can be delivered in-person or in an online format, and a “Toolbox” that contains various resources that can be used in staff meetings, “toolbox talks,” and more.

In April 2020, ATN announced that these existing resources would be expanded through virtual trainings, webinars, and workshops that focused on topics related specifically to COVID-19. Webinar topics have included managing uncertainty in the workplace, emerging technologies, ergonomic assessment tools, and resources for working from home.

Additionally, ATN offers a robust training system for more in-depth topics, such as lean manufacturing, food safety, and automation. In May, ATN announced that they are working to provide a *blended format* for some of these courses to accommodate a virtual learning environment.

TECHNICAL ASSISTANCE FOR MANUFACTURERS

Manufacturers are encouraged to reach out to ATN for technical assistance and requests for customized support in addressing challenges related to the pandemic. In April 2020, the Environmental, Health, and Safety Team at ATN announced that staff is available to provide technical data to manufacturers, perform critical research to assess safety needs in the workplace, or provide general support and feedback over the phone.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
COVID-19 RESPONSE ACTIONS
(continued)

COVID-19 Assessment Tool**
ATN has expressed intent to develop an assessment tool that will help to determine how the pandemic has impacted manufacturers across the state. These assessments will allow ATN to direct manufacturers to available resources and virtual trainings to meet specific needs. ATN also plans to use the assessment tool to determine manufacturers' capabilities to produce PPE, and create a database that will directly assist companies seeking to purchase or produce PPE in supplier scouting efforts.

Competency-Based Training for Displaced Workers**
ATN has expressed intent to collaborate with the Alabama Community College System to help assist displaced workers. ATN aims to partner with community colleges to provide skills-based trainings and resources to workers who have already been displaced or are at risk for displacement. These training programs will build competency in a manufacturing field that will empower them to seek employment in industries that have not been heavily impacted by COVID-19.

Return to Work Mitigation Plan Post COVID-19
ATN has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and on-site testing. The guide is publicly available on the ATN website.

(**) indicates that the program has been planned but has not yet been implemented.
ALASKA MANUFACTURING AT A GLANCE (2020)

- **603** manufacturing establishments in the state
- **9,400** employed by manufacturing industry

**Primary manufacturing sectors:**
- Food manufacturing
- Petroleum and coal manufacturing
- Nonmetallic mineral manufacturing

Source: BLS QCEW Data, National Association of Manufacturers, State Manufacturing Data

COVID-19 RESPONSE ACTIONS

**SUPPLY CHAIN AND PPE SUPPORT**

Alaska MEP has committed significant resources to supporting manufacturers in Alaska that are in need of or have capabilities to supply critical PPE. In May 2020, Alaska MEP provided a [COVID-19 PPE Retooling Playbook](#). The document is intended to serve as a “fact base” and resource for manufacturers as they explore strategies, such as manufacturer retooling, for providing critical PPE supplies. The playbook outlines the primary PPE product types needed, gives a high-level perspective on industries that are well-positioned to pivot, provides production guidelines and product information sheets, and more. Alaska MEP is also in contact with multiple manufacturers across the state to provide technical assistance for specific retooling strategies, and has helped companies pivot to production of products such as hand sanitizer and face shields.

Additionally, Alaska MEP is providing support for manufacturers in need of critical PPE supplies. Manufacturers can put in a request for locally-provided PPE by filling out a [brief request form](#) on the Alaska MEP website.

**COVID-19 WEBINAR SERIES**

In September 2020, Alaska MEP announced that it would be launching a [monthly webinar series](#), which will provide a free, one-hour webinar session each month. The first installment of the webinar series was released in early September, and focused on e-commerce and marketing strategies for manufacturers looking to expand their customer base.
COVID-19 RESPONSE ACTIONS (continued)

Amendment to SB241: PPE Production
In partnership with several organizations, Alaska MEP advocated on behalf of manufacturers in the state to secure an amendment to SB241 in the Alaska Legislature in March 2020. The amendment provides a liability waiver to local manufacturers of personal protective equipment (PPE) in the event that a healthcare worker falls ill. This amendment removed a significant barrier to PPE production in the state, and provides manufacturers with increased flexibility to pivot to retooling opportunities. Upon passing the amendment, more than 50 manufacturers have been able to produce over 10,000 masks, 600 gallons of hand sanitizer, 2,000 Tyvek coveralls, and other critical supplies. Through both the SB241 amendment and the rapid deployment of in-state manufacturing, nearly 60% of the PPE manufactured in Alaska over the past three months has gone to Alaska businesses in need of critical supplies, while 40% has gone to frontline workers.

No-Cost Business Assessments*
Alaska MEP continues to provide free, ongoing no-cost assessments for manufacturers to identify key challenges and opportunities. Available support includes troubleshooting supply and demand challenges, addressing workforce and communication issues, hiring and retaining employees, and learning more about product costs and margins. Though Alaska MEP provided this service prior to the pandemic, many of the services offered lend themselves to meeting pandemic-related challenges. Manufacturers are asked to fill out a brief online survey, and receive follow-up services from an Alaska MEP consultant.

COVID-19 Resources and Guides
Alaska MEP has adopted a number of useful resources related to the pandemic from Iowa’s Center for Industrial Research and Service (CIRAS). Available resources include Responding to a COVID-19 Exposure at your Business, a supply chain disruption planning checklist, and a guide on protecting your business from COVID-19. All resources are publicly available on the Alaska MEP website.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
ARIZONA MANUFACTURING AT A GLANCE (2020)

- 5,281 manufacturing establishments in the state
- 180,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Computers and electronic products
  - Aerospace manufacturing
  - Food manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

EMERGENCY ASSISTANCE PROGRAM

Over the past several months, AZMEP has been working diligently to help manufacturers navigate the challenges and overcome the impacts of the COVID-19 pandemic. These efforts are being accelerated with a grant received through the NIST MEP Emergency Assistance Program. These funds will be used to subsidize services that directly support manufacturers’ ability to sustain operations and respond to the pandemic.

In addition to the standard services, AZMEP is offering additional services, subsidized by the funds from NIST, to help manufacturers overcome the impact of the pandemic. Some of the services included under this grant include strategic planning and identification of new markets, rebuilding customer demand, overcoming supply chain disruptions, financial and cash flow management, lean manufacturing and continuous improvement, and cybersecurity risk assessment and compliance planning, among others. To access these services, Arizona manufacturers are asked to complete the online application, which allows AZMEP to gauge the individual needs of each firm. An evaluation committee assesses each application and, if accepted into the program, a more detailed assessment will be provided and an advisor will be assigned. This streamlined service allows manufacturers to quickly access solutions to their most pressing concerns. Funds are available on a first come, first served basis.

COVID-19 VIRTUAL TRAINING AND EVENTS

AZMEP has hosted several webinars and virtual events covering a variety of topics related to the pandemic. Future events will be posted as they are scheduled for 2021, and can be viewed at azmep.com.
COVID-19 RESPONSE PROFILE

ARKANSAS ECONOMIC DEVELOPMENT COMMISSION MANUFACTURING SOLUTIONS (AEDC MS)

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/7/2020

ARKANSAS MANUFACTURING AT A GLANCE (2020)

• 2,948 manufacturing establishments in the state
• 161,000 employed by manufacturing industry
• Primary manufacturing sectors:
  ○ Aerospace manufacturing
  ○ Timber and forest products manufacturing
  ○ Food and beverage manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

MEP COVID ASSISTANCE PROJECT (MCAP) GRANT PROGRAM

In response to the pandemic, AEDC MS has allocated CARES Act funding to provide grants to small and medium manufacturers through the MEP COVID Assistance Project (MCAP) Grant Program. The purpose of this program is to provide funding for manufacturers to secure assessments from resource providers in the fields of healthy workplaces, cybersecurity, supply chain, and technology. Manufacturers are asked to identify and collaborate with a resource provider of their choice to complete an online application. Through the application, manufacturers and resource providers identify challenges and potential solutions, along with potential projects and implementation strategies.

Manufacturers are provided grants for up to $5,000 to complete projects with their resource provider, and are asked to participate in post-project surveys for two years after project completion, in order for AEDC MS to assess the long-term impact of the MCAP grants.

NO-COST COVID-19 RISK ASSESSMENTS

In August 2020, AEDC MS introduced a new program that will provide manufacturers in Arkansas with no-cost assessments that will focus on COVID-19 related business risks. AEDC MS is providing the funding for this initiative, and has contracted with three organizations to implement risk assessments for manufacturers within the AEDC MS network.
COVID-19 RESPONSE ACTIONS (continued)

Core Value Assessments*
AEDC MS has an ongoing partnership with CoreValue Advisor Software, a business consulting services firm, to provide business assessments for manufacturers that are looking to assess the true value of their firm. Core Value Assessments help companies determine what their business is worth and provides key insights for firms considering selling or transferring their business. Though this service was provided prior to the pandemic, assessments that focus on selling or transferring a business are an important service to provide during the pandemic as manufacturers face challenges such as declining sales and supply chain disruption.

Supply Chain Optimization Support
AEDC MS has created a supply chain optimization checklist for manufacturers experiencing supply chain disruption. This resource provides actionable steps for manufacturers who have already experienced disruption or that want to prepare for future disruptions. Those experiencing supply chain disruption are encouraged to reach out to AEDC MS to receive available resources and support.

Virtual Training and Webinars
AEDC MS has hosted several webinars covering a variety of topics related to the pandemic since March. Topics have included avoiding COVID-19 exposure in the workplace, supply chain disruption and flexibility assessments, workforce and HR challenges, revenue recapture, and emerging technologies.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
CALIFORNIA MANUFACTURING AT A GLANCE (2020)

- 44,865 manufacturing establishments in the state
- 1,313,589 employed by manufacturing industry
- Primary manufacturing sectors:
  - Chemical manufacturing
  - Food manufacturing
  - Machinery manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

[P] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

COVID-19 CUSTOMIZED RECOVERY AND GROWTH ASSISTANCE

In May 2020, CMTC launched a new program aimed at providing customized consulting services for manufacturers in California that are facing the unique challenges presented by the pandemic. CMTC is providing these advisory services through expert Business Stabilization Consultants (BSCs). Manufacturers with 500 employees or less can sign up to meet with a BSC for a discovery meeting to assess current business conditions and identify needs, challenges, and opportunities. BSCs then help to create a plan of action with customized recommendations at no cost to the manufacturer.

CMTC also provides services beyond the plan of action in areas such as business continuity planning, COVID-19 workplace safety, marketing, market diversification, near-sourcing, supplier scouting, risk management, and cybersecurity. Manufacturers can request a virtual meeting online to meet with CMTC to discuss their needs.

SUPPLIER SCOUTING & MATCHING PROGRAM

CMTC is currently providing PPE supply chain services through their Supplier Scouting & Matching Program. The program connects firms with critical PPE or other specific supply needs to companies that have capabilities. Businesses experiencing supply chain disruption are directed to an online form to request help identifying suppliers, and businesses with production capabilities are directed to a Manufacturing Capacity Assessment to identify the solutions their firm is able to provide. CMTC provides these supplier scouting and matching services at no cost.
COVID-19 RESPONSE ACTIONS
(continued)

New COVID-19 Partnerships and Services
In order to expand partnerships throughout the state and increase awareness and outreach efforts to California manufacturers, CMTC has led the formation of Regional Manufacturing Assistance Teams (RMATs). RMATs include local and state partners, as well as BSCs. They provide manufacturers with direct assistance and referrals to relevant information and resources, including CMTC, that can provide immediate solutions and COVID-19 focused services. CMTC has also developed new services to in response to the pandemic, including assisting small and mid-sized manufacturers in preparing California state & local attestations of compliance, risk assessments, and prevention & protection plans.

PPE Product Specifications and Procurement Resources
CMTC has developed a compendium of PPE product specifications to "help manufacturers understand the processes, materials, and capabilities necessary to produce products to satisfy critical PPE needs." Manufacturers interested in shifting to PPE production can complete an online request form to gain access to these resources.

CMTC Return to Work Guide
CMTC has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and on-site testing. The guide is publicly available on the CMTC website.

COVID-19 Webinar Series
Since May 2020, the CMTC website has dedicated space to a COVID-related webinar series. Topics have included borrowing money during a pandemic, reshoring manufacturing using the total cost of ownership analysis, workplace safety, teleworking and cybersecurity, global supply chains, financial resources at the local, state, and national level, addressing HR-related challenges, and more.
COVID-19 RESPONSE PROFILE:
MANUFACTURER’S EDGE MANUFACTURING EXTENSION PARTNERSHIP

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbaní (rumana.rabbaní@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 12/4/2020

COLORADO MANUFACTURING AT A GLANCE (2020)

- 5,911 manufacturing establishments in the state
- 150,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Computers and electronic products
  - Food manufacturing
  - Aerospace manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

SUPPLY CHAIN AND PPE SUPPORT

In an effort to meet Colorado manufacturers’ need for critical supplies, Manufacturer’s Edge has developed multiple supply chain support services. Over the past several months, Manufacturer’s Edge has provided online Product & Services Directory. The directory is a free online tool that aims to connect manufacturers with Colorado-based companies that can provide critical PPE supplies during the pandemic. Companies with PPE production capabilities contribute to the directory by submitting their company name and contact information, a brief description of their company, their product “genre,” (i.e., face shields, masks, sanitizer, etc.), and relevant tags so that manufacturers can quickly search the directory for their most critical supply needs. Thus far, 17 companies have added their products to the directory.

In addition to the Product & Services Directory, Manufacturer’s Edge has provided several supplementary supply chain support resources. Manufacturers are able to list capabilities and/or needs on the Manufacturer’s Message Board. The website also provides a link to an open source Google Doc compendium for critical supplies, which includes blueprints and product specifications for N-95 masks, hand sanitizer, hospital gowns and beds, and more. Additionally, Manufacturer’s Edge is participating in a statewide PPE Manufacturing Task Force to provide support for critical service providers in need of PPE. In April, Manufacturer’s Edge coordinated efforts to connect 6,500 manufacturers with hospitals across the state. In partnership with the statewide task force and a partner of Manufacturer’s Edge, the center is working with companies to pivot production to new product lines, as well as COVID-19 related PPE and other products (such as restaurant barriers, gowns for health care workers, hand sanitizers, etc.)
COVID-19 RESPONSE ACTIONS (continued)

Partnership with COVIDCheck
Manufacturer’s Edge recently announced its partnership with COVIDCheck Colorado, a philanthropic health consortium that aims to help Coloradans navigate the pandemic. COVIDCheck offers a comprehensive COVID-19 testing and tracing program, and works with businesses to formalize these safety protocols in the workplace. Through this partnership, manufacturers are able to access regular testing services, symptom tracking protocols, and automatic contract tracing and exposure notification systems.

Audit and Certification
Manufacturer’s Edge is currently working with an outside contractor to provide COVID-19 best practices and safety audits for manufacturers. These audits are followed by a soft compliance certification, attesting to the businesses adherence to best practices and current health orders. To date, approximately 52 companies have taken advantage of the program, and demand is rising as COVID-19 cases increase.

Branded Business Assessment Program
Based on best practices from other MEP Centers, Manufacturer’s Edge has developed a branded assessment program for determining the impact of COVID-19 on manufacturing businesses. The assessment program will propose mitigation strategies for surviving future resurgences of COVID-19.

Partnership with Tooling-U SME*
Manufacturer’s Edge maintains a partnership with national online manufacturing training provider Tooling-U-SME, to offset the cost of bringing on-site training to manufacturing companies. Tooling U-SME offers more than 500 online classes in topics such as engineering, fabrication, welding, and more. Through this partnership, Tooling U-SME offers manufacturers in the Manufacturer’s Edge network 90-day access free of charge.

Monthly COVID-19 Newsletter
In addition to providing information regarding the pandemic in their monthly Manufacturing Minutes newsletter, Manufacturer’s Edge has instituted a monthly COVID-19 newsletter specifically focused on COVID-19 information, infection trends, best practices, success stories, and state, county, and local health orders.

Roundtables and Workshops on COVID-19 Impact and Response
Manufacturer’s Edge has worked continuously with local economic development corporations and federal stakeholders to present manufacturer roundtable discussions. These discussions serve as a way to collect information on COVID-19 impacts. Additionally, Manufacturer’s Edge hosts workshops to share best practices. The roundtables and workshops are held least once a month. Since the election, Manufacturer’s Edge has developed a new roundtable group, which includes a webinar series focused on health orders throughout the state and training on available COVID-19 resources.

"Ramping Back Up Under COVID-19" Guide and Resources
Manufacturer’s Edge has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and more. Additionally, Manufacturer’s Edge has developed two guides focused on emergency COVID-19 prevention measures that cover best practices and guidance for implementing risk assessments and workplace controls, as well as a downloadable Response & Recovery checklist.

COVID-19 Virtual Training and Events
Manufacturer’s Edge has hosted several webinars and events covering a variety of topics related to the pandemic. Topics have included preventing Zoom hacking, response to and recovery from major events, business resiliency strategies, digital marketing, supply chain disruption, and more. Additionally, Manufacturer’s Edge introduced a podcast series in response to the pandemic in March. The podcasts feature Manufacturer’s Edge CEO Tom Bugnitz and various partners to discuss topics related to the pandemic, such as supply chain disruptions, manufacturing trends, and mental health.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
COVID-19 RESPONSE PROFILE:

CONNECTICUT MANUFACTURING AT A GLANCE (2020)

- 4,413 manufacturing establishments in the state
- 160,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Aerospace manufacturing
  - Chemical manufacturing
  - Fabricated metal manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

CT COVID-19 RESPONSE PORTAL

In partnership with CONNSTEP affiliate CBIA and other statewide organizations, CONNSTEP developed the CT COVID-19 Response Portal to link frontline workers and other organizations in need of PPE and other critical supplies to manufacturers who pivoted their production to PPE.

The portal has received 86,000 visits and contains several online forms for suppliers; those who have production capabilities, those producing PPE, and those producing non-PPE critical supplies. Company and product information is used by CONNSTEP to provide supply matchmaking services that connect manufacturers with healthcare employers and other organizations. Organizations in need of both PPE and non-PPE supplies can use the Portal to make direct requests. Additionally, CONNSTEP provided technical consulting services to manufacturers looking to pivot to PPE production. For example, in April 2020, CONNSTEP worked with CT-based manufacturer Wepco Plastics, and provided technical assistance that enables them to produce 7,000 face shields per day.

ESSENTIAL SMALL BUSINESS MASK REQUEST

In April and May 2020, CONNSTEP and CBIA partnered with the state to provide free masks to essential businesses with 50 or fewer employees. Employers were able to complete a brief online form to request supplies, and could receive two masks per employee through the service. The program was able to distribute 500,000 masks over a two-month period. Additionally, CONNSTEP and CBIA worked with the state to distribute 50,000 infrared thermometers to essential businesses.
COVID-19 RESPONSE ACTIONS (continued)

Post-Pandemic Business Assessments
In July 2020, CONNSTEP announced that it would be providing limited-time business enhancement assessments at no cost. The assessments will cover a range of topics, including capacity capabilities, workforce utilization, technology applications, human resource systems, cybersecurity readiness, and strategic business planning. The assessments will result in a roadmap that provides implementation strategies for key areas of improvement. Assessments are being offered both virtually and in-person.

COVID-19 Resources
The CONNSTEP website created a resource page which provided valuable content covering a variety of topics related to the pandemic. Resources include a reopening guide, fact sheets, posters, blog and webinar content, and links to invaluable information across a variety of topics such as workplace safety, state and federal updates, labor and employment guidance, and disaster loans and relief.

COVID-19 Business Challenges Survey
CONNSTEP provided an online portal which allowed manufacturers to ask specific questions, state their challenges, or make suggestions for additional content. This enabled CONNSTEP and CBIA to provide valuable, needed resources for manufacturers as the pandemic evolved. Topic areas included emergency relief programs, health and safety, insurance, labor and employment, legal and finance, operations, and technology.
COVID-19 RESPONSE PROFILE:

DELAWARE MANUFACTURING EXTENSION PARTNERSHIP (DEMEP)

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 9/25/20

DELAWARE MANUFACTURING AT A GLANCE (2020)

- 674 manufacturing establishments in the state
- 27,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Chemical manufacturing
  - Food manufacturing
  - Computers and electronic products

COVID-19 RESPONSE ACTIONS

SUPPLY CHAIN SUPPORT
DEMEP is currently providing supply chain support for both businesses in need of supplies and businesses that have the capability to produce critical PPE. Manufacturers experiencing supply chain disruption are encouraged to reach out to DEMEP to find alternate supply sources. Additionally, DEMEP is offering supply matchmaking to connect businesses with supply or production capacity to organizations in need of supplies, such as hospitals and other frontline healthcare employers.

COVID-19 ASSESSMENTS**
DEMEP has expressed intent to provide remote, no-cost assessments and surveys to assess key manufacturing challenges across the state and deliver targeted solutions. Topics of interest include financial resources, operational challenges, navigating state- and federal-level guidelines, and supply chain disruption.

COVID-19 RESOURCES "CHEAT SHEET"
Since the pandemic began, DEMEP has offered a robust list of resources in the form of an online "cheat sheet" for manufacturers to easily refer to. Topics cover financial resources and challenges, operational support, government resources, and supply chain disruption, and compile a number of state, national, and private organization-level resources. For example, DEMEP has provided a Supply Chain Disruption Planning Checklist. This resource provides actionable steps for manufacturers who have already experienced disruption or that want to prepare for future disruptions in advance.

