

Hollings Manufacturing Extension Partnership (MEP) COVID- 19 Response and MEP Update

Visiting Committee on Advanced Technology

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In the year 2020...

- Manufacturing and MEP: The way we were.
- Pandemic turns into supply chain problems.
- MEP National Network: Coordinated response/CARES Act.
- One NIST and the MEP National Network.
- The National Network in action.
- Real MEP heroes to tell their stories.

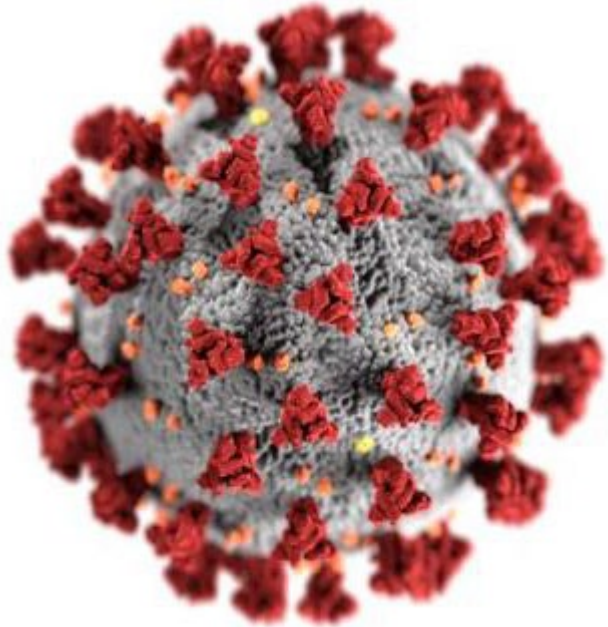
U.S. Manufacturing

- Nearly 99% of all manufacturers less than 500 employees; 75% of have 20 or less employees.
- 12.3 million people employed in manufacturing jobs.
- Last 6 months of 2019 saw a .5% contraction in manufacturing.
- Inability of small manufacturing businesses to expand because of extreme low unemployment.

MEP National Network

- \$146M FY20 MEP appropriated budget (\$6M increase from FY19).
- MEP Centers and their Boards ready to operationalize National Network approach.
- NIST MEP invested in building MEP Center capabilities in Cybersecurity and Advanced Manufacturing Technology Services.
- MEP NN focused on growing market penetration to help more manufacturers navigate smart manufacturing production processes.

In early February U.S. manufacturers impacted by major global supply chain disruptions. By March the disruption hits home.



Credit: CDC

- U.S. manufacturing output plummets 6.3%--largest single month drop in 74 years.
- Global pandemic declared as health crisis erupts into critical need for personal protective equipment.
- Previously invisible global supply chains are exposed.
- Large manufacturers of PPE can't keep up with demand for materials; others try to pivot to ease demand.
- Gaps in lower tier levels of production uncover the need for a better understanding of domestic production sources.

**National
Supplier
Scouting
services**

**Connect to
testing
laboratories**

Reminder to Governors: Local MEP Center ready and available to assist their manufacturers to:

- Find available resources, such as SBA Paycheck Protection Program;
- Source and connect suppliers to pivot production to make critically needed supplies;
- Help navigate the FDA material approval process; and
- Connect to NIST technical assistance and information.

**Information on
local and
national
supplies needed**

**Information
on employee
safety best
practices**

CARES Act

- The amount provided under this heading in this Act, **\$50,000,000 shall be for the Hollings Manufacturing Extension Partnership** to assist manufacturers to prevent, prepare for, and respond to coronavirus” ...” Provided further,
- That **none of the funds provided under this heading in this Act shall be subject to cost share requirements** under 15 U.S.C. 278k(e)(2) or 15 U.S.C. 278s(e)(7)(A): Provided further,
- That such **amount is designated by the Congress as being for an emergency requirement** pursuant to section 251(b)(2)(A)(i) of the Balanced Budget and Emergency Deficit Control Act of 1985.

Hollings Manufacturing Extension Partnership FY20 appropriated funding cost share requirements waived.

It is the sense of Congress that—

- (1) the centers of the Hollings Manufacturing Extension Partnership are front-line resources for manufacturers to improve supply chain resilience, workforce readiness, and technological expertise; and
- (2) such Centers are positioned to mitigate damage and accelerate recovery from the National public health and economic crisis caused by COVID–19.

First time ever MEP Program receives disaster funding to support U.S. manufacturers.

MEP Center trusted advisors across the country are provided funds to:

- Reach out directly to all new, present and past manufacturing clients to assess their needs;
- Identify companies capable of responding to critical needs in their region and at the national level;
- Connect manufacturers to resources needed to support transition; and
- Provide hands-on technical assistance to companies that transition their production operations to meet critical needs.

Request for Application (RFA) process for non-competitive awards-Posted April 10, 2020.

Status as of June 2, 2020:

- 49 of 51 MEP Center Applications received.
- 19 awarded for a total of \$ 20.61M.

One NIST and the MEP National Network



Just a few highlights of how we are learning through the crisis to work smarter together.

- Collaboration Team of reps from each of the labs participated in a webcast with MEP staff to help in cross-organizational communication about potential projects NIST can do right now to support immediate needs during the pandemic to discuss engaging with MEP Centers and getting their assistance to help manufacturers produce PPE.
- Standards Coordination Office provided a list of organizations certified ISO 13485, (quality management standard used by manufacturers of regulated medical devices) for companies looking to partner with manufacturers that already have a compliant quality management system for producing medical devices.
- Lab staff sharing how to get masks through the FDA certification process.
- NIST EL staff meeting with Connecticut MEP Center Director and their senior technical staff about to discuss an idea about open source supply chain connection / integration platform being operated by them as an immediate/near-term application in response critical supplies. The concept put forth by the EL personnel is oriented toward longer-term application during crisis recovery periods. Both sides appreciated the dialogue and MEP Center personnel agreed to share learnings from their work with the EL personnel.
- NIST Boulder connecting CO MEP with mask FDA testing facilities.
- Researcher in MML on a DHS working group focused on rapid production of ventilators reached out for help from MEP to expedite a match for a company with a fully finished ventilator design so it can be manufactured in the U.S.

National Network in Action



MEP Centers utilized staff to reach out to manufacturers remotely when projects were delayed or cancelled to provide information on available resources.



MEP Center leadership called on by Governors to discuss how their state can best prepare and deal with COVID 19 related issues.



MEP Centers across the country helping businesses get information on dealing with sick employees and un-employment insurance.



MEP Center Directors around the country set up local executive roundtables to support the hard hit automotive industry.



Centers pointed to automotive, aerospace and solar cell production that have been stalled or shut down because of supply chain disruption.



All 51 MEP Centers have seen an impact to manufacturing in their market. All are working with local leaders to provide support.

- SC MEP developed supply chain plan for ventilators to share with all MEP Centers to help state economic development organizations locate suppliers in their state.
- GENEDGE (VA MEP) hired a consultant to help all MEP Centers provide assistance to companies needing to go through the FDA approval process to produce medical equipment and supplies.
- All 51 MEP Centers created COVID-19 webpages to provide information to their manufacturing community and to match capabilities and needs to support production and access to critically needed supplies.
- All MEP Centers took steps to mitigate the risks associated with the coronavirus inside their organizations to protect their employees.
- MEP Centers utilized NIST guidance in areas relating to cybersecurity supply chain risk management that can be applied when addressing the potentially wide spectrum of impacted manufacturing supply chains.

Real MEP Heroes Tell Their Stories

NIST