(**) indicates that the program has been planned but has not yet been implemented.
**FLORIDA MANUFACTURING AT A GLANCE (2020)**

- **20,890** manufacturing establishments in the state
- **385,000** employed by manufacturing industry
- **Primary manufacturing sectors**:
  - Aerospace manufacturing
  - Pharmaceutical and medicine manufacturing
  - Navigational and control instruments

*Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data [1] Primary manufacturing sectors were determined by dollars generated.*

**COVID-19 RESPONSE ACTIONS**

**CONNEX FLORIDA**

Initially established in the aftermath of Hurricane Irma in 2017, FloridaMakes has expanded upon the Connex Florida database tool. Connex Florida is a statewide manufacturing supply chain, workforce, and R&D connection solution offered free of charge to manufacturers, educational institutions, and those performing manufacturing research and development in Florida.

Connex Florida streamlines connections between manufacturers and those businesses in need of their products, which is particularly timely as businesses seek out critical PPE. Additionally, the service can connect companies workforces to training, and R&D teams to ongoing research.

**ONLINE IMT APPRENTICESHIP PROGRAM**

In April 2020, FloridaMakes announced the launch of the [Industrial Manufacturing Technician (IMT) Apprenticeship Program](#). The program is fully available online and on demand to provide more flexible access and overcome geographic barriers to training, while meeting the challenges presented by the pandemic. The first round of the program, launched in July 2020, offers a focus on entry-level skills and credentials as an IMT and Certified Production Technician (CPT). Participants will also receive access to the Manufacturing Skills Standards Council’s (MSSC) Certified Production Technician training curriculum.

This program is a hybrid training model involving classroom and on-the-job training that addresses entry-level skills gaps and provides foundational manufacturing knowledge. The knowledge built in this program will provide employees with a foundation for more long-term career development.
COVID-19 RESPONSE ACTIONS (continued)

**Partnership with Tooling U-SME***
FloridaMakes maintains a partnership with national online manufacturing training provider Tooling U-SME, to offset the cost of bringing on-site training to manufacturing companies. Tooling U-SME offers more than 500 online classes in topics such as engineering, fabrication, welding, and more. Through this partnership, Tooling U-SME offers manufacturers in the FloridaMakes network 90-day access free of charge.

**Business Continuity and Risk Assessments***
FloridaMakes offers free business continuity and risk assessments to manufacturing companies across the state. Manufacturers can sign up for 90-minute sessions with a FloridaMakes business advisor and develop business continuity plans. These existing services have been expanded to meet the specific challenges presented by the pandemic, and include a "l-minute Triage Tool" to quickly help manufacturers identify their most pressing needs. Follow-up impact assessments are also available upon request.

**COVID-19 Response: Manufacturing Survey***
FloridaMakes recently developed an online impact survey to better assess the impact of the pandemic on manufacturers in the state. The survey covers a variety of topics, including supply chain support, resources for manufacturers' most immediate demands, workforce development, and assessing need for tailored technical assistance. The survey also links responses to supply chain questions to Connex Florida to support PPE production efforts.

**Supply Chain Disruption Planning Checklist***
In March, FloridaMakes developed a downloadable checklist that provides guidance at every step of supply chain disruption; if a supply chain has already been disrupted, if a future disruption is suspected, preparing long-term for future disruptions, preparing for employee illness, and more. This checklist is publicly available on the FloridaMakes website.

**Webinar Series***
FloridaMakes has hosted several webinars covering a variety of topics related to the pandemic since March. Topics have included tools for generating revenue during a crisis, best practices during the pandemic, cybersecurity, manufacturer roundtables, providing workforce support, workforce development, and more.

**2020 Return to Work and Recovery Guide***
FloridaMakes has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as guidance for resuming operations, PPE and disinfection protocol, social distancing guidelines, return to work planning, and more. The guide is publicly available on the FloridaMakes website.
COVID-19 RESPONSE PROFILE:

GEORGIA MANUFACTURING EXTENSION PARTNERSHIP (GaMEP)

PREPARED BY: UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 9/25/2020

GEORGIA MANUFACTURING AT A GLANCE (2020)

- 10,407 manufacturing establishments in the state
- 402,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Food manufacturing
  - Aerospace manufacturing
  - Chemical manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated

COVID-19 RESPONSE ACTIONS

TECHNICAL ASSISTANCE FOR MANUFACTURERS*

Both before and during the pandemic, GaMEP has offered a robust selection of technical assistance "areas of service" to manufacturers. These areas of service cover a range of topics, including strategy and leadership development, energy and environmental topics, lean manufacturing and process improvement, quality, and technology. GaMEP has provided a COVID-19 Assistance Request form, where manufacturers can detail specific support needed and receive follow-up services from GaMEP advisors in the form of resources, technical assistance, and and/or assessments.

Additionally, GaMEP offers both OSHA training and a free OSHA consultation program aimed at creating implementation strategies for infectious disease preparedness and response. Though these programs were offered prior to the pandemic, they are now offered in a virtual setting.

SUPPLY CHAIN AND PPE SUPPORT

GaMEP continues to work with state partners, including the Georgia Department of Economic Development, to identify manufacturers with PPE production capabilities that have expressed interest in providing supplies to frontline healthcare workers. Additionally, GaMEP is providing technical assistance to help manufacturers pivot to PPE production (see blog series). Georgia manufacturers that are interested in providing supplies to the Georgia Emergency Management & Homeland Security Agency (GEMA/HS) or other organizations can fill out a brief form on the State of Georgia’s COVID-19 Response page.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
**COVID-19 RESPONSE ACTIONS (continued)**

**GaMEP COVID-19 Survey**
GaMEP has developed a brief online survey intended to assess the impact of COVID-19 on manufacturers, and to better identify relevant resources and areas of needed assistance. The survey contains five questions that are targeted at assessing how the virus has impacted plant operations, what additional supports are needed, training topic suggestions, and space for additional questions and comments.

**No-Cost Cybersecurity Evaluations**
GaMEP has expressed its intent to deliver cybersecurity evaluations to manufacturers that focus on defense, food, and health care supply chains to assess cybersecurity needs and challenges. These evaluations will be provided at no charge to manufacturers.

**Layoff Aversion Services**
GaMEP has expressed its intent to partner with various workforce development organizations to provide technical assistance to manufacturers across the state in implementing layoff aversion strategies and prevent or minimize job losses.

**GaMEP Return to Work Guides and Tip Sheets**
GaMEP has produced two guides for manufacturers returning to work during the pandemic: "Business Guide to COVID-19: Prevention and Mitigation Strategies for Manufacturers," and the "Safe at Work Guide." These guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, on-site testing, etc. The guides are publicly available on the GaMEP website. GaMEP also developed several tip sheets, providing information on topics such as keeping employees safe at work, a COVID-19 Fact Sheet, and FDA updates for food manufacturing facilities.

**COVID-19 Virtual Training and Events**
GaMEP has hosted several virtual events (see "Past Webinars" section) covering a variety of topics related to the pandemic since March. Topics have included "leading beyond crisis management," PPE and supply matchmaking, navigating available resources, safety and risk mitigation, lean recovery, retooling, financial aid, virtual auditing, cost saving, and more. GaMEP has also transitioned existing training programs to a virtual setting, such as Food Safety and Total Productive Maintenance Cohorts, ISO training classes, and Six Sigma virtual consulting.

(***) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE:

INNOVATE HAWAII

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 12/8/2020

HAWAII MANUFACTURING AT A GLANCE (2020)

- 1,033 manufacturing establishments in the state
- 13,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Petroleum and coal manufacturing
  - Food manufacturing
  - Nonmetallic mineral manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

BUY HAWAII, GIVE ALOHA INITIATIVE
Since June 2020, INNOVATE Hawaii has served as a key partner in the Buy Hawaii, Give Aloha (BHGA) Initiative, spearheaded by the Hawaii Department of Business, Economic Development, & Tourism (DBEDT). The initiative aims to showcase local businesses and manufacturers, providing online exposure to maintain sales throughout the pandemic. The initiative includes marketing workshops and coaching for businesses, and an online market place for Made-in-Hawaii food and other products. INNOVATE Hawaii is supporting the program by “working with Hawaii companies to enable e-commerce and online shopping functionality.” Recently, the BGHA Initiative worked with INNOVATE Hawaii to create a series of short videos highlighting local manufacturers. The “Buy Local for Hawaii” PSAs received airtime on two local TV stations (KHNL and KGMB) from August through November 2020, with a projected 258 spots that reached approximately 357,422 viewers.

SUPPLY CHAIN SUPPORT
Businesses that have capabilities to supply critical PPE are encouraged to reach out to INNOVATE Hawaii to be placed on a PPE Critical Supply List that is currently featured on the Hawaii Technology Development Corporation (HTDC) website. Additionally, INNOVATE Hawaii has expressed intent to conduct supplier scouting and matchmaking. In a related response, the state has allocated $10 million in CARES Act funding to HTDC’s INNOVATE Hawaii to provide grants to small businesses in Hawaii. These grants helped establish a local supply chain of cleaning supplies and personal protective equipment (PPE) in response to the pandemic. As of December 2020, 36 manufacturers have been awarded funding to produce PPE and cleaning supplies for the state.
COVID-19 RESPONSE ACTIONS (continued)

Aloha Box and Mask Production Initiative
Since the start of the COVID-19 pandemic, INNOVATE Hawaii partner, Chamber of Commerce Hawaii, has provided additional support to local small businesses and manufacturers that have been impacted by COVID-19. Through funds received from INNOVATE Hawaii, the Chamber provided assistance to local manufacturers with ongoing COVID-19 relief and recovery efforts. In partnership with the Hawaii Food Manufacturers Association (HFMA), the Chamber created the Aloha Box to help local manufacturers that were negatively impacted by the first round of business closures in Hawaii. The initiative allowed manufacturers to sell some of the inventory that was sitting in closed storefronts. A number of manufacturers from across the state were able to provide products for the Aloha Box; including sea salt, coffee, cookies, candies, and chips. These boxes were available online for purchase and coincided with the Mother’s Day weekend, serving as a perfect gift box. 66 boxes were sold to help support these local manufacturers and showcase their products. The Chamber also purchased fabric and supplies for the production of masks made by manufacturers that had pivoted to address PPE needs. These masks were distributed to members of the HFMA, as well as other local manufacturers across the state in need of supplies. Through this initiative, over 700 masks were manufactured and distributed.

E-Commerce Workshops for Manufacturers
In an effort to provide technical assistance, INNOVATE Hawaii has initiated e-commerce workshops for manufacturers. Nine companies participated in the first cohort, which consisted of (6) three-hour virtual workshops led by Ellen Ng, Economic Development Specialist at HTDC. Three consultants specializing in Google Analytics, Search Engine Optimization (SEO), and branding presented during the workshops. In addition, each consultant provided three 1 on 1 consulting sessions with each company. An additional consultant is currently working with the companies to provide 1 on 1 consulting and execution of individualized social media campaigns. INNOVATE Hawaii is also hosting workshops for advanced manufacturers; in the first cohort, eight companies participated in (2) three-hour workshops focused on SEO and Google Analytics. Each workshop featured one consultant who is providing each company with three 1 on 1 consulting sessions from now until the end of the year. Going forward, INNOVATE Hawaii will select five companies to receive e-commerce assistance for the second cohort. Five consultants will be brought on to assist selected companies with their e-commerce needs, with topics ranging from web development and design, digital marketing, search engine optimization, social media marketing and email marketing.

Weekly Calls for Hawaii Manufacturers
INNOVATE Hawaii hosted weekly calls from April to May 2020 to discuss evolving challenges, responses, and resources within the local manufacturing community. Representatives from federal, state, and local government were invited to participate to share updates and ideas for how they might best be able to assist the businesses. The calls allowed INNOVATE Hawaii to hear from businesses and identify ways that multiple stakeholders could assist during the pandemic. These interactions helped ensure that INNOVATE Hawaii was addressing the needs of the manufacturers at the height of the pandemic, utilizing connections, and working together with the community to help address pressing issues. Between 25-50 people participated in these calls.
COVID-19 RESPONSE PROFILE:

IDAHO TechHelp

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/21/2020

IDAHO MANUFACTURING AT A GLANCE (2020)

- **2,792** manufacturing establishments in the state
- **68,000** employed by manufacturing industry
- **Primary manufacturing sectors**:  
  - Computers and electronic products  
  - Food manufacturing  
  - Wood manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

COVID-19 RESPONSE ACTIONS

NEW PRODUCT DEVELOPMENT SUPPORT

Idaho TechHelp provides [New Product Development (NPD) Services](#) through a team of specialists located on Boise State campus. This program serves as a "collaborative design and prototyping lab." The NPD Team works with entrepreneurs, startups, and established businesses to assist in concept development, design, engineering, and prototyping for new products. The NPD team offers services such as 3D printing, mold making, rapid prototyping, CAD, reverse engineering, and more.

Idaho TechHelp has expressed its intent to expand NPD Services during the pandemic. This resource can serve as a useful service for manufacturers looking to retool or pivot to new product lines during and after the pandemic. Manufacturers are able to contact the NPD team for a free idea assessment.

RESOURCES FOR IDAHO FOOD MANUFACTURERS*

Idaho TechHelp provides [specialized consulting services](#) in the field of Food Manufacturing Excellence. These services include leadership and technical training, process and product development, food safety programs, and more.

Throughout the pandemic, TechHelp has provided [specialized COVID-19 assistance](#) to food manufacturers by providing training on food safety issues, advanced food safety programs, and more. Food manufacturers can also reach out to TechHelp for specialized consulting on topics such as supply chain issues and risk assessments. TechHelp has provided COVID-19 specific resources for food manufacturers from other organizations with specific food manufacturing-related guidance. Though TechHelp’s food manufacturing services were available pre-pandemic, the extension of these services over the past several months has provided additional support to a critical industry.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
COVID-19 RESPONSE ACTIONS (continued)

Product Shelf Life Management for Food Processors
In addition to existing support for food manufacturers, Idaho TechHelp has focused on providing specific product shelf-life management support for food processors. Shelf life challenges are critical to food processing supply chains during the pandemic, and contribute significantly to both fixed and variable costs. Available services can include microbiological stability testing to ensure food safety, sensory and consumer testing to ensure consumer acceptability, and analytical testing to ensure standard of identity.

Technical Assistance for Manufacturers
Idaho manufacturers are encouraged to reach out to TechHelp for technical assistance by filling out a "General Request for Manufacturing Information or Services" Form. This form is meant to assess manufacturers' immediate and broad-ranging needs resulting from the pandemic. Applicable services include business operations and workforce needs including product design and development, food manufacturing and safety, plant operational issues, business continuity, supply chain issues, and supplier scouting/matchmaking. Advisors at TechHelp follow up with manufacturers to provide targeted assistance. TechHelp is offering its manufacturing client services at reduced pricing until September 30, 2021, to encourage companies to invest in improvements to processes, products, and people.

Manufacturing Excellence Assessments
Idaho TechHelp is currently implementing a Manufacturing Excellence Assessment that covers key areas around a manufacturing business's overall health. Topics include strategy, structure and accountability, process capability, metrics and rewards, people practices, and cyber/information security.

Business Funding Accelerator
Idaho TechHelp is actively implementing a Business Funding Accelerator program to enable entrepreneurs negatively impacted by the pandemic, and with the highest likelihood of securing investment capital, a proven and successful model of mentorship to find success in raising capital. This program will be featured at several events in Idaho, including Deal Forums and events with affiliated organizations such as Trailhead and Boise StartUp Week.

COVID-19 Virtual Training And Events
TechHelp has hosted several webinars and events covering a variety of topics related to the pandemic. Events have included virtual site tours, risk management and navigating uncertainty, cybersecurity, food safety, and more. TechHelp has also hosted several virtual workshops geared specifically toward food manufacturers.

Layoff Aversion Services**
TechHelp has expressed its intent to partner with various workforce development organizations to provide technical assistance to manufacturers across the state in implementing layoff aversion strategies and prevent or minimize job losses.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding. (**) indicates that the program has been planned but has not yet been implemented.
**COVID-19 RESPONSE PROFILE:**

**ILLINOIS MANUFACTURING EXCELLENCE CENTER (IMEC)**

**PREPARED BY:**

**UNC CENTER FOR URBAN AND REGIONAL STUDIES**

**OUR PROJECT TEAM**

**PROJECT LEAD**

Nichola Lowe, Ph.D. (nlowe@unc.edu)

**GRADUATE RESEARCH ASSISTANTS**

Matthew Wilson (mwilson2@live.unc.edu)

Rumana Rabbani (rumana.rabbani@unc.edu)

Olivia Raines (oraines@live.unc.edu)

Data inputted 12/18/2020

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**ILLINOIS MANUFACTURING AT A GLANCE (2020)**

- **18,222** manufacturing establishments in the state
- **577,000** employed by manufacturing industry
- **Primary manufacturing sectors:**
  - Chemical manufacturing
  - Food manufacturing
  - Machinery manufacturing

*Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data*

[1] Primary manufacturing sectors were determined by dollars generated.

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**COVID-19 RESPONSE ACTIONS**

**INDUSTRY 4.0 PROGRAM**

In August 2020, IMEC was awarded funding to deliver Advanced Manufacturing Technology Services (AMTS) to small and mid-sized manufacturers in the state, and announced a new program that will help manufacturers meet current challenges, such as workforce gaps and declining sales, and develop innovative techniques and skills to respond and rebound after the pandemic. IMEC is seeking 80 manufacturers to participate in the Industry 4.0 program. Through targeted assistance provided by IMEC, these companies will identify and implement Industry 4.0 technologies such as robotics and automation technology to advance their competitiveness on a global scale. These grants aim to improve connectivity, efficiency, and productivity among the selected companies.

**SUPPLIER SCOUTING AND SUPPLY CHAIN SUPPORT**

Since the pandemic began, IMEC has provided supply chain support by connecting manufacturers that already are or can quickly start manufacturing PPE to statewide stakeholders in need of critical supplies. On the demand side, IMEC is also connecting manufacturers in need of critical PPE to the supply chain using manufacturers that are producing supplies. Supply matchmaking is conducted through the IMEC website, and the portal has collected information on over 800 suppliers able to help. IMEC also serves on the Governor’s Medical Essential Equipment Taskforce and has led efforts to vet and source suppliers, as well as PPE retooling support. IMEC also created a downloadable supply chain disruption planning checklist, inspired by resources provided by CIRAS (Iowa’s MEP). This resource provides actionable steps for manufacturers who have already experienced disruption or that want to prepare for future disruptions.

(*) Indicates an extension of an existing program, or a program that is independent of CARES Act funding.
COVID-19 RESPONSE ACTIONS
(continued)

Illinois Manufacturing Helpline
IMEC is providing ongoing no-cost assessments to manufacturers facing pandemic-related challenges as well as customized solutions through individualized consulting. A survey on IMEC’s website allows manufacturers to identify challenges such as supply chain disruption/delay, cash flow issues, business loss, business continuity, and sanitation and decontamination assistance. IMEC representatives follow up with manufacturers within a day of completing the survey.

Cybersecurity Programs
Over the course of the pandemic, IMEC has provided support to help manufacturers assess cybersecurity needs and challenges. IMEC held a number of cybersecurity webinars in 2020, and launched a 6-part Cybersecurity Resiliency for Defense Contractors webinar series in Fall 2020. The webinars were held between October and November, and covered topics from cybersecurity compliance to risk assessments. Participants were joined by Lieutenant Governor Juliana Stratton in the final installation of the series, who shared her perspective and expertise. In December 2020, IMEC introduced manufacturers to the Certified Mission Critical Professional (CMCP) certification, which helps organizations ensure that they have the cybersecurity skills necessary to protect their operations. Finally, as part of the Illinois Defense Network, IMEC has continuously assisted manufacturers with cybersecurity implementation projects that improve cybersecurity resilience.

Navigator Apprenticeship Program*
Since Summer 2019, IMEC has advanced a coordinated effort with workforce and economic development partners across the Chicago region to address the challenges of upskilling workers by creating meaningful career pathways through customized apprenticeships. Partners include the City of Chicago Department of Planning & Development, City of Chicago Local Industrial Retention Initiative agencies, workforce centers, Lake County Partners, and more. The program focuses on employees of small and medium-sized manufacturers through the development and implementation of an apprenticeship program unique to each participating company. Thus far, over 200 manufacturers have been introduced to the program. Since June 2020, ten manufacturers have received their apprenticeship certification and approval from the U.S. Department of Labor, with 20 more companies in the final stages of curriculum development. Interest in the program continues to be strong, as manufacturers are interested in not only providing vital upskilling of incumbent workforce, but also sourcing and attracting new employees.

IMECU Online Training
IMEC is currently piloting IMECU, an in-house online training program for manufacturers. IMECU provides a number of manufacturer certifications in a virtual format, such as Lean Six Sigma certification, the Food Manufacturing Safety Online Training Program, and more. IMECU recently partnered with Tooling U-SME, a national manufacturing online training provider, to provide an online training program that covers basic manufacturing skills, such as reading and interpreting blueprints, basic measurement, and math fundamentals.

 Illinois Manufacturer Return to Work and Recovery Guide
IMEC has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and on-site testing. The guide is publicly available on the IMEC website.

COVID-19 Blog, Webinar Series, and Resources
The IMEC website has dedicated space to a COVID-related blog and a webinar series. Topics have included systematic business strategies, assistance with remote onboarding, strategic planning, virtual sales, supply chain disruption, a virtual innovation boot camp focused on developing new product and business ideas, and tips for administering employee engagement surveys. IMEC has provided over 60 COVID-specific blogs since the pandemic began.

Manufacturer’s Discussion Forum
IMEC has developed an online forum that is publicly available to all manufacturing firms to discuss pandemic-related challenges. This forum is meant to serve as a space where manufacturing leaders can share ideas, challenges, and questions. Though the forum is largely inactive at this time, it still remains an ongoing resource to manufacturers throughout the pandemic.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
COVID-19 RESPONSE PROFILE:

Purdue University Manufacturing Extension Partnership (Purdue MEP)

PREPARED BY:
UNC Center for Urban and Regional Studies

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

COVID-19 RESPONSE ACTIONS

COVID-19 CRITICAL PPE MANUFACTURING INITIATIVE

In April 2020, Purdue MEP launched the Critical PPE Manufacturing Initiative with the goal of identifying manufacturers able to provide PPE and address supply shortages. The database targets medical device manufacturers that are seeking suppliers or technical assistance to help increase output and capacity for their existing PPE production.

Additionally, it supports businesses looking to create new PPE products and/or retool their current manufacturing processes towards PPE production. Manufacturers that want to join the initiative fill out a brief online survey on the Purdue MEP website, and receive targeted assistance to help reach their PPE production goals.

ADDITIONAL SUPPLY CHAIN SUPPORT

In addition to the Critical PPE Manufacturing Initiative, Purdue MEP also launched a PPE Request form on their website. This form is meant to serve as a demand-side complement to the Critical PPE Manufacturing Initiative database of companies with available PPE supplies. Manufacturers in need of critical PPE supplies submit a brief online form, and are contacted by Purdue MEP to facilitate the matchmaking process with a supplier.

The PPE Request form, in combination with the Critical PPE Manufacturing Initiative, has allowed Purdue MEP to successfully match suppliers with more than 60 businesses in need and provide critical supplies such as oxygen hoods, temperature probes, face shields, hand sanitizer, and more.
COVID-19 RESPONSE ACTIONS (continued)

Technical Assistance for Manufacturers

Purdue MEP is providing remote consultations to help manufacturers across the state determine best practices and individualized solutions to meet challenges presented by the pandemic. These remote consultations are meant to help address operational, supply chain, or financial issues that may be arising as a result of the crisis. They also serve as a connection point to trusted advisors to aid manufacturers in understanding and accessing federal resources such as those included in the CARES Act.

Virtual Training and Webinars

Purdue MEP shifted webinars and workshops to a virtual platform, covering a variety of topics related to the pandemic since March. Topics have included rapid recovery strategies, return to work guidance, and following OSHA Guidelines. Purdue MEP has hosted nearly 30 remote learning sessions available through open enrollment. Topics included lean manufacturing, Six Sigma, additive manufacturing, cybersecurity, and robotics.

2020 Returning to Work & Recovery Guide

Purdue MEP has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and on-site testing. The guide is publicly available on the Purdue MEP website. Purdue MEP partnered with the Indiana Manufacturers Association (IMA) to leverage their statewide communication platform and distribute the Returning to Work & Recovery Guide. The guide distribution was preceded by an online event to discuss its contents, as well as to feature Purdue MEP as a go-to resource for COVID-related business issues. Nearly 80 people participated in the event, with more than 60 individuals subsequently requesting a copy of the guide.

Manufacturing Community Discussion Board

Purdue MEP has developed an online discussion board that is publicly available to all manufacturing firms to discuss pandemic-related challenges. This forum is meant to serve as a space where manufacturing leaders can share ideas, challenges, and questions. Topics of discussion have included strategies for operating safely during the pandemic, and sharing ideas for retooling to produce PPE.
IOWA MANUFACTURING AT A GLANCE (2020)

- 4,094 manufacturing establishments in the state
- 223,000 employed by manufacturing industry
- **Primary manufacturing sectors**:
  - Food manufacturing
  - Machinery manufacturing
  - Chemical manufacturing

**COVID-19 RESPONSE ACTIONS**

**SUPPLY CHAIN SUPPORT**

Since March 2020, CIRAS has worked with manufacturers to source supply and meet demand for PPE. CIRAS has worked with stakeholders across Iowa to help meet critical demand for frontline and other essential workers. CIRAS’ stated goal is “for Iowa companies to take the lead in fulfilling manufacturing requests.” In support of this goal, CIRAS is coordinating PPE designs and prototypes, retooling manufacturing processes to facilitate custom PPE production, finding raw materials, and locating manufacturers with PPE production capacity.

CIRAS has also compiled a list of resources to assist with supply chain support. CIRAS has produced a number of original materials, including guides on supply chain disruption planning, PPE supply chain comparisons, finding sources for PPE, and more.

**VIRTUAL PROCESS REVIEW**

CIRAS is providing tailored support for companies that need to examine procedures and operational processes surrounding social distancing in the workplace, and/or identify and prioritize opportunities for innovation presented by the pandemic. These process reviews are provided in a virtual format, and manufacturers are able to sign up for the program through the CIRAS website.

Manufacturers are asked to submit a short video stating their objectives for using the virtual process review service, and CIRAS follows up with a no-cost summary. These summaries outline items like lean process opportunities, technology opportunities, concerns and limitations, and suggestions for ways in which CIRAS can add value to existing operational processes.
COVIRD-19 RESPONSE ACTIONS  
(continued)

CIRAS Survey: Business Impacts of COVID-19
From March to September 2020, CIRAS conducted phone surveys with manufacturers across the state to better understand the needs of Iowa companies and connect them to appropriate resources. The phone survey includes questions about current capacity, plans to stay in business, and primary business concerns. CIRAS posts a weekly update on their website about what they have learned in terms of capacity, revenue loss, employee wellbeing, and more to share with the CIRAS network.

CIRAS Helpline
CIRAS is encouraging manufacturers to contact them via e-mail to receive one-on-one assistance, and troubleshoot key challenges presented by the pandemic. The helpline’s primary focus is to help manufacturers keep employees safe and ensure they are able to keep their business open, both during the pandemic and long-term.

CIRAS COVID-19 Preparedness & Return to Work Checklist + Guides
CIRAS has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, enforcement guidelines, etc. Additionally, CIRAS has created an exhaustive compilation of COVID-19 related downloadable guides that are available on their website. Guides have included topics such as responding to COVID-19 exposure, protecting your business during the pandemic, best practices for screening employees, operational best practices, hierarchy of controls, and ventilation and HVAC recommendations.

COVID-19 Webinar Series
The CIRAS website has dedicated space to COVID-related webinars. Topics have included manufacturing and food industry roundtables, protecting businesses during the pandemic, strategies for restoring revenue, supply chain support, financial resources, and more. CIRAS has also moved their Internet Marketing Boot Camp to a virtual setting on a permanent basis, based on feedback from manufacturers.

No-Cost Assessments for Manufacturers
CIRAS is offering supply chain risk assessments and COVID-19 facility assessments for Iowa manufacturers that have been impacted by the pandemic. Both assessments are offered remotely at no cost to manufacturers.
COVID-19 RESPONSE PROFILE:

KANSAS MANUFACTURING SOLUTIONS (KMS)

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/2/2020

KANSAS MANUFACTURING AT A GLANCE (2020)

- 3,160 manufacturing establishments in the state
- 170,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Aerospace manufacturing
  - Food manufacturing
  - Petroleum and coal manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

PARTNERSHIP WITH BIOKANSAS: PPE SUPPORT

In April 2020, Kansas Manufacturing Solutions announced a new partnership with life sciences organization, BioKansas. KMS and BioKansas have partnered to identify manufacturers with capabilities to produce critical PPE, and to support statewide efforts to deliver supplies to frontline workers. The two groups have developed a list of both facilities and workers with PPE production capacity.

KMS and BioKansas have also worked to identify businesses that are interested in pivoting to PPE production, but need assistance or additional resources. Additionally, KMS and BioKansas have partnered to deliver informational webinars to manufacturers across the state.

KMS STATEWIDE NEEDS ASSESSMENT

In June 2020, KMS conducted their first annual statewide needs assessment. The study was conducted by the National Business Research Institute. The assessment identified needs, challenges, and opportunities currently facing manufacturers. Needs assessment topics included business profiles, current strategies being used, workforce challenges, specific challenges related to COVID-19, and needed financial and technical resources.

The results of the needs assessment will be shared as a de-identified summary of responses in October 2020, and KMS announced that the program will continue next year.
COVID-19 RESPONSE ACTIONS (continued)

KMS Recovery Assessment
KMS has provided an online Recovery Assessment through a webpage that asks manufacturers key questions in the fields of strategic planning, financial readiness, human resources readiness, facility readiness, product demand, cybersecurity, and more. Topic-specific questions are asked under each category, and businesses that identify trouble spots are encouraged to watch relevant KMS webinars and/or reach out to KMS for targeted technical assistance & assessments.

Partnership with Kansas Department of Commerce*
As a result of the pandemic, KMS partnered with the Kansas Department of Commerce, to assist their efforts in coordinating statewide responses with the Department of Emergency Management and Department of Adjutant General. This partnership was created to address PPE procurement solutions and other statewide responses.

KMS Return to Work & Recovery Guide
KMS has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, enforcement guidelines, etc. The guide is publicly available on the KMS website.

COVID-19 Virtual Events And Blog
KMS has hosted several webinars and events covering a variety of topics related to the pandemic. Topics have included risk management, CARES Act funding, strategic planning, HR solutions, financial preparedness, and more. KMS has also posted several COVID-19 related blogs and has covered topics such as maximizing PPP loan forgiveness, combatting fear in the workplace, and more.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
KENTUCKY MANUFACTURING AT A GLANCE (2020)

- **4,788** manufacturing establishments in the state
- **251,000** employed by manufacturing industry
- **Primary manufacturing sectors**:
  - Automotive manufacturing
  - Food manufacturing
  - Primary metals manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data [1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

HEALTH AND SAFETY AUDITS AND ANALYSES

Over the past several months, AKA has conducted both comprehensive COVID-19 reopening conformance audits and health and safety gap analyses to ensure that manufacturers are able to reopen and conduct operations safely.

The conformance audit involves a review of site policies, procedures, and training to ensure compliance with national- and state-level requirements and recommendations. The health and safety gap analysis assesses compliance with OSHA regulations as well as state and federal requirements to ensure that manufacturing facilities are safe for employees returning to work. The analysis determines health and safety gaps and provides next steps to ensure an optimal work environment.

PPE AND SUPPLY CHAIN SUPPORT

AKA has provided supplier sourcing services throughout the pandemic, and provides manufacturers with a list of suppliers that can provide specific supply needs and address disruptions upon request. Through an internal database, AKA is able to provide supplier scouting and matchmaking for manufacturers across the state. AKA is also sharing this information with key partners, such as the Kentucky Association of Manufacturers, to coordinate efforts.

AKA continues to work in partnership with statewide organizations, such as the Kentucky Cabinet for Economic Development, to assist in critical PPE procurement and address specific challenges facing manufacturers during the pandemic.
COVID-19 RESPONSE ACTIONS (continued)

Assessments for Manufacturers
In addition to health and safety and supply chain support, AKA has provided a robust offering of targeted assessments for manufacturers during the pandemic. These include maintenance assessments to determine facility production needs, operational assessments that result in a roadmap for improvement, supply chain risk assessments aimed at supporting business continuity, website performance assessments, and financial score cards. All assessments are followed by recommendations for future implementation and improvement strategies.

Showcase Videos
AKA is assisting manufacturers in showcasing their capabilities and expanding market presence during the pandemic by developing showcase videos. These videos are meant to "engage customers by highlighting [the] company’s strengths and services." For example, AKA created a showcase video to help Victor Enterprises showcase their new aerospace certification in an effort to bring in new customers.

Cybersecurity Evaluations*
AKA provides a number of cybersecurity services for manufacturers, including a "Cybersecurity Maturity Model Certification" assessment for compliance, cybersecurity audits, a continuous monitoring program, and immediate assistance in the event that a manufacturer experiences a security breach. Though this service was available pre-pandemic, it remains a critical resource for manufacturers as they continue to navigate a virtual environment.

Layoff Aversion Services**
AKA has expressed its intent to partner with various workforce development organizations to provide technical assistance to manufacturers across the state in implementing layoff aversion strategies to prevent or minimize job losses.

COVID-19 Virtual Events & Blog
AKA has hosted several webinars and events covering a variety of topics related to the pandemic. Topics have included supply chain risk and optimization, cybersecurity, food safety, and more. AKA has also provided several COVID-19 related blogs and has covered topics such as supply chain gaps and opportunities, continuous improvement principles during COVID-19, and business growth opportunities post-COVID-19.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding. (***) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE:

MANUFACTURING EXTENSION PARTNERSHIP OF LOUISIANA (MEPOL)

PREPARED BY: UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/21/2020

COVID-19 RESPONSE ACTIONS

COVID-19 SURVEY FOR LOUISIANA MANUFACTURERS

In response to the pandemic, MEPOL has developed an online survey for manufacturers. The survey is intended to determine what challenges and needs manufacturers are facing, and provide necessary resources. Survey questions cover topics such as supply chain disruptions, consumer demand, workforce, technology, financial concerns, ability to pivot to PPE production, and more. MEPOL follows up with targeted assistance and resources. The survey is useful both in determining manufacturer needs and identifying manufacturers that might be able to pivot to PPE production for frontline workers and other statewide organizations.

COVID-19 WEBINAR SERIES

In May 2020, MEPOL announced that it would be launching online webinars on the MEPOL website. Manufacturers are able to register online to participate in this monthly webinar series. The first webinar launched in June, and was related to cash flow management during the pandemic.

2020 RETURN TO WORK MITIGATION PLAN

MEPOL has has produced a Return to Work guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees and on-site testing. The guide is publicly available on the MEPOL website.

LOUISIANA MANUFACTURING AT A GLANCE (2020)

- 4,516 manufacturing establishments in the state
- 137,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Petroleum and coal manufacturing
  - Chemical manufacturing
  - Food manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated
Detailed Business Assessments

The MEP of Louisiana developed one of the first COVID-19 detailed business assessments to properly assist manufacturers whose businesses have been affected by COVID-19. The assessments can be completed on-site, or via video or phone conference, and result in recommendations for the affected company. Since the pandemic began, MEPOL has completed forty seven assessments, and project managers have followed up on recommendations to further assist the affected manufacturers.
MAINE MANUFACTURING AT A GLANCE (2020)

- **1,823** manufacturing establishments in the state
- **52,000** employed by manufacturing industry
- **Primary manufacturing sectors**:  
  - Paper manufacturing  
  - Chemical manufacturing  
  - Fabricated metal manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data [1] Primary manufacturing sectors were determined by dollars generated

COVID-19 RESPONSE ACTIONS

REMOTE CRISIS RESPONSE CONSULTATIONS

Maine MEP has offered free, remote crisis response consultations throughout the pandemic to help manufacturers meet challenges in the fields of operations, workforce, supply chain, cash flow, business continuity, and recovery and resiliency. These consultations are in part made possible through a partnership with the Manufacturers Association of Maine (MAME) and the Advanced Manufacturing Center (AMC) at the University of Maine. The partnership, announced in July 2020, allows the three organizations to combine resources and provide expertise to manufacturers in the fields of finance, technology, business operations, product development, and more. The organizations contacted a total of 250 manufacturers from July to September, and have committed to conduct 60 in-depth consultations, and engage in 40 remediation projects.

PPE PRODUCT DEVELOPMENT AND INNOVATION

Since April 2020, Maine MEP joined partners from both the economic and healthcare fields to serve on an innovation team formed by the University of Maine. The team has been working since April to document the needs of medical centers and to vet manufacturers in order to meet these critical supply needs.

In April, Maine MEP worked with UMaine and the MaineHealth Innovation Division to develop an aerosol box that allows frontline workers to intubate patients safely. UMaine developed a prototype, while Maine MEP worked with Maine manufacturers to produce the design based on feedback from healthcare professionals. This partnership has allowed for the in-state production of aerosol boxes, face shields, face masks, and more.
COVID-19 RESPONSE ACTIONS
(continued)

Assistance with Retooling & Redeployment of Resources
Maine MEP is providing manufacturers with assistance in responding to critical needs for PPE and healthcare equipment. Available assistance includes identifying production opportunities, assessing feasibility and gaps, line layout assistance, assessing distribution channels, building connections with other manufacturers and technical resources, and providing methods for rapidly retraining employees. This work is complemented by Maine MEP’s partnership with MAME and AMC at UMaine. For example, the organizations were able to help a Maine manufacturer retool to produce 1,200 masks per day. Additionally, Maine MEP has compiled a list of Maine manufacturers that are currently producing face masks, hand sanitizer, isolation gowns, and more on the Maine MEP website, and has included direct links for businesses and individuals to order supplies.

Supply Chain Support for Manufacturers
Maine MEP continues to work with manufacturers to address supply chain disruption issues resulting from the pandemic, in part by utilizing the national MEP network and other state and federal resources. Maine MEP has committed to conducting supplier scouting and matchmaking activities with Maine manufacturing clients on an individual basis.

Layoff Aversion Services
Through the partnership with MAME and other organizations across the state, Maine MEP is providing matchmaking of furloughed workers with manufacturers looking for employees. Manufacturers are encouraged to reach out to Maine MEP to receive workforce support.

Cybersecurity Services*
In September 2020, Maine MEP announced that it had received a joint grant of $1.5 million with Connecticut, Vermont, Massachusetts, New Hampshire, and Rhode Island from the U.S. Department of Defense’s Office of Economic Adjustment (OEA). The funds are allocated to create an organization called the New England Regional Defense Industry Collaboration (NERDIC). Through this organization, Maine and its partner states will be delivering assessments that will include gap analysis, plan of action & milestones (POAM), assistance with system security plan (SSP), policies and procedures, and incident response plans. The funding from this grant will allow manufacturers to defer some of the cost of receiving an assessment. Though this funding is separate from CARES Act funding, it supports Maine MEP’s goal of providing cybersecurity services to manufacturers during the pandemic.

COVID-19 Manufacturing Workplace Readiness Guidance
Maine MEP has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and on-site testing. The guide is publicly available on the Maine MEP website.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
MARYLAND MANUFACTURING NETWORK

Created in partnership with the Maryland Department of Commerce, MDMEP launched an online platform dedicated to serving as a database for PPE suppliers and buyers across the state in May 2020. Companies like Under Armour and Charm City Meadworks have pivoted to provide critical PPE supplies during this time and have used the platform to provide PPE. Suppliers fill out a survey detailing resources available, and buyers are able to search the platform by supplies needed. As of October 2020, the platform has generated $2 million in sales.

MARYLAND MANUFACTURING HELPLINE

MDMEP has also launched an online platform to connect manufacturers with MDMEP business advisors for one-on-one assistance. The Helpline is set up to help manufacturers assess and meet key challenges presented by the pandemic. Upon filling out a brief survey, MDMEP provides manufacturers with relevant informational and financial resources, referrals, and technical assistance. This service is provided at no cost to companies that request assistance.

COVID-19 WEBINAR SERIES AND GUIDE

MDMEP has hosted several webinars covering a variety of topics related to the pandemic since March. Topics have included critical manufacturing strategies such as business growth, operations, workforce development, and technology, OSHA guidelines and risk mitigation in the workplace, and more. MDMEP has also created a free, downloadable Back to Business Playbook that covers topics such as health and safety protocol, reopening guidelines, and social distancing.
COVID-19 RESPONSE PROFILE:

MASSACHUSETTS MANUFACTURING EXTENSION PARTNERSHIP (MassMEP)

PREPARED BY: UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS Matthew Wilson (mwilson2@live.unc.edu) Rumana Rabbani (rumana.rabbani@unc.edu) Olivia Raines (oraines@live.unc.edu)

Data inputted 9/4/20

MASSACHUSETTS MANUFACTURING AT A GLANCE (2020)

- 6,734 manufacturing establishments in the state
- 241,000 employed by manufacturing industry

Primary manufacturing sectors:
- Computers and electronic products
- Chemical manufacturing
- Fabricated metal manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

PARTNERSHIP:

COVID-19 RESPONSE ACTIONS

MANUFACTURING EMERGENCY RESPONSE TEAM & SUPPLY CHAIN SUPPORT

Since April 2020, MassMEP has served as a member of the Manufacturing Emergency Response Team (M-ERT), a state government initiative. MassMEP serves as the key manufacturing partner, and has provided critical support for the program. Created as a separate office within the MassTech Collaborative, M-ERT's main goals are to identify what PPE and COVID-19 related materials are of highest priority to produce, ensure regulatory compliance, determine product specification and testing needs, and provide design and retooling support for manufacturers that can pivot to PPE production. In July, M-ERT also launched a Manufacturers Portal, which provides manufacturers with a list of vendors that can supply PPE.

As a member of M-ERT, MassMEP has played a vital role in helping companies find funding for needed supplies, provide workforce training, improve operational procedures, validate products for the Manufacturers Portal, and more.

BROWNMED TEMPORARY MANUFACTURING SITE

In June 2020, MassMEP successfully launched a temporary production site in Worcester, MA to manufacture critical PPE supplies in partnership with medical manufacturer Brownmed. MassMEP began planning the site with Brownmed in early June, and identified a unique opportunity to both provide critical PPE supplies and engage local Worcester high school students searching for summer employment with careers in manufacturing. The site was staffed through the summer by 65 high school students from seven high schools, including interns from the Innovation Pathways Advanced Manufacturing Program, a state government initiative.
Partnership with Tooling U-SME*
MassMEP maintains a partnership with national online manufacturing training provider Tooling U-SME, to offset the cost of bringing on-site training to manufacturing companies. Tooling U-SME offers more than 500 online classes in topics such as engineering, fabrication, welding, and more. Through this partnership, Tooling U-SME offers manufacturers in the MassMEP network 90-day access free of charge.

Online STEM Program with Holbrook Middle & High School*
In early March 2020, MassMEP officially launched its partnership with Holbrook Middle-High School (HMHS) to provide students with the All Made Possible (AMP) learning program, an innovative STEM enrichment program, in an entirely virtual format. All Made Possible is an education and workforce development program created by MassMEP to introduce students to the multitude of career paths and employment opportunities available using advanced manufacturing technologies.

No-Cost Cybersecurity Evaluations**
MassMEP has expressed its intent to deliver cybersecurity evaluations to manufacturers that focus on defense, food, and health care supply chains to assess cybersecurity needs and challenges. These evaluations will be provided at no charge to manufacturers.

Layoff Aversion Services**
MassMEP has expressed its intent to partner with various workforce development organizations to provide technical assistance to manufacturers across the state in implementing layoff aversion strategies to prevent or minimize job losses.

COVID-19 Webinar Series
MassMEP has hosted several COVID-related webinars and events since the beginning of the pandemic. Topics have included Industry 4.0 strategies, protocol for returning to work safely, workforce training opportunities, information on cybersecurity trends, and digital marketing strategies. In May 2020, MassMEP launched a Youtube vlog series featuring interviews with Massachusetts manufacturing companies and MassMEP employees.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding. (***) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE:

MICHIGAN MANUFACTURING TECHNOLOGY CENTER

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/9/2020

MICHIGAN MANUFACTURING AT A GLANCE (2020)

- 17,393 manufacturing establishments in the state
- 613,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Automotive manufacturing
  - Machinery manufacturing
  - Fabricated metal manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

PARTNERSHIP WITH MICHIGAN ECONOMIC DEVELOPMENT CORPORATION*

Since the beginning of the pandemic, the Michigan Manufacturing Technology Center (“The Center”) has maintained its existing partnership with the Michigan Economic Development Corporation to assist in meeting critical supply needs across the state. Michigan EDC facilitates the Pure Michigan Business Connect (PMBC) program, which connects Michigan businesses with regional, national, and international buyers through matchmaking and liaison services.

The PMBC program is currently providing a COVID-19 Procurement Platform to both assist businesses in procuring non-medical grade PPE, and create a database of suppliers with PPE production capabilities. The Center continues to make these efforts possible by vetting manufactures and suppliers that can help meet PPE needs for businesses across the state.

TECHNICAL ASSISTANCE FOR MANUFACTURERS*

The Center is providing technical assistance, assessments, and connections to relevant resources to address challenges related to the COVID-19 pandemic. Assistance is available for a wide range of fields, including quality system maintenance and planning, supply chain mentoring, standard work processes, product launch, cybersecurity risk management, technology integration, 5S and visual management, lean best practices, supplier scouting and sourcing, and leadership and workforce development. Although many of these areas of expert assistance were available prior to the pandemic, The Center has increased its efforts to reach out to manufacturers across the state provide additional support.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
COVID-19 RESPONSE ACTIONS (continued)

Chicago Fed Survey of Business Conditions
In May 2020, the Federal Reserve Bank of Chicago collaborated with The Center and IMEC of Illinois to conduct a survey on the impact of the COVID-19 pandemic on manufacturers. The survey was based on the methodology of the broader Chicago Fed Survey of Business Conditions, and asked questions about the impact of the outbreak as well as expectations for the coming months. The Center published the results of the survey for Michigan manufacturers in June 2020. The survey illuminated primary challenges, concerns, and opportunities for manufacturers, including business performance, demand, operations, customer base, costs, production capacities, and more.

COVID-19 Capabilities & Needs Message Board
In addition to the supplier scouting and sourcing efforts made possible through the partnership with MEDC, The Center has also developed a message board where manufacturers can list PPE products needed and/or their company's production capabilities. Each listing contains product details and allows businesses to locate and contact manufacturers with critical supplies.

Layoff Aversion Services**
The Center has expressed its intent to partner with various workforce development organizations to provide technical assistance to manufacturers across the state in implementing layoff aversion strategies to prevent or minimize job losses.

Safe Work Playbook
The Center shared its Safe Work Playbook on The-Center.org in hopes that it may be of assistance to manufacturers returning to work during the pandemic. The information contained in the Safe Work Playbook represents the Center's current practices regarding the recommended operation of its facility during the COVID-19 pandemic. The guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and on-site testing.

COVID-19 Webinar Series and Resources
Prior to the COVID-19 pandemic, The Center offered various webinars and online training opportunities for manufacturers in fields such as lean manufacturing, leadership, and quality improvement. Since the pandemic began, The Center has introduced a variety of additional COVID-19 related webinars that cover topics such as available resources, preparing to reopen, social distancing guidelines, lean manufacturing, and post-COVID recovery.

(**) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE:

ENTERPRISE MINNESOTA

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/9/2020

MINNESOTA MANUFACTURING AT A GLANCE (2020)

- 8,423 manufacturing establishments in the state
- 319,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Computers and electronic products
  - Food manufacturing
  - Machinery manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

STATE OF MANUFACTURING SURVEY*

Each year, Enterprise Minnesota conducts a State of Manufacturing Survey. This comprehensive survey of Minnesota’s manufacturers "reveals their perceptions and opinions on the economy and other issues impacting business." The survey results are typically released in the spring via a release event. This year, the annual survey was particularly unique as it was held in March, and included responses from both before and after the pandemic hit. Results varied widely pre- and post-COVID: for example, while only 9% of manufacturers expected a recession pre-COVID, that number rose dramatically in late March to 46% of respondents.

To account for these differences, Enterprise Minnesota conducted a second survey in September to assess the impact of COVID-19. Results were released in November 2020. Enterprise Minnesota interviewed over 500 manufacturing executives across the state and incorporated data from Minnesota’s six regional initiative foundations.

ENTERPRISE MINNESOTA PEER COUNCILS*

Enterprise Minnesota engages manufacturing executives through an innovative Peer Councils program. The program provides a structured forum for executives to share ideas and concerns. Meetings are held monthly, and councils are available for CEOs and Presidents, operations management executives, and human resources personnel. Since the pandemic began, CEOs have requested more frequent council meetings. Discussions have included HR strategies, downsizing during the pandemic, workforce support, and managing supply chain disruptions. This existing program has been augmented to meet the most pressing needs of manufacturing executives.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
COVID-19 RESPONSE ACTIONS
(continued)

Technical Assistance for Manufacturers**
Enterprise Minnesota has outlined a three-phase plan to provide technical assistance and assessments to manufacturers during the pandemic. Phase 1 incorporates six functional assessments to identify strategic planning, continuous improvement, management systems, marketing, and leadership development priorities on a client-by-client basis. Phase 2 moves towards follow-up and implementation of these assessments through “micro” services that emphasize cost-effective assistance with quick returns. Finally, Phase 3 focuses on technology deployment in areas such as automation, Internet-of-Things, and information security. Enterprise Minnesota has also expressed intent to provide virtual assistance in topics such as strategy, revenue growth, leadership development, continuous improvement, workplace safety, and quality systems.

Virtual Resources for Manufacturers
Enterprise Minnesota has provided a robust offering of virtual resources for manufacturers that cover topics related to the pandemic. The organization has provided several virtual training and webinar opportunities on topics such as navigating uncertainty during the pandemic, leadership development, virtual roundtables with technical colleges, and more. Enterprise Minnesota Magazine, a quarterly manufacturing publication, has featured a number of articles related to the pandemic since Spring 2020, including PPE production, business planning, innovations during COVID-19, strategies for virtual training, product diversification, and more. Finally, Enterprise Minnesota publishes a weekly newsletter report, and has recently focused on areas such as adaption, innovation, and pandemic success stories.

(**) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE:

MISSISSIPPI MANUFACTURERS ASSOCIATION MANUFACTURING EXTENSION PARTNERSHIP (MMA-MEP)

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 11/5/2020

MISSISSIPPI MANUFACTURING AT A GLANCE (2020)

- 2,375 manufacturing establishments in the state
- 146,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Automotive manufacturing
  - Petroleum and coal manufacturing
  - Food manufacturing

Source: BLS-QCEW Data, National Association of Manufacturers State Manufacturing Data
\[1\] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

PPE PRODUCT DEVELOPMENT SUPPORT

The Mississippi Polymer Institute (MPI) at University of Southern Mississippi, a strategic partner and sub-recipient of MMA-MEP funding, has provided innovative product development support for manufacturers looking to produce critical PPE supplies since March. Perhaps most notably, MPI worked with the Eagle Maker Hub, a 3-D printing lab at USM, to develop the "Hub Mask" in April 2020. The Hub Mask serves as a literal hub for multiple filters of the same tube size, and can be hooked up to an existing hospital N-99 filter, providing a uniform system for hospitals across the country. In June, MPI and the Eagle Maker Hub distributed nearly 2,000 Hub Masks to nursing homes and medical facilities. MPI has also worked to help develop an oral suction device and other innovate PPE products over the course of the past six months.

With a team led by Mississippi State University Center for Advanced Vehicular Systems Extension (MSU-CAVS-E), MMA-MEP also worked with Mississippi manufacturers and suppliers to produce isolation gowns for several Mississippi hospitals. This initiative came after hearing concerns that the hospitals were having difficulty locating disposable isolation gowns. MSU-CAVS-E identified suppliers of the gown material and reached out to several furniture manufacturers to produce sample gowns for evaluation, many of whom had in-house cut-and-sew operations within their plant. Sample gowns were produced for feedback and evaluation from the hospitals. After making necessary changes, furniture manufacturers were ready to begin producing isolation gowns for hospitals in need of this critical PPE in September 2020.
COVID-19 RESPONSE ACTIONS
(continued)

Governor’s Commission for Economic Recovery
In April 2020, the state of Mississippi announced a Governor’s Commission for Economic Recovery that would be tasked with providing recommendations for political leaders across the state as they work towards business resiliency and recovery efforts throughout the pandemic. The Commission is comprised of business leaders from across the state, and is responsible for exploring specific recovery needs for multiple sectors of the economy, including the manufacturing sector. In its role as a member of the commission, MMA-MEP has been tasked with providing recommendations specific to manufacturing resilience and recovery, and relaying any feedback, suggestions, or concerns from manufacturers through outreach efforts.

Supply Chain Support for Manufacturers
MMA-MEP has extended a number of services to address major supply chain concerns facing manufacturers. MMA-MEP is providing supplier and technology scouting, as well as supply matching activities with its clients as needed. Additionally, MMA-MEP Centers at MPI and MSU-CAVS-E are working with manufacturers to provide technical assistance specifically targeted at addressing supply chain disruption.

Virtual Training**
MMA-MEP has expressed intent to contract with a training provider to supply a comprehensive suite of manufacturing training solutions. Through this contract, MMA-MEP and its sub-recipients plan to offer virtual industry restart webinars aimed at workplace safety protocols and reopening measures. In October, MMA-MEP held a webinar focused on assessing and reducing risk in the workplace.

Additional Technical Assistance for Manufacturers**
MMA-MEP has expressed intent to offer assessments addressing the areas of cybersecurity, competitiveness reviews, succession planning, and business continuity and risk analysis through its sub-recipients.

(***) indicates that the program has been planned but has not yet been implemented.
MISSOURI MANUFACTURING AT A GLANCE (2020)

- 6,836 manufacturing establishments in the state
- 273,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Food manufacturing
  - Chemical manufacturing
  - Automotive manufacturing

Source: BLS-QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

COVID-19 RESPONSE TEAM

Missouri Enterprise has developed a three-person COVID-19 response team to tackle four key areas: strategy, communications, people, and processes. Available assistance within these four categories includes business continuity and resiliency planning, supplier scouting, product development, market research, importing/exporting assistance, marketing plans, communicating with suppliers and employees, safe practices, returning to work preparedness, workforce strategies and training, lean manufacturing, cybersecurity, ISO certification, and value-stream mapping.

The team is comprised of Tom Gordon, April Schmidt, and David Goebel, all project managers at Missouri Enterprise with multiple areas of expertise. Manufacturers are able to reach out to the response team at any time for assistance.

COVID-19 READINESS RECOVERY ASSESSMENT

Missouri Enterprise has developed a COVID-19 Readiness Recovery Assessment to determine the core challenges facing manufacturers during the pandemic. The assessment helps participating manufacturers identify both short- and long-term needs and solutions. Upon requesting an assessment, consultants at Missouri Enterprise follow up to provide expertise in the areas of business continuity planning, resiliency planning, reopening assistance, health and safety protocol, worker training, leadership development, supplier scouting, plant layout, market research, and more.
COVID-19 RESPONSE ACTIONS (continued)

COVID-19 Reopening Products & Services Directory
In May 2020, Missouri Enterprise launched the COVID-19 Reopening Products & Services Directory to serve two primary purposes: protecting essential workers and supporting Missouri manufacturers. Manufacturers can add their products and services to the directory by submitting a company profile, and businesses in need of critical supplies can easily search for items by using keywords. Available items include non-medical grade PPE, gloves, protective barriers and guards, signage, cleaning products, and sanitizer. Over 50 companies have listed available supplies through the website. The directory helps meet demand for PPE for essential workers while highlighting the ingenuity of Missouri’s manufacturers.

Missouri Enterprise COVID-19 Manufacturing Network
Missouri Enterprise has developed a venue for manufacturers that want to connect during the pandemic, share best practices, and help meet the demand for PPE by sourcing materials. Manufacturers can fill out a brief form on the Missouri Enterprise website to be added to the Manufacturing Network and begin networking with other Missouri businesses.

COVID-19 Webinar Series
In May 2020, Missouri Enterprise launched a free webinar series that covers topics related to the pandemic and to general manufacturing practices. Topics have included improving workplace culture and processes, workforce development and training, navigating new health and safety policies, a reopening webinar and checklist, up-skilling workers, Zoom crash courses, infectious disease planning, business continuity planning, and supplier scouting.
COVID-19 RESPONSE PROFILE:

MONTANA MANUFACTURING EXTENSION CENTER (MMEC)

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 11/4/2020

MONTANA MANUFACTURING AT A GLANCE (2020)

- 1,631 manufacturing establishments in the state
- 20,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Petroleum and coal manufacturing
  - Wood product manufacturing
  - Food manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

COVID-19 RESPONSE ACTIONS

PPE SUPPLY CHAIN SUPPORT

Since the pandemic began, one of MMEC's primary focuses has been working with manufacturers on an individual basis to pivot production to PPE and other critical supplies. In April 2020, MMEC formed critical supply subgroups, focusing on hand sanitizer, masks, surgical gowns, ventilators, food and beverage manufacturers, and more, with an MMEC staff member dedicated to each group to coordinate production efforts. Additionally, MMEC's Coronavirus Response page maintains a directory of manufacturers that are currently providing critical supplies.

MMEC has leveraged several key partners to coordinate this effort, including the Montana Hospital Association, Montana Disaster and Emergency Services, the Governor's Office of Economic Development, and other state agencies. These efforts have led to major success stories; in March, MMEC helped five distilleries in their efforts to produce hand sanitizer by finding a supplier match that could provide 15,000 bottles and caps. MMEC has also worked with companies like Spark R&D, H-E Parts Mining, and Ascent Vision Technologies, that have developed their own prototypes or used designs such as the Montana Mask to produce over 65,000 masks.

PARTNERSHIP WITH TOOLING U-SME*

MMEC maintains a partnership with national online manufacturing training provider Tooling U-SME, to offset the cost of bringing on-site training to manufacturing companies. Tooling U-SME offers more than 500 online classes in engineering, fabrication, welding, and more. Through this partnership, Tooling U-SME offers manufacturers in the MMEC network 90-day access free of charge.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
**COVID-19 RESPONSE ACTIONS**
(continued)

**Montana Manufacturers Collaboration Calls**
In March, MMEC began hosting weekly Manufacturer’s Collaboration Calls with the Greater Gallatin Valley Manufacturing Partnership ([GCVMP](#)). Nine weekly calls were held between March and May 2020. These calls allowed representatives from organizations across the state to address key challenges and troubleshoot for potential solutions, share resources, and identify opportunities. Topics of discussion included supply chain matchmaking efforts, helping manufacturers pivot to PPE production, reviewing updates from the state and federal government, broadcasting companies that were hiring manufacturers, and more. Key findings from each week were shared with the MMEC network via a weekly news update.

**ISO 13485 Certification**
In an effort to increase the supply of PPE in Montana, MMEC is helping manufacturing companies secure their ISO 13485 certification, which demonstrates that a manufacturer is able to produce medical supplies. Receiving this certification has been a major barrier to manufacturers looking to meet supply chain needs. This service will make critical PPE production more accessible to Montana manufacturers in MMEC’s network.

**Technical Assistance for Manufacturers**
Throughout the pandemic, MMEC has provided technical assistance to manufacturers at no charge on an individual basis. Manufacturers that request MMEC’s services are eligible to receive assistance with pivoting to produce critical supplies, keeping their business open during the pandemic, and more. As of the end of October 2020, over 30 projects have been started or completed for assistance with supplier scouting, strategic planning, risk management, efficiency improvements, quality management and certification, and other needs.

**No-Cost Cybersecurity Evaluations**
MMEC has expressed its intent to deliver cybersecurity evaluations to manufacturers that focus on defense, food, and health care supply chains to assess cybersecurity needs and challenges. These evaluations will be provided at no charge to manufacturers.

(***) indicates that the program has been planned but has not yet been implemented.
NEBRASKA MANUFACTURING AT A GLANCE
(2020)

- 1,986 manufacturing establishments in the state
- 99,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Food manufacturing
  - Chemical manufacturing
  - Machinery manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

NEBRASKA MANUFACTURING EXTENSION PARTNERSHIP (Nebraska MEP)

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UNC CENTER FOR URBAN AND REGIONAL STUDIES

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Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 11/4/2020

COVID-19 RESPONSE ACTIONS

NO-COST CONSULTATIONS AND TRAINING
Nebraska MEP is using a portion of CARES Act funding to offer single-service, no-cost consultations and employee development training to manufacturers. Manufacturers can apply online, and are eligible to receive cybersecurity assessments, Online Selling Portal management services, three days of Entrepreneurial Operating System (EOS ®) implementation training, accounting and finance assessments, assistance with recruiting and training staff, securing ISO certifications, and more.

PPE AND SUPPLY CHAIN SUPPORT
Nebraska MEP has led efforts throughout the pandemic to identify businesses that can supply critical items to frontline healthcare providers and essential workers. Nebraska MEP partnered with the Nebraska Chamber of Commerce & Industry and the Departments of Economic Development and Administrative Services to connect manufacturers to organizations in need of PPE across the state. The Nebraska MEP website provides a survey for manufacturers with smaller-scale production capabilities. The medical community can reach out to Nebraska MEP to be connected with a manufacturer with available products or services.

COVID-19 ONLINE RESOURCES
Nebraska MEP has hosted several webinars covering a variety of topics related to the pandemic since March. Subjects have included improving employee and employer relationships, ISO certification information, cybersecurity, developing sales and increasing revenue, maintaining client relationships, food safety, and value stream mapping. For Manufacturing Month 2020, Nebraska MEP posted eight online webinars which could be accessed for free through the end of October.
NEVADA MANUFACTURING AT A GLANCE (2020)

- **2,091** manufacturing establishments in the state
- **58,000** employed by manufacturing industry
- **Primary manufacturing sectors:**
  - Food manufacturing
  - Fabricated metal manufacturing
  - Non-metallic mineral manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

COVID-19 RESPONSE ACTIONS

**LAYOFF AVERSION SERVICES**

Since the beginning of the pandemic, one of NVIE’s primary focuses has been layoff aversion and supporting displaced workers. NVIE recently launched a virtual job portal, where applicants can view specific jobs, or submit their resume for general consideration. This helps manufacturers locate and hire available workers.

In September 2020, NVIE, Empower America, and University of Nevada Reno launched the Manufacturing Technician (MT1) Express Online Certification Prep program through a grant provided by the Workforce Innovation and Opportunity Act. The program is free to recently displaced workers, and includes two self-paced, college-level online courses as well as post-certificate interview opportunities. This program provides an entry level pathway to careers in manufacturing. NVIE has also expressed intent to help transition employees in the gaming industry who are being permanently laid off to manufacturing career opportunities.

**PPE AND SUPPLY CHAIN SUPPORT**

In an ongoing effort to meet PPE demand in Nevada, NVIE is coordinating with the Governor’s Office of Economic Development (GOED) to identify manufacturers with available products and services. The NVIE website hosts the GOED’s PPE survey, which identifies manufacturers by location, business size, available products and/or services, product quantities, and ability to retool to manufacture new products. This collaborative effort has led to multiple success stories, such as the University of Nevada Reno Innovation Center producing 750 gowns in June 2020 through NVIE’s support and manufacturing network connections.
COVID-19 RESPONSE ACTIONS
(continued)

COVID-19 Critical Supply List
In addition to NVIE's collaborative efforts with GOED, the website also provides a page that contains links to an open source Google Doc compendium for critical supplies. The compendium includes blueprints and product specifications for N-95 masks, hand sanitizer, hospital gowns and beds, and more.

Technical Assistance for Manufacturers
Manufacturers are encouraged to reach out to NVIE for no-cost consultations and assessments for assistance with meeting challenges related to the pandemic. To receive a no-cost assessment, manufacturers fill out a brief online form. Eligible assistance includes process improvements, communication strategies, hiring and retaining employees, marketing, sales, new product development, and more.

No-Cost Cybersecurity Evaluations**
NVIE has expressed its intent to deliver cybersecurity evaluations to manufacturers that focus on defense, food, and health care supply chains to assess cybersecurity needs and challenges. These evaluations will be provided at no charge to manufacturers.

COVID-19 Virtual Training
Since March 2020, NVIE has hosted several webinars covering a variety of topics related to the pandemic. Topics have included financing options for businesses and an overview of the SBA Disaster Relief Programs, supplier scouting and pivoting to new products, adapting to pandemic-related challenges, cash flow management, business resilience, and more.

(***) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE:

NEW HAMPSHIRE MANUFACTURING EXTENSION PARTNERSHIP (NH MEP)

PREPARED BY:

UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/23/2020

NEW HAMPSHIRE MANUFACTURING AT A GLANCE (2020)

- 2,015 manufacturing establishments in the state
- 70,000 employed by manufacturing industry
- **Primary manufacturing sectors**:
  - Computers and electronic products
  - Fabricated metal manufacturing
  - Machinery manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

**CARES ACT FUNDED TRAINING AND PROGRAMS**

In August 2020, NH MEP announced that it would be using CARES Act funding to deliver expanded services to New Hampshire manufacturers at either no cost or 50% funded between 7/1/2020 and 9/30/2021. In addition to general consulting and advising, NH MEP is providing partial funding for Phase 1 of the Cybersecurity Maturity Model Certification (CMMC), as well as the Kaizen Rapid Improvement program, lean assessment, principles of lean manufacturing course, marketing strategies program, sales training program, and value stream mapping services at no cost. The expansion of these services at reduced or no cost provides critical technical support services for manufacturers as they navigate pandemic-related challenges and opportunities.

**COVID-19 SUPPLY SURVEY AND PPE SUPPORT**

On behalf of a request from the Governor of New Hampshire, NH MEP has posted a survey on their website to identify potential suppliers or donors of PPE and other critical supplies. Upon filling out the survey, the New Hampshire Department of Business & Economic Affairs (NH DBEA) follows up with businesses with production or donation capabilities to facilitate supplier matchmaking. The survey helps to connect manufacturers with each other and with relevant suppliers. This effort is part of a larger ongoing partnership between NH MEP and NH DBEA to accelerate the production of critical supplies for frontline workers and other essential employees in New Hampshire.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
COVID-19 RESPONSE ACTIONS
(continued)

Layoff Aversion and Temporary Workforce Services
In an effort to provide layoff aversion services to New Hampshire manufacturers, NH MEP is currently conducting a Temporary Workforce Survey. The survey aims to identify manufacturers that are currently employing too many people due to a decline in production and/or sales, as well as manufacturers that have a need for temporary staff. The survey allows NH MEP to provide temporary staff matchmaking services.

Consulting Services for Manufacturers
New Hampshire manufacturers are encouraged to reach out to NH MEP to receive no-cost consulting services throughout the pandemic. NH MEP project managers are consulting with small and medium sized manufacturers and offering free service via phone, email or video conferencing. These consulting sessions are meant to help manufacturers answer questions, troubleshoot challenges, and connect businesses with relevant resources.

Virtual Training and Workshops
In order to stay connected to New Hampshire manufacturers during the pandemic, NH MEP has provided a number of COVID-19 related webinars, and moved some of their existing workshops to a virtual webinar format. Topics have included strategies for staying profitable during COVID-19, technology-driven market intelligence, an introduction to value stream mapping, internal auditor training, principles of lean manufacturing, internet marketing solutions, and more.
COVID-19 RESPONSE PROFILE:

NEW JERSEY MANUFACTURING EXTENSION PARTNERSHIP (NJMEP)

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UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (m Wilson@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/7/2020

NEW JERSEY MANUFACTURING AT A GLANCE (2020)

- **8,998** manufacturing establishments in the state
- **247,000** employed by manufacturing industry
- **Primary manufacturing sectors**:  
  - Chemical manufacturing
  - Food manufacturing
  - Computers and electronic products

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

SUPPLY CHAIN PREPAREDNESS AND SUPPORT
NJMEP has recently created a critical supply chain online database tool to capture the response of science, pharmaceutical, medical device, and emergency manufacturers that are critical to the supply chain of their respective fields. Manufacturers identify current strengths, capacities, and best practices, as well as challenges brought about by COVID. Through this database, NJMEP has worked with over 300 manufacturers to showcase manufacturing capabilities. This database was shared with state and federal partners to add in supply sourcing efforts. The critical supply chain database and other supply chain support efforts have led to multiple success stories; from helping manufacturers secure over $1.5 million in PPE, to providing PPE to frontline workers and law enforcement in a New Jersey municipality, to connecting an eight-employee textile manufacturer to another New Jersey manufacturer to produce PPE and successfully avoid the lay-off of three employees. Additionally, NJMEP provides a separate supply chain database for food manufacturers. Manufacturers receive tailored technical assistance from NJMEP based on supply chain needs, be it on a regional, national, or global scale.

COVID-19 VIRTUAL TRAINING AND RESOURCES
Since March, NJMEP has provided a robust online training system for manufacturers that covers a variety of topics related to the pandemic. Topics have included business recovery strategies, management skills, training during the pandemic, guidance on returning to work, lean manufacturing, a “Back to Work Checklist” training, and more. NJMEP has also created a free, downloadable Return to Work and Recovery Guide that covers topics such as health and safety protocols, reopening guidelines, and social distancing.
COVID-19 RESPONSE ACTIONS
(continued)

Workforce Support
NJMEP has implemented a number of measures to support New Jersey's manufacturing workforce during the pandemic. In-person workforce trainings have been modified to support an online format. Additionally, NJMEP provide free, online virtual training and consulting sessions. Consulting sessions are available in three categories, and are presented in (5) four-hour sessions. Topics include process control (lean manufacturing, Six Sigma, plant layout), human resources and sales, and business planning (strategic, continuity, risk assessments). Additionally, NJMEP is currently training 160 underemployed or unemployed individuals from New Jersey municipalities, and providing them with online Manufacturing Skills Standard Council (MSSC) training.

Redeployment of Resources and Retooling Assistance
NJMEP has maintained a specific focus on helping manufacturers in efforts to redeploy resources or retool, including but not limited to healthcare supplies and equipment production. Assistance has included identifying opportunities, assessing feasibility and gaps, production line layout evaluation, assessing distribution channels, networking connections with other manufacturers and technical resources, and applying methods for rapidly retraining employees. NJMEP's efforts have supported PPE production by identifying manufacturers that can produce PPE, assisting with supplier matchmaking, and sourcing materials for production.

COVID-19 Assistance for Manufacturers
New Jersey manufacturers can complete a brief online survey on the NJMEP website to receive follow-up support from NJMEP advisors. NJMEP provides follow-up support, including remote consultations and facilitation, to apply problem-solving methods to operational, workforce, supply chain, cash flow, business continuity, and recovery and resiliency support. Additionally, NJMEP conducted a virtual mini assessment of over 1,100 manufacturers to identify critical industry needs. Examples of support related to the pandemic include helping manufacturers understand Executive Orders and work safety protocol, redesigning product lines to operate within CDC guidelines, helping manufacturers pivot to produce PPE, informing manufacturers of workforce benefits and programs, and more.

Partnerships with Local, Statewide, and National Organizations
NJMEP is working with partners across the state and leveraging expertise, resources, and connections to assist with the pandemic response and recovery efforts. NJMEP immediately developed a plan which focuses on valuable local, state, and national resources to alleviate the COVID-19 disruptions manufacturers and their employees continue to face. Among these partners is the MEP National Network, which NJMEP tapped into to address supply chain disruptions. Partnerships formed through NJMEP have been instrumental in keeping manufacturing open during the COVID shutdown.
NEW MEXICO MANUFACTURING AT A GLANCE (2020)

- **1,820** manufacturing establishments in the state
- **28,000** employed by manufacturing industry
- **Primary manufacturing sectors:**
  - Computers and electronic products
  - Petroleum and coal manufacturing
  - Food manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

NEW MEXICO COVID-19 EMERGENCY SUPPLY COLLABORATIVE

In April 2020, NM MEP announced the launch of the New Mexico COVID Emergency Supply Collaborative website. This statewide collaborative is a partnership that includes NM MEP, Air Force Research Laboratories (AFRL), the state of New Mexico, national federal laboratories and other organizations.

The website aims to quickly source, produce, and test needed medical and other critical supplies. The Collaborative focuses on products that meet medical needs. The website contains a form for businesses and individuals that can provide needed products or materials, and for medical providers in need of supplies. This allows the Collaborative to perform matchmaking services. It also contains a Back-to-Business Directory containing contact information of businesses with production capabilities and supplies.

As of September 2020, the Collaborative has been able to fulfill 127 out of 138 PPE requests made through the Supplier Self-Service Portal, touching almost 70% of the counties in the state of New Mexico. This portal serves as an informational PPE database for those looking to facilitate transactions. Through these PPE requests, the Collaborative has facilitated the procurement of over 20,000 gowns, over 10,000 face masks, and more.
COVID-19 RESPONSE ACTIONS
(continued)

NM Safe Certified Portal
NM MEP also engaged with various partners and the State government to successfully launch the Return-to-Work COVID Safe Practices portal, NM Safe Certified. This portal is organized by industry, and contains industry specific virtual training. Once an organization has completed training and passed all assessments at various employee levels, the company can apply to become an NM Safe Certified employer. In Fall 2020, over 40 manufacturers became COVID-safe certified.

Technical Assistance for Manufacturers**
NM MEP has expressed intent to implement a number of services that will provide technical assistance and assessments to manufacturers. Planned activities include hiring an assessment coordinator to assist with no-cost assessments, and deploying tools that support expanding customer bases and generating revenue.

Virtual Training Resources**
NM MEP has expressed its intent to conduct webinars that will provide critical information to manufacturers throughout the pandemic. Additionally, NM MEP intends to develop and deploy virtual workshops focusing on COVID safe practices and lean manufacturing with social distancing. In June, NM MEP participated in a joint webinar with the City of Aztec Municipal Government Offices, Aztec Chamber of Commerce, and WESST, a New Mexico-based small business development and training organization, to present a webinar on safe practices and social distancing.

(**) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE:

NEW YORK MANUFACTURING EXTENSION PARTNERSHIP (NYMEP)

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/23/2020

NEW YORK MANUFACTURING AT A GLANCE (2020)

- 16,362 manufacturing establishments in the state
- 430,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Chemical manufacturing
  - Food manufacturing
  - Computers and electronic products

Source: BLS QCEW Data. National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

The NYMEP network includes eleven centers: FuzeHub, a statewide center, and ten regional subcenters. Each center brings distinct expertise accessible across the entire state. In September 2020, NYMEP received $2.3 million in CARES Act Funding, and dispersed the funding between four NYMEP sub-centers: FuzeHub, the Center for Economic Growth (CEG), the Industrial & Technology Assistance Corporation (ITAC), and the Manufacturing & Technology Enterprise Center (MTEC). Together, the four subcenters are implementing NYMEP's COVID Recovery Initiative, and delivering services across four categories: re-shoring and re-building supply chains, PPE assistance, virtual assessments and assistance, and webinars and online workshops.

RESHORING AND REBUILDING SUPPLY CHAINS

Efforts to reshore and rebuild supply chains are led by CEG using $800,000 in CARES Act funding. This initiative focuses on filling manufacturing skills gaps, reducing production costs, and addressing other barriers to moving production from other countries back to New York manufacturers. CEG is offering assessments and project resources to assess supply chain impacts, rebuild and strengthen local supply chains, and reshore.

This initiative contains two major components: supply chain assessments to understand supply chain gaps, risks, and vulnerabilities, and assistance identifying reshoring opportunities. Manufacturers interested in receiving these services can fill out a brief online form and be connected to CEG.
COVID-19 RESPONSE ACTIONS (continued)

PPE Assistance
ITAC was provided with $650,000 in CARES Act funding to lead PPE assistance efforts. The PPE Assistance program provides support in forecasting PPE demand, maximizing PPE use, identifying and qualifying PPE suppliers, and identifying optimal online supplier directories and buying channels. The program contains five parts: a PPE survey that enables ITAC to get a sense of overall supply and demand; a PPE self-assessment and demand forecasting tool; demand optimization and supplier information services; $100,000 to be disbursed among ten New York manufacturers to scale high-tech PPE production, and provide procurement models and logistics services. In April 2020, FuzeHub also provided PPE assistance through their COVID-19 Manufacturing Grants Program. FuzeHub provided $400,000 to expand resources for manufacturers hoping to accelerate PPE production, particularly of masks and ventilators. The program offered (4) $50,000 grants for masks and (2) $100,000 grants for ventilators.

Virtual Assessments and Assistance
MTEC leads virtual assessments and assistance efforts using $500,000 in CARES Act funding. The goal is to "determine what assistance is needed by companies to ensure they are operating safely, effectively and efficiently." The program offers four major services: assessments in the core service areas of Lean Manufacturing, Cybersecurity, Quality, and Engineering and other needs; tele-consulting; project funding for MTEC provided services up to $10,000 in value; and a "Shaping the Future" program that allows manufacturers to provide input on how services should be delivered going forward.

Manufacturing Reimagined: Webinars and Online Workshops
Fuzehub was granted $350,000 in CARES Act funding to roll out the "Manufacturing Reimagined Program," which provides webinars and online workshops to manufacturers. The program has prioritized training focused on topics related to the pandemic and beyond, such as emergency preparedness, supply chain utilization during a crisis, cybersecurity webinars and workshops, and recovery strategies. In addition to the webinars and workshops, FuzeHub is providing up to $10,000 in funding for project implementation for select manufacturers that participated in a webinar or workshop.

NYMEP COVID-19 Back to Work Playbook
NYMEP has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, enforcement guidelines, etc. The guide is publicly available on the NYMEP website.
COVID-19 RESPONSE PROFILE:

NORTH CAROLINA MANUFACTURING EXTENSION PARTNERSHIP (NCMEP)

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 9/16/2020

NORTH CAROLINA MANUFACTURING AT A GLANCE (2020)

- 10,383 manufacturing establishments in the state
- 473,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Food manufacturing
  - Chemical manufacturing
  - Computers and electronic products

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

COVID-19 RESPONSE ACTIONS

NCMEP EMERGENCY ASSISTANCE PROGRAM

The Emergency Assistance Program (EAP) began in July to provide services that support manufacturers’ ability to address issues related to safe operations, pivot production to PPE and improve overall competitiveness as market challenges continue to arise. A primary step in this process includes an EAP assessment survey launched in July to determine current business conditions due the pandemic and to identify operational challenges in order to connect them to resources and services. The survey has allowed NCMEP to determine manufacturers’ eligibility for various funding sources while also providing a more detailed account of the impact of the pandemic on manufacturers in the state.

In the early days of the pandemic, in partnership with North Carolina’s Emergency Management Division, NCMEP built a Rapid Manufacturing Response Database to capture the capability of manufacturers across the state to deliver critical PPE supplies during the pandemic. Manufacturers were directed to a (now defunct) procurement survey on the NC Department of Health & Human Services website, which prioritized suppliers that could provide N-95 respirators, surgical masks, goggles, hand sanitizer and other critical supplies. The identification of and follow-up with these companies by NCMEP field staff has been a key strategy in its COVID-19 response.

MNC NETWORK WEBINAR SERIES

NCMEP has hosted several webinars covering a variety of topics related to the pandemic since March. Topics have included business continuity planning, supply chain management, following OSHA guidelines, pivoting to meet market challenges caused by the pandemic, strategies for quickly and cost effectively using more innovative manufacturing tools, feasibility of pivoting to PPE production, and navigating CARES Act funding.
COVID-19 RESPONSE ACTIONS
(continued)

Technical Assistance for Pandemic Production
NCMEP has a statewide team of regional managers who are trusted advisors to North Carolina manufacturers. For those manufacturers who completed the NCMEP EAP survey, the regional managers reached out to them to determine how the pandemic impacted their business and what services NCMEP might offer to help them pivot to producing PPE temporarily or long-term, reshore products, and develop business continuity plans to minimize supply chain disruption. Assistance includes advanced product testing, medical device/FDA support, supplier scouting, market development, business continuity, and disaster recovery.

Market Development Assistance
The Economic Development Partnership of North Carolina, a NCMEP partner, identifies manufacturing prospects for economic gardening projects. Economic gardening is an economic development program focused on helping companies grow. While traditional economic development focuses on recruiting companies, this program focuses on growing local companies. These companies typically have from $1 to $50 million in annual sales and 10 to 99 employees. Their developmental stage includes a product, market awareness, and management skills. They have the potential for additional sustained growth but do not have access to the sophisticated tools and concepts of larger markets. Economic gardening will provide companies with various tools for growth, such as market research, targeted client maps, web assistance, and business problem analysis. This service meets a critical need as companies try to find new markets and reposition themselves during the pandemic.

Supporting the Business Edge Layoff Aversion Program*
Business Edge is a program administered by the North Carolina Department of Commerce to help businesses with layoff aversion strategies and activities designed to prevent or minimize job losses. Business Edge strategies and services are customized, quickly deployable and designed and coordinated with a variety of partners, including NCMEP. Through an assessment process, the Business Edge program staff determine company eligibility based on several 'at risk' categories, including: declining sales, high turnover, supply chain issues, safety compliance, changes in management behavior or ownership, and/or innovations among competitors.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
COVID-19 RESPONSE PROFILE:

IMPACT DAKOTA

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 11/4/2020

NORTH DAKOTA MANUFACTURING AT A GLANCE (2020)

- 799 manufacturing establishments in the state
- 25,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Machinery manufacturing
  - Food manufacturing
  - Petroleum and coal manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

NO-COST ASSESSMENTS*
Impact Dakota is currently offering expanded services by providing their no-cost assessments to manufacturers across the state. The assessments are based on principles of LEAN manufacturing, which focuses on waste reduction and achieving higher levels of production and operations productivity. The assessment includes an on-site visit followed by a brief summary report. Assessment topics include manufacturing lead times and throughput, on-time delivery and quality, production capacity and planning, pull/Kanban system manufacturing processes, inventory including raw materials, work-in-process (WIP) and finished goods, materials replenishment system facility layout, product flow and movement, travel distances, square footage utilized, equipment downtimes including setups, input quality, and waits, internal talent development and employee involvement, workplace organization (5s) and visual control, supplier(s) issues, and cybersecurity needs.

PPE AND SUPPLY CHAIN SUPPORT
In an effort to identify North Dakota manufacturers that have critical supply production capabilities, Impact Dakota has created a webpage where manufacturers can display their products online. Manufacturers can contact Impact Dakota to be listed as a manufacturer with available supplies. Impact Dakota is also engaged in supplier scouting efforts: both companies that are seeking suppliers and that are interested in becoming suppliers can submit an online form, which is then submitted to the National MEP network for nationwide supply matchmaking.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
**COVID-19 RESPONSE ACTIONS**
(continued)

**Virtual Training & Workshops**
Impact Dakota has offered a number of webinars and virtual training opportunities related to COVID-19 and beyond throughout the pandemic. Topics have included food safety training, cybersecurity, and virtual leadership workshops. Impact Dakota has moved their Lean Enterprise Certification Program (LECP), which is a pre-requisite for more advanced workshops, to a virtual format. Additionally, the ExportTech Program, which is designed to help companies pivot to global markets, as well as ISO9001 and AS9100 internal auditor training, have been moved to a virtual setting.

**Workforce Transition and Retraining Services**
Impact Dakota has expressed intent to partner with state and regional workforce development groups to address statewide workforce transition and retraining services.

(***) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE:

OHIO MANUFACTURING EXTENSION PARTNERSHIP (Ohio MEP)

PREPARED BY: UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbaní (rumana.rabbaní@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/22/2020

OHIO MANUFACTURING AT A GLANCE (2020)

- 15,539 manufacturing establishments in the state
- 693,000 employed by manufacturing industry

Primary manufacturing sectors:
- Transportation equipment manufacturing
- Fabricated metal manufacturing
- Machinery manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

OHIO MANUFACTURING ALLIANCE TO FIGHT COVID-19

Launched in April 2020, the Ohio Manufacturing Alliance to Fight COVID-19 is a joint collaboration between Ohio MEP* and partner MAGNET, the Ohio Manufacturers’ Association, the Ohio Hospital Association, and JobsOhio. This collaborative initiative was created to engage manufacturers and identify which companies have interest in repurposing their manufacturing operations to produce critical PPE products, especially products for the health care industry.

The initiative consists of three major "work streams" - supply, demand, and engineering support for manufacturers. Ohio MEP and MAGNET are responsible for the management and oversight of all three work streams.

On the demand front, Ohio MEP and MAGNET serve as the primary contact for health care personnel in need of essential PPE, determining products and quantities needed. They also manage communications with manufacturers, suppliers, and vendors that have volunteered to participate in the initiative by assessing their capabilities and capacity to retool and provide needed supplies. Finally, they work with manufacturers to think through engineering processes, and provide assistance with developing and evaluating product concepts, retrofitting existing components to pivot to PPE production, executing rapid prototyping, and more. Manufacturers that are interested in providing critical PPE or that have raw materials that can be used in PPE production can complete a brief survey on the Ohio Manufacturing Alliance website.

*The Ohio MEP network includes six regional partners: CIFT, Columbus State Community College, Eastlane at University of Dayton Research Institute, MAGNET, the Ohio State University - South Centers and TechSolve. Each center provides basic manufacturing support services and brings distinct expertise accessible across the entire state. All six were engaged with the Ohio Manufacturing Alliance to fight COVID-19, sourcing demand, supply and engineering support in their respective regions.
COVID-19 RESPONSE ACTIONS (continued)

Ohio Emergency PPE Maker's Exchange
As part of the Ohio Manufacturing Alliance to Fight COVID-19 initiative, the Emergency PPE Maker's Exchange was launched in April 2020. The exchange is primarily designed for smaller purchases of PPE from retooled or repurposed products. Additionally, it hopes to highlight the ingenuity and adaptability of Ohio's manufacturers. Since April, the exchange has reached several notable milestones, including providing 1,300 hand sanitizer kits to the Ohio Department of Aging, and producing 1 million face masks and 750,000 isolation gowns in May of 2020. Additional success stories can be found here.

COVID-19 Business Assessment
Ohio MEP has created an online survey to assess the key needs and challenges of manufacturers during the pandemic. Businesses are asked a series of questions addressing challenges in various areas, including staffing and workforce, business continuity, sales, emergency operation plans, supply chain, cybersecurity, CARES act funding, reopening plans, and more.

COVID-19 Webinar Series & Virtual Training
Ohio MEP has offered a number of COVID-related webinars and virtual training opportunities through its network of partners. MAGNET, TechSolve, and Fastlane, all part of Ohio MEP network, have offered virtual COVID-19 webinar series. Additionally, Columbus State Community College already offers several certification and training programs in an online format.

Columbus State Partnership with GDI Partners & Balanced Biotech
In July 2020, Columbus State Community College announced a partnership with GDI Partners to support Ohio-based life sciences company Balanced Biotech, Inc., in efforts to manufacture groundbreaking COVID-19 medicine delivery technologies. Balanced Biotech, Inc. has been performing research on a COVID viral detection test called DAT-X, which uses biosensing and electrochemical technology for both bedside and in-the-field testing for infectious diseases. Columbus State is sponsoring Balanced Biotech at GDI Partners' TRIAD event, where they will pitch their innovation to U.S. Combatant Command Technology Scouts.

Layoff Aversion Services**
Ohio MEP has expressed its intent to partner with various workforce development organizations to provide technical assistance to manufacturers across the state in implementing layoff aversion strategies and prevent or minimize job losses.

Ohio MEP Reopening Guidelines
Ohio MEP has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees and on-site testing. The guide is publicly available on the Ohio MEP website.

COVID-19 Audits
Columbus State Community College, an Ohio MEP partner, is performing no-cost audits that assess compliance with Ohio MEP's reopening guidelines. The audits include a walk-through of the facility and four-hour assessment. Auditors then follow up with a detailed report assessing compliance with the guidelines and recommendations for improving safety protocols on-site.

(**) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE:

Oklahoma Manufacturing Alliance (OMA)

Prepared by: UNC Center for Urban and Regional Studies

Our Project Team

Project Lead
Nichola Lowe, Ph.D. (nlowe@unc.edu)

Graduate Research Assistants
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/29/2020

Okahoma Manufacturing at a Glance (2020)

- 4,221 manufacturing establishments in the state
- 138,000 employed by manufacturing industry

Primary manufacturing sectors:
  - Machinery manufacturing
  - Fabricated metal manufacturing
  - Food manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

Primary manufacturing sectors were determined by dollars generated.

COVID-19 Response Actions

PPE and Supply Chain Support

Since the pandemic began, OMA has taken several actions to support manufacturers experiencing supply chain disruption, manufacturers looking to produce PPE and other critical supplies, and frontline works across the state.

In May 2020, OMA launched the Supplier Scouting Program, which connects manufacturers with suppliers of materials, products, and processes. The program taps into both local and regional connections within Oklahoma, as well as OMA's national connections as part of the MEP network. Manufacturers can reach out to an extension agent to detail needed supplies, and receive follow up feedback and contact information of relevant suppliers.

OMA is also contributing to statewide efforts to produce PPE for frontline and other essential workers. In collaboration with the Greater Oklahoma City Chamber of Commerce and the Tulsa Regional Chamber of Commerce, OMA has been a key partner in supplementing the Oklahoma Department of Commerce's PPE Source Directory. Manufacturers can fill out a brief form to be listed on the directory, which includes contact and product information. OMA has tapped into its network of manufacturers to identify eligible businesses. OMA has also shared an open source Google Doc compendium, which details blueprint specifications for various PPE products.

Finally, OMA is providing retooling assistance to manufacturers looking to pivot to PPE/critical supply production for essential workers. Available assistance includes identifying production opportunities, assessing production feasibility and gaps, assessing line layout, identifying distribution channels, forming connections with other manufacturers and providing technical resources, and methods for rapidly retraining employees.
COVID-19 RESPONSE ACTIONS (continued)

No-Cost Consultations for Manufacturers
OMA is providing no-cost consultations to help manufacturers address a number of challenges related to the pandemic. These consultations aim to help company leaders apply innovative problem solving strategies to address challenges in operations, workforce, supply chain, cash flow, business continuity, and other fields, and provide specialized support in recovery and resiliency responses. In April 2020, OMA launched an ongoing Pandemic Recovery Survey to identify the major challenges facing manufacturers and further tailor technical assistance and consultations.

Support for Displaced Workers
One of OMA's primary focuses throughout the pandemic has been providing specialized support to displaced workers. OMA recently launched the Workforce-Connection program; a matchmaking service for displaced workers to connect with companies that have immediate hiring needs. Additionally, OMA hosted a webinar series specifically catered to displaced workers from April to June 2020. Topics include a resume bootcamp, virtual interview and job searching tips, and rebranding in a virtual environment.

Strengthening Manufacturer Connections**
OMA emphasizes the importance of knowledge-sharing and building connections during the pandemic. The organization is currently working on developing virtually-facilitated discussion groups to provide a platform for manufacturers to share challenges and troubleshoot solutions.

OMA Return to Work and Recovery Guide
OMA produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and enforcement guidelines. The guide is publicly available on the OMA website.

COVID-19 Virtual Resources
OMA has hosted several webinars and videos covering a variety of topics related to the pandemic. Topics have included support for displaced workers, and a five-part Youtube series from OMA's President and CEO, Dave Rowland, featuring weekly manufacturing updates from March to May. OMA also provides a number of downloadable resources on their COVID-19 Resources landing page.

(**) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE:
OREGON MANUFACTURING EXTENSION PARTNERSHIP (OMEP)

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumanara.babani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 9/16/2020

OREGON MANUFACTURING AT A GLANCE (2020)

- 6,442 manufacturing establishments in the state
- 193,000 employed by manufacturing industry

Primary manufacturing sectors:
- Computers and electronic products
- Food manufacturing
- Wood product manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

FACTORY OF TOMORROW VIRTUAL LAB*

In April 2020, OMEP announced its plans to launch the Factory of Tomorrow Virtual Lab in partnership with the Oregon Manufacturing Innovation Center Research & Design Team (OMIC R&D). The lab is intended to empower manufacturers to adopt emerging technologies and increase efficiency and competitiveness. The lab will also help manufacturers meet the challenges of the pandemic, such as supply chain disruption and production delays, through advanced manufacturing technologies. The September 2020 launch includes interactive experiences, and focuses on areas such as robotics, 3-D printing, augmented and virtual reality, Internet of Things (IoT) device integration, cloud-based computing, and data analytics. The Factory of Tomorrow Lab will serve as Oregon’s first advanced technologies lab dedicated exclusively to small and medium manufacturers, and will help position companies to rebound from the pandemic with advanced technologies and skillsets.

COVID-19 WORKPLACE PREPAREDNESS ASSESSMENT FOR MANUFACTURERS

Led by OMEP’s Business Continuity Planning Team, OMEP has recently developed a COVID-19 interactive assessment tool to determine the workplace preparedness of manufacturers across the state and deliver tailored consulting and technical assistance. The assessment contains 40 questions grouped into nine categories that assess each company’s overall awareness of current guidelines, protocols, and resources. OMEP will then follow up with tailored recommendations, as well as a heat map that allows each company to hone in on key areas of focus. OMEP can also provide assistance with developing a more formalized implementation plan at no cost.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
COVID-19 RESPONSE ACTIONS
(continued)

Supply Chain Support
OMEP has dedicated space on their website to resources for PPE supply. The webpage updates frequently to reflect new opportunities to provide stakeholders across the state and nation with PPE, for example the Oregon Supply Connector and National Supply Connector, as well as for manufacturers to seek out critical supplies needed for ongoing manufacturing of their products.

COVID-19 Impact Survey
OMEP has developed an online impact survey to better assess the impact of the pandemic on manufacturers in the state. The survey covers a variety of topics, including sales impacts, workforce and job loss challenges, new technologies and tools explored as a result of the pandemic, and CARES Act funding. This survey is intended to help OMEP align resources to meet client needs and leverage the vast partner support across the state.

"Ready Or Not" Virtual Business Simulation*
OMEP has developed a virtual business simulation experience called "Ready or Not," a competitive online game that brings real-world challenges to life. Participating teams compete as fictitious manufacturing companies that are tasked with doubling their organizations revenue over a six-year time frame. The group works to understand threats and opportunities, then makes strategic decisions on how to invest their limited resources to achieve their goal of increasing market share while growing profitability. This simulation builds manufacturing business acumen, expands awareness of strategies and tactics, and encourages new perspectives to prepare for tomorrow's challenges. Participants will make decisions in the areas of business strategies, financials, operations, technology, leadership, workforce, and organizational development.

No Cost Cybersecurity Evaluations and Layoff Aversion Services**
MEP has expressed its intent to deliver cybersecurity evaluations to manufacturers that focus on defense, food, and health care supply chains to assess cybersecurity needs and challenges. These evaluations will be provided at no charge to manufacturers. Additionally, OMEP has expressed its intent to partner with various workforce development organizations to provide technical assistance to manufacturers across the state in implementing layoff aversion strategies to prevent or minimize job losses.

OMEP COVID-19 Workplace Preparedness Guidebook and Checklist
OMEP has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and enforcement guidelines. Additionally, OMEP has developed an exhaustive downloadable checklist that covers Oregon guidelines and resources for employers on topics such as employee benefits, downsizing and layoffs, unions, supply chain, use of technology and creating a culture of safety. Both resources are publically available on the OMEP website.

COVID-19 Webinar Series
The OMEP website has dedicated space to COVID-related webinars. Topics have included discussions around resource sharing, creating and implementing business continuity plans, overcoming current market challenges, and more.
COVID-19 RESPONSE PROFILE:

Pennsylvania Manufacturing Extension Partnership (PA MEP)

Prepared by: UNC Center for Urban and Regional Studies

Our Project Team

Project Lead
Nichola Lowe, Ph.D. (nlowe@unc.edu)

Graduate Research Assistants
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/19/2020

Pennsylvania Manufacturing at a Glance (2020)

• 14,492 manufacturing establishments in the state
• 568,000 employed by manufacturing industry
• Primary manufacturing sectors:
  ○ Chemical manufacturing
  ○ Food manufacturing
  ○ Fabricated metal manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 Response Actions

Pennsylvania Manufacturing Call to Action Portal

PA MEP has joined the Pennsylvania Department of Community & Economic Development (PA DCED) in implementing the Manufacturing Call to Action Portal, which aims to mobilize manufacturers around critical PPE production. Through the portal, PA MEP and PA DCED are able to match manufacturers and distributors with frontline workers and organizations in need of health supplies, assist manufacturers looking to produce PPE in identifying skilled workers, and identify manufacturers that can pivot to produce PPE. The Portal is part of the State’s larger Business-2-Business (B2B) Interchange Directory, which connects manufacturers using the Call to Action Portal with organizations in need of supplies.

Additional Supply Chain Support

All of PA MEP’s seven regional centers have provided additional supplier scouting and supply chain support. By connecting both regionally and through the MEP National Network, technical assistance has been provided to secure manufacturers’ current production or pivot to PPE production. For example, NWIRC is providing consulting through strategic business advisors for companies to troubleshoot specific supply chain needs and challenges. MANTEC has developed a webpage that displays manufacturers with available PPE supplies. DVIRC has developed a cloud-based platform to connect manufacturers that can produce PPE or other critical supplies for the life sciences industry. Manufacturers with production capabilities are directed to DVIRC’s COVID-19 “Life Sciences” Vendor Form.
COVID-19 RESPONSE ACTIONS (continued)

Technical Assistance for Manufacturers
All seven of PA MEP’s regional subcenters are providing technical assistance and/or assessments for manufacturers. Businesses are receiving assistance in the fields of operational challenges, supply chain disruption and management, communication, cybersecurity threats, business continuity planning, risk assessments, HR solutions, and growth opportunities. Assessments and consultations are offered in a virtual setting with a subject expert at each of the respective subcenters.

NWIRC COVID-19 Recovery Program
NWIRC, a PA MEP subcenter representing manufacturers in Northwest Pennsylvania, has created the COVID-19 Recovery Program in partnership with state-wide organizations. The no-cost, virtual program includes a business assessment and financial analysis, followed by a tactical action plan, debrief, and referrals to provide customized support to manufacturers in the NWIRC network. Similar customized action plans and support are provided by each of the seven subcenters across Pennsylvania as a follow-up to their regional COVID-19 assessments for manufacturers.

MANTEC's COVID-19 Impact on Manufacturers Survey and Report
MANTEC, a PA MEP subcenter representing manufacturers in South Central Pennsylvania, began surveying regional businesses in March 2020. The survey consisted of 95 questionnaires and 40 in-depth interviews. In September 2020, MANTEC released a six-month preliminary report that highlights key manufacturing challenges identified in the survey such as negative impacts on sales, supply chain disruptions, and workforce challenges. The report serves as a useful resource for subcenters throughout the PA MEP network.

COVID-19 Return to Work Guides
Subcenters across the PA MEP network, including Catalyst Connection, NEIRC, NWIRC, IMC, and MANTEC have produced guides for manufacturers returning to work during the pandemic. These guides cover topics such as social distancing, cleaning guidelines, health monitoring of employees, and enforcement guidelines. The guides are publicly available on each subcenter website.

Manufacturing Peer Group Networks
In response to rapidly evolving COVID-19 issues, subcenters across the PA MEP network have hosted regional peer group meetings among CEOs, human resource managers, and technology managers. DVIRC alone facilitates eight on-going peer group forums in Southeastern PA for over 100 manufacturers. These peer groups provide manufacturers with a forum to quickly capitalize on each other’s experience and expertise. The lasting professional connections formed through these peer group meetings have been critical to supporting continued operations during COVID-19.

COVID-19 Virtual Training and Events
Subcenters across the PA MEP network have hosted numerous webinars and events covering a variety of topics related to the pandemic. Topics have included supply chain disruption, remote auditing, health and safety, risk management, market diversification, and more. Additionally, a range of existing in-depth training courses are offered online or in a hybrid format.

Partnership with Tooling U-SME*
Through regional partners Catalyst Connection, MANTEC, and NWIRC, PA MEP maintains a partnership with national online manufacturing training provider Tooling U-SME, to offset the cost of bringing on-site training to manufacturing companies. Tooling U-SME offers more than 500 online classes in topics such as engineering, fabrication, welding, and more. Through this partnership, Tooling U-SME offers manufacturers in the PA MEP network 90-day access free of charge.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
COVID-19 RESPONSE PROFILE:

PUERTO RICO MANUFACTURING EXTENSION, INC.
(PRIMEX)

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/29/2020

COVID-19 RESPONSE ACTIONS

COVID-19 EMERGENCY ASSISTANCE PROGRAM

In September 2020, PRIMEX launched three new programs aimed at responding to several concurrent events: the COVID-19 pandemic, recent earthquakes in the southwest area of the island, and rural areas and the agro-industrial sector in the south central area of the island.

The COVID-19 Emergency Assistance Program was designed to identify pandemic-related challenges and needs facing manufacturers, and provide technical, strategic, and educational support. Companies can reach out to PRIMEX to apply for assistance, and selected companies will receive up to 40 hours of technical and strategic consulting from PRIMEX consultants. Consultants will work with manufacturers to identify needs, develop growth strategies, and prepare financially and operationally for future disruptions. The program also provides virtual seminars, which are made available to all manufacturers.

PPE SUPPLY CHAIN SUPPORT

In March 2020, the Puerto Rico Department of Economic Development was tasked with identifying textile plants and distilleries that had the capacity to re-tool production to critical supplies and PPE for frontline workers. PRIMEX assisted with this effort by identifying eligible manufacturers, and 27 companies with over 500 available workers stepped forward to produce critical supplies by the end of March.

PRIMEX also provided technical assistance to manufacturers to ensure that they had the correct protocols and procedures for health and safety compliance in place, and helped to identify efficient operational procedures.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.

COVID-19 MANUFACTURING AT A GLANCE (2020)

- 1,931 manufacturing establishments in the state
- 75,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Computers and electronic products
  - Chemical manufacturing
  - Machinery manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[] Primary manufacturing sectors were determined by dollars generated.
COVID-19 RESPONSE ACTIONS (continued)

Technical Assistance for Manufacturers
Since the pandemic began, PRIMEX has provided technical assistance and consulting for manufacturers across a wide range of topics, including navigating SBA and PPP loans, general financial consulting, creating business continuity plans, and Industry 4.0 consulting. Manufacturers interested in receiving support fill out a brief online form and are contacted by a PRIMEX consultant with tailored services.

COVID-19 Virtual Training & Events
PRIMEX has hosted several webinars and events covering a variety of topics related to the pandemic. Events have included cybersecurity, health and safety protocols, creating health and safety contingency plans, developing business continuity plans, flexibility and adapting, managing fear during a crisis, practical and legal complications with remote work, developing emergency management plans, and food safety.

COVID-19 Exposure Control Plan
PRIMEX has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and enforcement guidelines. The guide is publicly available on the PRIMEX website.
COVID-19 RESPONSE PROFILE: POLARIS MANUFACTURING EXTENSION PARTNERSHIP (Polaris MEP)

PREPARED BY: UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 9/11/2020

RHODE ISLAND MANUFACTURING AT A GLANCE (2020)

- 1,527 manufacturing establishments in the state
- 39,000 employed by manufacturing industry

Primary manufacturing sectors:
- Aerospace manufacturing
- Chemical manufacturing
- Computers and electronic products

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

RHODE ISLAND MANUFACTURING TALENT EXCHANGE

In partnership with the Rhode Island Manufacturing Association and the Department of Labor and Training, Polaris MEP launched a pilot talent exchange program in April 2020.

The Rhode Island Manufacturing Talent Exchange serves two major purposes: first, it supports employers that are hiring during the pandemic by providing matchmaking services that identify workers with applicable experiences and skillsets. These employers are directed to a survey to identify the specific employee skillsets needed. Second, the talent exchange supports employers that are currently displacing workers due to layoffs brought on by the pandemic. Employers can help to find employment opportunities for displaced workers by registering their company on the Skills for Rhode Island’s Future website and providing a description of their company and the skillsets their employees possess. The Talent Exchange is an innovative resource to specifically support manufacturing employers during the pandemic.

"BACK TO WORK RI" INITIATIVE

Polaris MEP has joined the statewide "Back to Work RI" initiative, a statewide program created by Governor Raimondo in July 2020. The $45 million initiative will focus on bringing Rhode Islanders back into the economy with more stable, higher-paying jobs. The initiative plans to leverage partners such as Polaris MEP to hire thousands of new employees. Additionally, the program will provide displaced workers with job training, career counseling, financial literacy resources, and supports such as transportation and child care. The initiative plans to focus on providing opportunities for workers of color and women. Polaris MEP will serve as the representative for the manufacturing industry throughout the initiative.
COVID-19 RESPONSE ACTIONS (continued)

Textile Production Survey And Supply Chain Support
In March 2020, Polaris MEP partnered with the Rhode Island Textile Innovation Network (RITIN) to launch a survey specifically targeted towards textile manufacturers. The survey aims to gauge the capabilities of textile manufacturers to produce critical PPE supplies. Thus far, the survey has helped Polaris MEP and RITIN identify companies with production capacity and work with manufacturers to develop product prototypes for N95 masks. Additionally, Polaris has worked with RITIN and DESIGNxRI to develop Masks RI, an online marketplace for non-medical mask production. The marketplace connects makers and manufacturers of non-medical masks with potential buyers.

COVID-19 Impact Survey
In May 2020, Polaris MEP published the findings of a survey completed in partnership with the Rhode Island Manufacturer’s Association to better assess the impact of the pandemic on manufacturers in the state. The survey captured the most pressing concerns of manufacturing CEOs and owners. Notably, the survey showed that 62% of manufacturing firms felt that sales were most severely impacted by the pandemic.

Technical Assistance for Manufacturers
Manufacturers in Rhode Island are being encouraged to reach out to Polaris MEP for technical assistance related to the unique challenges presented by the pandemic. Polaris MEP advisors are available for free consultations that address topics such as supply chain disruption, creating disaster recovery plans, business continuity strategies, and more. Additionally, Polaris is providing free COVID-19 Facilities Assessments. Polaris project managers tour facilities, and share tools and strategies for improvement.

No-Cost Cybersecurity Evaluations**
Polaris MEP has expressed its intent to deliver cybersecurity evaluations to manufacturers that focus on defense, food, and health care supply chains to assess cybersecurity needs and challenges. These evaluations will be provided at no charge to manufacturers.

Rhode Island Manufacturing Workplace Readiness Playbook
Polaris MEP has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, enforcement guidelines, and more. The playbook is publicly available on the Polaris MEP website.

COVID-19 Webinar Series
Polaris MEP has hosted several webinars and events covering a variety of topics related to the pandemic. Topics have included supplier scouting, supply chain management, health and safety protocols, cybersecurity, CARES Act funding, and more. Additionally, Polaris MEP has published several blogs related to the pandemic, including supply chain disruption, marketing during periods of decreased sales, and teleworking guidance.

(***)) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE:
SOUTH CAROLINA MANUFACTURING EXTENSION PARTNERSHIP (SCMEP)

SOUTH CAROLINA MANUFACTURING AT A GLANCE (2020)

- 6,537 manufacturing establishments in the state
- 256,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Automotive manufacturing
  - Chemicals manufacturing
  - Machinery manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

SCMEP ONLINE
In May 2020, SCMEP announced a new online training platform, developed specifically for manufacturers, that allows companies and individuals to access training and certifications virtually. SCMEP Online provides a variety of on-demand training packages designed to address a wide array of operational disciplines. Manufacturers have access to both smaller ten-pack modules focused within a specific topic area, as well as more comprehensive training packages. Training topics include supply chain disruptions, Industry 4.0 manufacturing, recruiting and maintaining talent, and more.

TECHNICAL ASSISTANCE FOR MANUFACTURERS
Manufacturers across the state are being encouraged to reach out to SCMEP for technical assistance related to the unique challenges brought on by the pandemic. SCMEP advisors are performing cost-free competitiveness reviews, cost analysis assessments, cybersecurity assessments, lean manufacturing consulting, COVID-19 procedure reviews, reshoring consulting, supply chain strategy, risk management support, and more.

2020 RETURN TO WORK AND RECOVERY GUIDE
SCMEP has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as guidance for resuming operations, PPE and disinfection protocol, social distancing guidelines, and return to work planning. The guide is publicly available on the SCMEP website.
COVID-19 RESPONSE ACTIONS
(continued)

Launch of Emergency Supply Portal
A collaboration between SCMEP, the SC Hospital Association, the SC Department of Commerce, and SCBIO resulted in the expedited launch of a new online South Carolina Emergency Supply Collaborative web portal (SCCOVID19.org) in April 2020. The portal connected parties in need of essential supplies and equipment with those that can provide them quickly and efficiently. It allowed industry and community partners with the ability to quickly produce, source, test, certify, or contribute critical medical supplies (such as face shields, gowns, ventilators, and masks) to directly connect with healthcare providers, first responders, and members of industry in search of those essential supply needs in one step.

Manufacturers able to expand or pivot their production lines, suppliers and distributors with access to ready-made supplies, and organizations able to donate supplies or PPE can identify available supplies and equipment in the site’s central repository. Once reviewed and vetted by a team at SCMEP, organizations in need of materials are digitally connected through the portal to secure desired goods from providers directly. The portal added approximately 600 South Carolina manufacturers and distributors offering to supply items, identified 19 organizations and individuals with donations, included 300 companies requesting PPE, and allowed 222 healthcare providers to submit their specific needs. SCMEP was also able to assist manufacturers with the FDA certification process.

In July 2020, the collaborative secured a key partnership with nationally recognized supply chain support platform, PPE Exchange. This partnership is an extension of the supply chain support efforts that began when the portal was created in early Spring 2020. Through the PPE Exchange platform, hospitals, providers, and businesses looking for critical PPE supplies are virtually connected to a marketplace of verified suppliers where they can search for items, schedule orders, compare prices, and complete transactions online.

COVID-19 Webinar Series
SCMEP has hosted several webinars covering a variety of topics related to the pandemic since March. Topics have included protocol for returning to work, following OSHA guidelines, and performing remote audits.
COVID-19 RESPONSE PROFILE:

SOUTH DAKOTA MANUFACTURING & TECHNOLOGY SOLUTIONS (SD MTS)

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/29/2020

SOUTH DAKOTA MANUFACTURING AT A GLANCE (2020)

- 1,077 manufacturing establishments in the state
- 43,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Food manufacturing
  - Machinery manufacturing
  - Fabricated metal manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

RISE ABOVE INITIATIVE

In June 2020, SD MTS launched the Rise Above Initiative, a program that provides support in four major focus areas: finance, human resources, sales, and operations. The program began with a Rise Above webinar series, that included seminars and workshops in each category.

In July 2020, MTS built off the webinar series by providing strategic development sessions within each category. Financial sessions include discovery meetings with the business consulting firm B2B CFO. The firm provides expert insight for managing and improving cash flow, and helps companies develop a year-long business model at $1,500/company. Human resources sessions involve a 4-hour workshop to develop a strategic HR roadmap at $500/company. Sales sessions occur over a 1.5-day workshop, where a company’s leadership team will move through proven sales and messaging strategies, and identify opportunities for growth at $2,500/company. Finally, operations sessions are on a project-by-project basis, and can include leadership, value stream mapping, automation, lean manufacturing support, and more. The webinar series and strategic sessions across these four key areas are helping manufacturers address the most pressing pandemic-related challenges.

COVID-19 VIRTUAL TRAINING AND EVENTS

Since the pandemic began, MTS has hosted several events related to the pandemic, both virtually and in person. Topics have included lean leadership for supervisors, finance, human resources, increasing sales, improving operations, lean manufacturing, digital advertising, cybersecurity, and money saving strategies.
**COVID-19 RESPONSE ACTIONS (continued)**

**No-Cost Consultations for Manufacturers***
Prior to the pandemic, MTS provided free consultations to manufacturers to address a range of challenges and opportunities, such as lean manufacturing, improving manufacturing quality, operations, leadership, sales and marketing, workforce development, technology, supply chain optimization, and more. Although this program was already established, MTS has expanded services to help manufacturers navigate CARES Act and other financial resources, establish health and safety protocol, develop business continuity plans, and meet other pandemic-related challenges.

**Collaborative Conference Calls for Manufacturers**
In April and May 2020, MTS facilitated a number of [conference calls](#) for manufacturers. The goal was to allow manufacturers to share ideas, resources, challenges, and collaborative solutions. Topics of discussion included best practices in the workplace, health and safety technology, labor laws, loan forgiveness, business flexibility and adaptability, crisis communications, childcare, mental health, and more. The calls utilized a peer-to-peer model to allow manufacturers to share experiences in a smaller setting.

**Supplier Scouting**
MTS has expressed intent to conduct supplier scouting and matching activities with its clients as necessary and collaborate across other agencies and organizations across the state as opportunities arise.

**SD MTS COVID-19 Back to Work Playbook**
SD MTS has produced a [guide](#) for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and enforcement guidelines. The guide is publicly available on the MTS website.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
(**) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE:

UNIVERSITY OF TENNESSEE CENTER FOR INDUSTRIAL SERVICES (UT CIS)

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 10/29/2020

COVID-19 RESPONSE ACTIONS

TENNESSEE MANUFACTURING AT A GLANCE (2020)

- **7,516** manufacturing establishments in the state
- **353,000** employed by manufacturing industry
- **Primary manufacturing sectors**:  
  - Automotive manufacturing  
  - Food manufacturing  
  - Chemical manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

1] Primary manufacturing sectors were determined by dollars generated.

NO COST CONSULTATIONS FOR MANUFACTURERS

Throughout the pandemic, UT CIS has continued to support manufacturers by providing no-cost consultations and technical assistance on an individual basis. The UT CIS Health, Safety, and Emergency Preparedness team is providing virtual consultations with manufacturers to discuss strategies for creating and implementing a customized COVID-19 Preparedness and Response Plan for the workplace. Each consultation provides guidance on creating a plan, developing business continuity insights, and establishing effective disinfecting strategies.

UT CIS also provided no-fee technical assistance through August 2020, covering topics such as back-to-work safety planning, supply chain risk mitigation, workforce systems, process improvement, and more. Although the funding to administer this service at no cost has been distributed, UT CIS continues to provide technical assistance at a set price.

ECONOMIC DEVELOPMENT RECOVERY FUNDING

In July 2020, the U.S. Department of Commerce provided **$300,000** in CARES Act funding to the University of Tennessee's EDA University Center (UTUC). The grant will fund economic development recovery efforts in the economically distressed and at-risk communities hit hardest by COVID-19. UTUC is operated by UT CIS, and provides a number of services to communities across the state, including building community capacity for economic development, helping companies innovate and expand, and advancing entrepreneurship and technology commercialization.

This $300,000 grant will boost UTUC's capacity to support regional economic recovery and resilience efforts. The funds will allow at-risk communities to connect to UT resources and work with economic development organizations throughout the state to improve resilience and expand supply chains. Additionally, the funding will allow for expanded virtual training opportunities.
COVID-19 RESPONSE ACTIONS
(continued)

Virtual Training Opportunities
Since the pandemic began, UT CIS has offered virtual training and workshops on a variety of topics, both related to the pandemic and as an extension of existing trainings. New topics have included retooling to produce PPE, food safety, and supply chain risk management. UT CIS has offered existing programs, such as the ten-hour OSHA training and Tennessee Certified Economic Developer (TCED) certification program, in a virtual format.

In August 2020, UT CIS and other members of the UT system announced a new webinar series: Pandemic to Possibility. The series consists of 60- to 90-minute live webinars available to Tennessee businesses and organizations and UT alumni worldwide. It features UT experts and alumni and business leaders, and is customized for various industries. The series is designed to allow manufacturers to share insights, ideas, and opportunities. Upcoming topics include mental health, social media, communicating in a pandemic, and more. Additionally, UT CIS hosted two webinars for small manufacturers highlighting opportunities and guidance for pivoting to the production of PPE. The webinars enabled UT CIS to connect with an average of sixty participants from manufacturers and state organizations.

PPE Supply Chain Support
UT CIS has distributed a number of resources to support manufacturers that have the capability to pivot to PPE production and support essential workers. In April 2020, UT CIS held a webinar to provide guidance on retooling to PPE production. UT CIS has also provided resources to help manufacturers tap into national networks by sharing a critical supply survey, an open-source Google Doc compendium containing blueprint specifications for PPE, and other relevant resources. Additionally, UT CIS coordinated with the Tennessee Chamber of Commerce and Industry, universities across the state, maker labs, and statewide efforts, including Governor Lee’s Unified-Command, to support the production and sourcing of PPE for manufacturers. UT CIS estimates that it has responded to at least 75 requests for assistance in identifying PPE sources, and is working to support the efforts of at least nine companies that pivoted to PPE production, including several cut and sew operations and job shops.

Procurement Technical Assistance Center (PTAC) Support
The PTAC team at UT CIS provides government contracting services, including identifying contracting opportunities, adhering to governmental regulations, developing proposals, and more. Since March 2020, PTAC has moved training and consulting to an online format. In July and October, PTAC held virtual conferences for the construction industry. Additionally, PTAC has helped organizations navigate emergency contracting requests related to the pandemic; for example, the team helped fulfill an emergency request to disinfect a facility for FEMA in March 2020.

UT CIS Return to Work and Recovery Guide and Checklists
UT CIS has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and enforcement guidelines. Additionally, UT CIS has developed several Workplace Safety Checklists, providing tools for risk assessment, disinfection protocols and processes, workplace monitoring, and more. The guide and checklists are publicly available on the UT CIS website. The UT CIS COVID-19 Response page continues to be maintained and updated regularly as new information and resources become available.
**COVID-19 RESPONSE PROFILE:**

**TEXAS MANUFACTURING ASSISTANCE CENTER (TMAC)**

**PREPARED BY:**

UNC CENTER FOR URBAN AND REGIONAL STUDIES

**OUR PROJECT TEAM**

**PROJECT LEAD**
Nichola Lowe, Ph.D. (nlowe@unc.edu)

**GRADUATE RESEARCH ASSISTANTS**
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 11/6/2020

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**TEXAS MANUFACTURING AT A GLANCE (2020)**

- **25,903** manufacturing establishments in the state
- **905,000** employed by manufacturing industry
- **Primary manufacturing sectors:**
  - Chemical manufacturing
  - Computer and electronic products
  - Petroleum and coal manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

[1] Primary manufacturing sectors were determined by dollars generated.

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**COVID-19 RESPONSE ACTIONS**

**TMAC ASSISTANCE PROGRAM**

In July 2020, TMAC announced that it received CARES Act funding that would allow the organization to provide direct assistance to manufacturers through the TMAC Assistance Program. Manufacturers that apply for the program are able to work on a one-on-one basis with a TMAC representative to improve profitability, productivity and recovery. Additionally, TMAC is performing supplier searches and providing assistance for manufacturers with capabilities to pivot to PPE production.

**PPE AND SUPPLY CHAIN SUPPORT**

Since the pandemic began, TMAC’s eight regional offices have been working to identify manufacturers that can produce critical PPE to support frontline and other essential workers. Manufacturers whose supply chains have been disrupted by the pandemic are encouraged to reach out to TMAC to receive assistance with supplier scouting and/or reshoring efforts. Additionally, TMAC has shared resources for manufacturers with capabilities to produce PPE, such as an open source compendium that details PPE blueprints and manufacturing specifications.

The Southwest Research Institute (SwRI), representing the South Central region, has played a critical role in TMAC’s support of PPE production in the state. SwRI has worked with the San Antonio Manufacturing Association to help local companies retool to produce critical PPE, including shields for the University Health System in San Antonio. In April 2020, SwRI led the creation of the Medical Manufacturing Alliance of South Central Texas, which is committed to sourcing critical supplies for essential workers, and identifying products and supply source to pivot to PPE production.

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*The TMAC network includes eight regional offices: Beehive Fund, Lamar University, Southwest Research Institute, Texas A&M Engineering Extension Service, Texas Tech University, the University of Texas at Arlington, the University of Texas at El Paso, and the University of Texas Rio Grande Valley. Each office provides basic manufacturing support services and brings distinct expertise accessible across the entire state. All eight were engaged with TMAC’s COVID response.*
COVID-19 RESPONSE ACTIONS (continued)

Cybersecurity Assessments*
One of TMAC's priorities throughout the pandemic has been providing support in the field of cybersecurity for manufacturers. TMAC has leveraged existing resources to provide this service. For example, SWRI provides cybersecurity assessments that offer a comprehensive package of services to help small and medium manufacturers meet DFARS cybersecurity requirements. TMAC's Texas A&M Engineering Extension Service (TEEX) regional office offers multiple cybersecurity education opportunities, such as cybersecurity for manufacturing executives, vulnerability assessments, and more. Though these programs were in place prior to COVID-19, they continue to be a valuable resource for manufacturers navigating cybersecurity challenges.

No-Cost Assessments for Manufacturers*
In addition to the TMAC Assistance Program, TMAC representatives remain ready to conduct no-cost assessments for help identifying challenges and opportunities and troubleshooting solutions. These assessments were available prior to the pandemic, and include assistance on topics such as commercializing products and ideas, market analysis, financial assessments, process improvements such as lean manufacturing and certifications, 3-D printing, data analytics, cybersecurity, cobots, talent management, and more.

Layoff Aversion Services**
TMAC has expressed its intent to partner with various workforce development organizations to provide technical assistance to manufacturers across the state in implementing layoff aversion strategies and prevent or minimize job losses.

TMAC Gulf Coast COVID-19 Resources and Best Practices Guide
Regional office TMAC Gulf Coast has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and on-site testing. The guide is publicly available on the TMAC Gulf Coast website.

Virtual Training and Webinars
In response to the pandemic, existing trainings across TMAC's eight regional offices, such as Lean Six Sigma, food safety, and leadership training, have been moved to an online format. Additionally, TMAC has hosted a robust offering of webinars since April 2020. Topics have included protecting the workplace, cash management for business recovery through the CARES Act, cybersecurity, ISO certifications, forecasting future demand, building a successful workplace culture, HR for small employers, Industry 4.0/SMART manufacturing, competitive advantage through employee engagement, employee recruitment and selection, and dimensional engineering.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
(**) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE:

UNIVERSITY OF UTAH MANUFACTURING EXTENSION PARTNERSHIP CENTER (UUMEP)

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 11/24/2020

UTAH MANUFACTURING AT A GLANCE (2020)

- 4,534 manufacturing establishments in the state
- 135,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Computer and electronic products
  - Food manufacturing
  - Chemical manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

COVID-19 RESPONSE ACTIONS

UTAH INDUSTRY RESOURCE ALLIANCE

In May 2020, UUMEP announced the Utah Industry Resource Alliance (UIRA). The alliance is augmented by the expertise of Utah State University’s Manufacturing Extension Service and their Manufacturing and Outdoor Products Support Hub, Impact Utah, the Utah Manufacturers Association (UMA), World Trade Center Utah (WTC Utah) and the Utah Advanced Materials and Manufacturing Initiative (UAMMI).

UIRA is focused on supporting manufacturers by providing services and outreach to all 29 Utah counties and improving the bottom line through concepts like process improvement and operational efficiencies, supply chain optimization, and quality systems and certifications. Additionally, UIRA provides support in new technology adoption, workforce development, strategic planning, cybersecurity, sustainable practices, and market expansion. UIRA services include industry-specific training, mentoring, coaching, and business advising. Specific resources can be accessed on the UIRA website, and include a COVID-19 Resource Connection Tool, Business Health Assessments, and more.

CONNEX UTAH

As part of UIRA’s services, the CONNEX UTAH was launched in September 2020 to support supply chain efforts across the state. CONNEX UTAH is a supply chain database tool that contains detailed information on a broad range of Utah manufacturers, and allows organizations to easily search for manufacturers with specific production capabilities, certifications, equipment, material types and more.

CONNEX UTAH makes basic contact information for Utah manufacturers available to anyone that enters the database. More detailed information, such as sourcing needs, requirements, and opportunities, are made available to Utah manufacturers that register online.
COVID-19 RESPONSE ACTIONS (continued)

Assistance in Navigating Federal COVID-19 Programs
In April 2020, UUMEP subrecipient and partner, World Trade Center Utah, established a Rapid Response Team (RRT) to help level the economic impact of COVID-19 by increasing the number of Utah businesses using federal resources. RRT members helped Utah's Small Business Administration office respond to general inquiries regarding the Economic Injury Disaster Loan and Paycheck Protection Plan programs. This effort helped ensure Utah small business owners understood and utilized federal programs designed to help them during the COVID-19 Pandemic. As a partner in this effort, UUMEP paid for all the non-volunteer support staff and software. At one point, UUMEP had mobilized more than 50 full-time volunteers to help answer phone calls. Utah ranked number one in the nation in making use of the PPP loan program, in large part due to this effort.

"A Mask for Every Utahn" Initiative
UUMEP subrecipient and partner, Utah Manufacturers Association, contracted with local Utah companies to provide over 1,000,000 masks. These masks were manufactured at facilities throughout the state, and supported the continuation of 200 manufacturing jobs throughout Utah. This unique partnership between the state of Utah and the Utah Manufacturers Association was part of the "A Mask for Every Utahn" initiative, and was implemented from April to July 2020. The manufacturers also received a Lean assessment, and assistance on making improvements to their mask making facilities. As a result, manufacturers were able to produce masks quickly and efficiently - in some instances, production rates doubled.

Mobilizing State and Federal Funding for Manufacturer Assistance
UUMEP also drafted a request to the State of Utah to receive COVID-19 Relief Funds, and were approved for $3 million in funding to cover 19 initiatives, ranging from return to work training to cybersecurity assistance - many of which are available on the UIRA website. Both state and federal COVID funding has allowed UUMEP to "Touch all Manufacturers" and point them to these resources. Currently, UUMEP is utilizing a third-party calling center to contact a list of 8,634 identified manufactures in Utah, and aims to get at least ¼ of those contacted to use the broad range of services offered.

Virtual Training and Webinars
In response to the pandemic, UUMEP and other UIRA partners have provided a wealth of webinars and virtual training opportunities on the UIRA website. Training topics include COVID-19 resources, strategies for growing revenue, navigating government contracts and identifying contracting opportunities, combating the impacts of COVID-19 with automation, cybersecurity, and more.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
COVID-19 RESPONSE PROFILE

VERMONT MANUFACTURING EXTENSION CENTER (VMEC)

PREPARED BY: UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 11/16/2020

VERMONT MANUFACTURING AT A GLANCE (2020)

- 1,114 manufacturing establishments in the state
- 29,000 employed by manufacturing industry

Primary manufacturing sectors:
- Computer and electronic products
- Food manufacturing
- Machinery manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

RestartVT MANUFACTURING WORK GROUP

In late March 2020, due to health and safety concerns related to COVID-19, by Executive Order the State of Vermont began directing the temporary shutdown of manufacturers not deemed "essential." On April 14th, Governor Phil Scott and the Agency of Commerce & Community Development announced the formation of the VT Economic Mitigation & Recovery Taskforce, aimed at delivering economic assistance and recovery efforts on a statewide scale. The taskforce created several Action Teams, one of which is the RestartVT Team.

The RestartVT Team was tasked with developing phased-in reopening plans for businesses across the state. VMEC was asked to help create, serve on, and facilitate the RestartVT MFG Working Group Team that was specifically charged with preparing a phased reopening plan for the Vermont manufacturing, fulfillment, and distribution sectors. A three-phase reopening plan was expeditiously created and made available on MXVT.org on May 1st, 2020. VMEC worked in partnership with the VT Agency of Commerce & Community Development, Vermont Occupational Safety and Health (VOSHA), the Vermont Department of Health, the RestartVT MFG Working Group, and other local and national manufacturers to develop safe and effective guidelines for all manufacturers.

In November 2020, as COVID-19 cases increased across the nation, VMEC proactively moved forward to refresh and redouble its COVID awareness raising, education and related efforts, along with renewed encouragement from the Restart MFG Working Group and other partners, under a new mantra, "Stay Safe, Stay Strong, Stay Open."
COVID-19 RESPONSE ACTIONS (continued)

VMEC Advising, Remote Consultations, and Connections to COVID-19 Resources
VMEC's Business Growth Advisors have remained readily available since the pandemic hit Vermont in mid-March, and VMEC has increased its frequency of communications to support and provide assistance and support to manufacturers across the state. Early on, this included the creation of a five-step 'Survival Guide' and tool for senior business leaders, which promotes contacting an advisor to create a business continuity plan. Among VMEC's crisis response services, advisors were made available for COVID-19 no-cost, remote crisis response consultations, along with problem solving support, supply chain assistance, redeployment of resources and/or retooling assistance, and building manufacturing connections via the MXVT.org platform. In mid-July 2020, VMEC published its Return-to-Work Policy and again began delivering some of its services on-site at client locations. Additionally, VMEC created and has maintained a robust COVID-19 resource identification and connector page for manufacturers on its website at www.vmeg.org.

Manufacturing Exchange Vermont (MXVT)
On April 6, 2020, after just 14 days of intense development, VMEC launched Manufacturing Exchange Vermont (MXVT.org) in response to the shortage of critical supplies at the beginning of the COVID-19 pandemic. MXVT.org is a cloud-based platform that uses familiar social media tools in a virtual collaboration space. It allows manufacturers and suppliers to post needs and identify business opportunities, and connects people to empower innovative thinking, solve problems and create new supply chains. To coordinate this statewide effort, VMEC partnered with the Vermont Agency of Commerce & Community Development (ACCD), the Vermont Procurement Technical Assistance Center (VTPTAC), Associated Industries of Vermont (AIV), Vermont’s 12 Regional Development Corporations (RDCCs), and additional organizations to bring specialized expertise to the initiative. MXVT.org has served as an efficient, free platform to facilitate Business-to-Business (B2B) matching. Manufacturers can register as a Vermont supplier, and companies with production capabilities or available supplies can be searched. MXVT.org also includes expert-moderated forums designed to share ideas and connect businesses in supply sourcing and a variety of other collaborative efforts. Manufacturers can create work groups to coordinate efforts, such as PPE procurement, volunteering, product development, and more. Finally, registered manufacturers can post needs and opportunities via “classifieds”-style posts on the site. This innovative platform is helping to both meet supply needs and share knowledge across organizations.

COVID-19 Virtual Training and Problem Solving Opportunities
VMEC has provided virtual learning and training opportunities throughout the pandemic. From May to June 2020, VMEC hosted a Recovery Forum series featuring expert panelists. Topics included restarting operations, safety and training plans, return-to-work scenarios, legal, safety, and HR specialists panels, protecting workers health and preventing worker disability, and addressing cybersecurity challenges while working from home. Additionally, VMEC created and launched a Manufacturing Health Officer Training (H.O.T.) program in June 2020. The training consisted of (5) two-hour sessions per course, and was free for up to three participants per company. Sessions focused on developing critical thinking skills, process improvement, employee interactions, and more in the wake of reopening. Participants learned through live classroom sessions, and had access to three small group coaching sessions. Participants also gained access to a private work group on MXVT.org, which included course materials, coaching, and on-line discussions. This series empowered manufacturing leaders to develop a new skillset that could be applied both during the pandemic and beyond. Additionally, since March 2020 VMEC has succeeded in converting almost 100% of its traditional on-site training and educational offerings into versions that can now also be delivered remotely.

Product Innovation Support: The Vermontilator
VMEC also became involved as a key partner in efforts to bring to market an innovative new product that addresses critical supply needs. Over the spring of 2020, researchers at the University of Vermont (UVM) developed an innovative new ventilator, named the "Vermontilator." This emergency ventilator provides a mode of ventilation called "airway pressure release ventilation," or APRV, which is different from most emergency ventilators that are based on resuscitation of squeeze bag ventilation. The Vermontilator is simpler to manufacture than comparative equipment. The research team engaged the assistance of VMEC to recruit several Vermont manufacturers to be involved in the design for manufacturing process. These manufacturers produced parts and assemblies for test units. VMEC’s assistance allowed the research team to be ready to manufacture and bring the Vermontilator to market pending FDA Emergency Use Authorization Approval.
COVID-19 RESPONSE PROFILE:
GENEDGE ALLIANCE

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 12/1/2020

VIRGINIA MANUFACTURING AT A GLANCE (2020)

- 7,007 manufacturing establishments in the state
- 240,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Food manufacturing
  - Aerospace and transportation manufacturing
  - Chemical manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated

COVID-19 RESPONSE ACTIONS

COVID-19 VIRGINIA SUPPLY CHAIN CONNECTOR
In April 2020, GENEDGE announced the launch of the COVID-19 Virginia Supply Chain Connector, a microsite that immediately focused on addressing the PPE shortage in Virginia. Manufacturers and/or organizations in need of critical PPE can register to join the Connector and gain access to both buyers looking to source finished PPE, and manufacturers both in need of and in supply of specific products.

The microsite also includes COVID-19 specific resources, and a COVID-19 discussion forums page where registered participants can collaborate, ask questions, network, and find buyers and sellers of PPE. While current topics relate primarily to the pandemic, new groups have been made available to discuss more general manufacturing issues. Current forum topics include COVID-19 discussions, PPE, supply chain, operations, workforce, and funding sources.

TECHNICAL ASSISTANCE FOR MANUFACTURERS*
Beginning in March 2020, GENEDGE partnered with several state organizations, (Public Safety and Homeland Security, the Virginia Department of Labor and Industry, the Virginia Department of Health, the Virginia Economic Development Partnership, and the Virginia Manufacturers Association) to offer no-cost resources to Virginia-based companies and nationwide to other state MEPs in fields such as meeting FDA requirements, best practices in manufacturing, quality systems, following product and facility requirements and guidelines, and developing plans to assist manufacturers in producing PPE supply.

Additionally, GENEDGE offers existing support services to assist with bringing ideas to market and product commercialization, process improvement, sustainability, supply chain optimization, technology acceleration, and cybersecurity. Plus, GENEDGE has partnered with various workforce development organizations to provide technical assistance to manufacturers across the state in implementing diversification strategies to avoid layoffs and prevent or minimize job losses.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
COVID-19 RESPONSE ACTIONS
(continued)

Commonwealth of Virginia COVID-19 PPE Retooling Playbook
In partnership with several statewide organizations, GENEDGE has produced a guide for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and enforcement guidelines. The guide is publicly available on the GENEDGE Supply Chain Connector website.

COVID-19 Virtual Trainings and Webinars
Since the pandemic began, GENEDGE has provided a robust offering of webinars and virtual training opportunities. Topics have included virtual regional manufacturer's forums, cybersecurity challenges, and workforce engagement strategies. Additionally, GENEDGE hosted a Refocus and Rebuild Webinar Series in collaboration with Virginia Community Capital (VCC) and other statewide partners from August to October 2020. Topics include business resilience, debt management, crisis preparation, crisis communication planning, and risk management.

Enhancement of Total Cost of Ownership Calculator**
Due to COVID-19 issues at GENEDGE partner Virginia State University, this program has been delayed until January 2021. The intent is to develop a supported tool for the MEP National Network to utilize with companies that are strategically pivoting to domestic supply chains to improve resiliency. The calculator, originally developed by MEP in a stand-alone manner for supply chain service needs, will provide a supported, cloud-based mechanism to quantify benefits of the new supply chain arrangements.

GO Virginia: Retooling Virginia Manufacturers for Strategic Industries Program
In July 2020, GENEDGE announced a new program focused on helping Virginia manufacturers shift their operations to emphasize PPE production. GENEDGE will manage this program over two years, implementing a mid- to long-term response to the COVID-19 crisis by retooling Virginia manufacturers for strategic industries. The focus for the first year will address the need for medical supplies and PPE, with the expectation that additional critical supply chain opportunities will be identified at the industrial sector, state, or federal level. The processes and tools developed in the first year can easily be redirected to additional critical strategic supply chains as they are identified. GENEDGE expects to focus on reshoring efforts for strategic supply chain, and will prioritize supporting these efforts in the second year of the program.

(**) indicates that the program has been planned but has not yet been implemented.
COVID-19
RESPONSE
PROFILE:

IMPACT WASHINGTON

PREPARED BY:
UNC CENTER
FOR URBAN
AND REGIONAL
STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 11/27/2020

WASHINGTON MANUFACTURING
AT A GLANCE
(2020)

- 7,830 manufacturing establishments in the state
- 287,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Aerospace manufacturing
  - Food manufacturing
  - Computer manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data
[1] Primary manufacturing sectors were determined by dollars generated.

COVID-19 RESPONSE ACTIONS

MANUFACTURING RECOVERY ASSISTANCE PROGRAM

Impact Washington has allocated CARES Act funding to implement a Manufacturing Recovery Assistance Program for manufacturers facing pandemic-related challenges. Manufacturers can reach out to Impact Washington to apply, and eligible businesses will receive a Business Recovery Assessment aimed at identifying key areas where teams are not aligned, providing operational prioritization areas, and building a foundation for a Recovery Plan. Recovery Plans vary depending on specific needs, and can include investments in: ramping up production, automation assessment and solutions, supply optimization and disruption planning, adjustments in plant design or workforce methods and approaches, onboarding and up-skilling new and returning employees, risk mitigation, cybersecurity, business continuity, and more.

U.S. EDA SAFE START GRANT

In October 2020, Impact Washington was selected as one of eight Washington organizations to receive a collective $15 million in funding from the U.S. Economic Development Administration’s Safe Start Program. Funding from the grant will allow Impact Washington to help strengthen the manufacturing industry by supporting small and medium manufacturers in their recovery efforts.

Impact Washington will use the funding allocation to provide technical assistance to small manufacturers, startups, and main street businesses. Businesses that receive assistance will have access to one-on-one support with Impact consultants, and will work on recovery and resilience strategies specifically tailored to their organization. Examples of available services might include retooling, increasing production efficiency, online marketing, or business diversification.
COVID-19 RESPONSE ACTIONS (continued)

**Shellfish Industry Seed Bank**
In September 2020, the Departments of Commerce and Agriculture partnered with Impact Washington to launch the [Washington Shellfish Industry Seed Bank](https://www.impactwashington.org/seedbank). This $300,000 initiative, which closed in November 2020, provided funding for shellfish growers severely impacted by COVID-19. Qualified growers were able to apply for $1,000-$5,000 in funding for reimbursement of larvae and seed purchases through June 30th, 2021. The Seed Bank’s mission is to create equity and retain as many jobs as possible for Washington’s shellfish growers.

**Cybersecurity Programs**
In August 2020, Impact Washington announced that it would provide $1 million in grant funding from the Department of Defense to launch cybersecurity programs for manufacturers. Impact Washington is using the grant funding to provide no-cost, self-paced [DFARS-CMMC training programs](https://www.cmmc.gov), which will help manufacturers achieve cybersecurity maturity and compliance. Additionally, Impact is launching a [Cybersecurity Pilot Program](https://www.impactwashington.org/cybersecurity-pilot-program), which will match 19 companies with cybersecurity advisors that provide one-on-one consulting services. All companies will be selected by December 30, 2020.

**PPE and Supply Chain Support**
Impact Washington has provided various supports throughout the pandemic to help manufacturers retool and pivot to PPE production. Impact worked with the State Commerce Department to help more than 60 manufacturers adjust their operations to produce critical PPE, and provided guidance for obtaining necessary certifications, navigating procurement and testing processes, and ensuring PPE product quality. Impact is helping to coordinate efforts among key manufacturers identified by the state. For example, Impact facilitated an interaction between two manufacturers, GlobalTech Plastics and Tool Gauge, and design non-profit, [Design that Matters](https://www.designthatmatters.com), to collaborate on a face shield prototype. Impact has also provided a shortlist of national PPE supply chain databases on their website.

**No-Cost Assessments for Manufacturers**
Impact Washington is providing several no-cost assessments to manufacturers to support recovery efforts. The [Preventative & Preparedness Assessment](https://www.impactwashington.org/assessment) includes a virtual site visit with a consultant, followed by a preparedness implementation plan for reopening efforts that incorporates OSHA guidelines and operational/HR best practices. Each assessment summarizes risk levels within the workplace and provides recommendations for risk mitigation strategies. Impact also continues to provide existing assessments and technical assistance in the fields of HR, workforce, financial guidance, and more.

**COVID-19 Virtual Training and Resources**
Impact Washington has provided a variety of virtual webinars and resources for manufacturers facing challenges related to the pandemic. From April to July 2020, Impact hosted a “Preventative and Preparedness Return to Work, Measures and Controls” webinar series. In the Fall of 2020, Impact announced it would be launching a Department of Defense [Cybersecurity Maturity Model (CMMC) readiness training](https://www.impactwashington.org/cybersecurity-maturity-model-cmmc), using a $1 million grant from the DoD.

**Emergency Prevention Measures for Manufacturers White Paper**
Impact Washington has produced a [guide](https://www.impactwashington.org/emergency-prevention-measures) for manufacturers returning to work during the pandemic. This guide covers topics such as social distancing, cleaning guidelines, health monitoring of employees, and enforcement guidelines. The guide is publicly available on the Impact website.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
WEST VIRGINIA MANUFACTURING AT A GLANCE (2020)

- 1,242 manufacturing establishments in the state
- 46,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Chemical and allied products
  - Industrial machinery and equipment
  - Lumber and wood manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

Data inputted 11/12/2020

COVID-19 RESPONSE ACTIONS

COVID-19 WEBINAR SERIES

In April 2020, WVMEP launched a virtual webinar series to provide no-cost training to manufacturers facing pandemic-related challenges and address other key manufacturing topics. Topics have included cybersecurity, virtual manufacturing roundtables, Industry 4.0, industry hygiene principles and OSHA standards, business continuity planning, receiving ISO certifications, disaster preparedness, and technology readiness.

COVID-19 RECOVERY SURVEY & ASSISTANCE

The WVMEP website currently hosts a COVID-19 Recovery Survey that asks a host of questions related to the pandemic, including challenges and opportunities. Topics include business continuity, COVID health and safety protocol, organizational and employee engagement, supply chain disruptions and opportunities, expanding customer base, cybersecurity, and using technology in the workplace.

TECHNICAL ASSISTANCE FOR MANUFACTURERS**

WVMEP plans to provide technical assistance, assessments, and resources in the fields of strategic planning, business continuity, pandemic preparedness, PPE and supply chain assessments, workforce, innovation, cybersecurity, leadership, and more. Assessments will identify gaps and develop tailored recommendations. Existing services can be found here.

PPE AND SUPPLY CHAIN SUPPORT**

WVMEP plans to conduct supplier scouting and matchmaking activities to connect manufacturers to frontline and other essential workers in need of critical PPE. Additionally, WVMEP aims to help manufacturers quickly retool and accelerate rapid PPE production.

(**) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE: WISCONSIN CENTER FOR MANUFACTURING & PRODUCTIVITY (WCMP)

PREPARED BY: UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 11/12/2020

WISCONSIN MANUFACTURING AT A GLANCE (2020)

- 9,298 manufacturing establishments in the state
- 475,000 employed by manufacturing industry
- Primary manufacturing sectors:
  - Food manufacturing
  - Machinery manufacturing
  - Fabricated metal manufacturing

Source: BLS QCEW Data, National Association of Manufacturers State Manufacturing Data

Primary manufacturing sectors were determined by dollars generated

COVID-19 RESPONSE ACTIONS

The Wisconsin MEP Network includes three partners: the Wisconsin Center for Manufacturing and Productivity (WCMP), and two subrecipients, Wisconsin MEP (WMEP) and the University of Wisconsin-Stout Manufacturing Outreach Center (MOC). This alliance provides basic manufacturing support services and brings distinct expertise accessible across the entire state. Though this profile centers around the WCMP, all three partners engaged in COVID response efforts, as reflected in this profile.

PPE AND SUPPLY CHAIN SUPPORT

Since March 2020, the WCMP has been assisting the State of Wisconsin in building and organizing a robust PPE supply chain system for both short- and long-term procurement efforts. Companies with production capabilities can fill out a brief online form, identifying if they are able to provide supplies immediately or would be able to pivot to PPE production. Additionally, the WCMP has shared an open-source compendium containing blueprint specifications for PPE on their website.

TECHNICAL ASSISTANCE FOR MANUFACTURERS

The Wisconsin MEP network provided technical assistance for manufacturers facing pandemic-related challenges across the state. In May 2020, the WCMP announced that they would utilize CARES Act funding to offer resources to manufacturers to help them survive the financial strain of the pandemic, transition their business models, stabilize recovery efforts, and expand to new markets. The partnership provides a portfolio of existing services such as technology acceleration, supplier development, sustainability, workforce strategy and engagement, continuous improvement, and growth and exporting support. The WMEP provides technical assistance in a number of fields, including market diversification, leadership assessments, value stream mapping, rapid improvement, and more. Finally, businesses can reach out to UW-Stout’s MOC to receive technical assistance and consulting in the fields of supply chain support, business continuity efforts, and more.
COVID-19 RESPONSE ACTIONS
(continued)

WMEP's COVID-19 Assessments
Utilizing CARES Act funding, the WMEP launched three low-cost assessments aimed at
COVID-19 recovery and revenue generation efforts in July 2020. The Discover2Recover
program includes a free assessment and follow-up recommendations related to increasing
cash flow, stabilizing and increasing cash reserves, and other financial tools and
techniques. In partnership with financial consultant David Smith, the Discover2Recover
program provides manufacturers with access to proprietary financial and business
expertise to improve their financial outcomes. The Pivot2Revenue program includes an
assessment of sales and revenue generation opportunities, and evaluates each company's
growth performance and risk. Finally, the COVID-19 Risk Assessment and Mitigation
program aims to identify and manage risks associated with the pandemic. Services may
include virtual or on-site exposure risk assessments, employee screening,
decontamination or disinfecting services, work process evaluation and employee hygiene
protocols, and more.

UW-Stout's MOC Outreach and Support
UW Stout's MOC reached out directly to small and medium manufacturers in Northwest
Wisconsin, using CARES funding to create tailored approaches to respond to the
pandemic. These approaches allow operations in rural parts of the state to connect, share
best practices, and come out of the economic downturn in a strong position. UW-Stout's
MOC is also exploring innovative approaches to reach even more manufacturers, including
using game design to teach basic Lean principles to a new generation.

COVID-19 Virtual Trainings and Webinars
Since the pandemic began, both the WMEP and UW-Stout's MOC have provided a robust
offering of COVID-19 related webinars and virtual training opportunities. WMEP webinar
topics have included sharing highlights of COVID's impact on manufacturers, reducing
COVID risk and safe practices, designing a risk management strategy, cybersecurity,
pivoting for growth during the pandemic, food safety, cobots, recovery and resilience, and
more. Additionally, the WMEP announced a 12-week virtual ExportTech program for Spring
2021, which will focus on export expansion strategies. UW-Stout's MOC launched a
Manufacturing Advantage Series in June of 2020, and has covered lean manufacturing
principles, improving company culture, 3D printing, Industry 4.0, mental health,
cybersecurity, developing a safe work environment, legal issues during COVID, robotics,
highlights of the state of manufacturing, and more.

(*) indicates an extension of an existing program, or a program that is independent of CARES Act funding.
(**) indicates that the program has been planned but has not yet been implemented.
COVID-19 RESPONSE PROFILE:

MANUFACTURING WORKS (MW)

PREPARED BY:
UNC CENTER FOR URBAN AND REGIONAL STUDIES

OUR PROJECT TEAM

PROJECT LEAD
Nichola Lowe, Ph.D. (nlowe@unc.edu)

GRADUATE RESEARCH ASSISTANTS
Matthew Wilson (mwilson2@live.unc.edu)
Rumana Rabbani (rumana.rabbani@unc.edu)
Olivia Raines (oraines@live.unc.edu)

Data inputted 11/12/2020

COVID-19 RESPONSE ACTIONS

TECHNICAL ASSISTANCE FOR MANUFACTURERS*
Managers are encouraged to reach out to Manufacturing Works for technical assistance in addressing both challenges related to the pandemic and more general manufacturing challenges. In March 2020, MW announced that advisors would be available to provide support with securing critical supply chains. Manufacturers can also contact MW for assistance with growing revenue, increasing productivity and performance, and strengthening global competitiveness. Finally, MW provides assessments and other services related to energy audits, ISO certifications, cybersecurity, and lean manufacturing.

MW has expressed intent to collaborate with Wyoming Chambers of Commerce, Wyoming Business Council, and other organizations to connect manufacturers to relevant resources and services, and has shared resources from key organizations on their website and social media platforms.

COVID-19 WEBINARS
Since the pandemic began, Manufacturing Works has partnered with Timberline Training to provide a number of webinars related to the pandemic. Topics have included using innovation to jumpstart your business, listening and communication skills, sales strategies, pricing techniques, building trust in your operations, delegating workload, and more.

SUPPLIER SCOUTING EFFORTS**
Manufacturing Works has expressed its intent to conduct supplier scouting and matching activities with its clients as necessary in an effort to support statewide PPE production and procurement efforts.

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