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# 2021 ANNUAL REPORT

## A Letter From our Director

To our valued Partners, Clients, Stakeholders and Manufacturers throughout the State of Maryland:

2021 was a challenging but promising year for the manufacturing industry, our stakeholders and the nearly 4,000 manufacturers that call Maryland home. The ongoing effects of COVID-19, disruptions to our supply chains and the continuing struggle to find, recruit and retain qualified skilled workers continues to challenge the manufacturing sector on a regular basis.

Despite these challenges, manufacturers across the state have demonstrated a resilience and willingness to increase investments in their business, develop and deliver new products, expand facilities, improve operations, and hire new employees to support opportunities for growth. At MD MEP, we were able to witness first-hand the overwhelming number of manufacturers that responded to COVID-19 to support their communities, their employees and their customers. In recognition of these efforts, MD MEP produced our [Maryland Manufacturing: Resilience through COVID-19 video](#) as a way to highlight and share amazing efforts of the manufacturing community.

Throughout 2021, our team at MD MEP has had the opportunity to develop and deliver programs and services to support the manufacturing community like never before. These services and programs resulted in MD MEP supporting the community with projects focused on Business Growth, Process and Innovation, Supply Chain and Defense, Technology and Cybersecurity, and Talent and Workforce. Through these efforts we are pleased to share that Maryland is at the forefront of cybersecurity compliance thanks to the [Maryland Defense Cybersecurity Assistance Program \(DCAP\)](#), one of the leading states in the delivery of workforce training programs for manufacturing and at the leading edge of developing new programs and services to support technology adoption and implementation in the manufacturing community. The launch of the '[Proud to Make it in Maryland](#)' banner campaign has resulted in renewed energy and excitement around manufacturing and the commitment to make Maryland the most innovative and productive state in the country.

The collective impact of these efforts on the manufacturing community has been more than \$280million in direct economic impact and the creation or retention of more than 2,100 jobs! We look forward to continuing to support the manufacturing community, to advocate for growth and to champion the stories of perseverance, innovation and success!

Sincerely,

Mike Kelleher  
Director, MD MEP

## About MD MEP

The Maryland Manufacturing Extension Partnership (MD MEP) is a non-profit organization focused on growing the manufacturing industry in Maryland by making manufacturers stronger, smarter and more profitable.

Serving mostly small and mid-size manufacturers (500 employees or less) across all industries, MD MEP provides an array of programs and services to that create economic impact by helping companies operate more efficiently, grow profitability, implement new technologies and create more jobs and opportunities in Maryland.

**We assist Maryland Manufacturers in five key areas of business:**

- **Strategy & Growth**
- **Talent & Workforce**
- **Technology & Cybersecurity**
- **Supply Chain & Defense**
- **Process & Innovation**



PART OF THE  MEP  
**National  
Network™**

The [MEP National Network™](#) is a unique public-private partnership that delivers comprehensive, proven solutions to U.S. manufacturers, fueling growth and advancing U.S. manufacturing.

Focused on helping small and medium-sized manufacturers generate business results and thrive in today's technology-driven economy, the MEP National Network comprises the National Institute of Standards and Technology's Manufacturing Extension Partnership (NIST MEP), the 51 MEP Centers located in all 50 states, as well as Puerto Rico, and over 1,300 trusted advisors at more than 400 MEP service locations, providing any U.S. manufacturer with access to resources they need to succeed.



## CLIENT-REPORTED ENGAGEMENT IMPACTS

*Gathered by the Fors Marsh Group via Independent Survey; Verified by U.S. Department of Commerce*

In 2021, MD MEP delivered more than **200 projects** to nearly **150 Maryland** manufacturers.

<b>\$43.8m</b>	<b>\$162.5m</b>	<b>\$18.6m</b>	<b>\$56.2m</b>	<b>2,123</b>
<b>INCREASED SALES</b>	<b>RETAINED SALES</b>	<b>COST SAVINGS</b>	<b>NEW INVESTMENTS</b>	<b>JOBS CREATED / RETAINED</b>

## STRATEGY & GROWTH

### Getting Maryland Manufacturers Back to Business

The COVID-19 pandemic caused drastic changes to the Maryland manufacturing community. Many companies switched their production lines and began making personal protective equipment and sanitizing products, while others had to temporarily close their doors or reduce the number of employees in their workforce.

As the pandemic eased and businesses began to recover, many saw the need to ensure that their organizations were positioned to overcome future challenges by investing in the growth of the business through market and product development, innovation and long-term strategic growth.

During 2021, 20% of the projects delivered by MD MEP, were centered around Strategy and Growth. MD MEP delivered projects in the following areas:

- Acquisition and/or Exit Strategies
- Facility Expansion & Relocation
- Organizational & Business Assessments
- Strategic Planning
- Market Diversification
- Sales & Marketing



# TALENT & WORKFORCE



## Helping Manufacturers Face Workforce Challenges & Build Their Talent Pipeline

While many businesses were hopeful 2020 was behind them, 2021 proved to have its own challenges, but with these challenges came unexpected opportunities. In response to the rapidly changing workforce MD MEP helped clients meet their training and development needs by delivering programs and services designed to support the growth and training needs of the organization.

During 2021, MD MEP supported manufacturers through the delivery of programs and training designed to develop the next generation of manufacturing workforce:

- Training and Skills Development
- Leadership Development
- Apprenticeship Program Development
- HR Compliance
- Community Outreach and Engagement
- College & Youth Internship Programs

The impacts of our Talent and Workforce initiatives resulted in the following:

- 434 New Jobs Created
- 1,689 Retained Jobs
- 50+ College-aged students engaged in internship / apprenticeship
- 200+ K-12 students engaged in manufacturing programs

## Creating New Career Pathways Through Apprenticeship

Manufacturers continue to explore ways to attract new talent, in 2021 more companies began turning to registered apprenticeship programs to help fill the gaps and create visible career paths for the next generation of workers.

Registered Apprenticeship is a well established career path to help manufacturers attract, train and retain skilled talent to meet the needs of the organization.

MD MEP has led a renewed effort to revive old programs, develop and register new apprenticeship occupations and support manufacturers in the administration of registered apprenticeship programs throughout the state.

**As a result of MD MEP's Apprenticeship Program:**

- **17 Registered Apprentices**
- **12 actively supported companies**
- **6 Occupations including CNC Machinist, Welding Technician, Industrial Maintenance Technician, Tool & Die Maker, Additive Manufacturing Technician, and PostScript Printing Technician**

## **TECHNOLOGY & CYBERSECURITY**



### **Protecting Information & Increasing Productivity Through Technology**

As technology continues to change and advance, one of the greatest risks to the security and financial viability of a business is protecting data and assets from cybersecurity threats and attacks. Data shows an exponential increase in the number of cyber incidents that coincided with the shift in work paradigm created by COVID-19. MD MEP has developed the leading cybersecurity assistance program in the country, having conducted more than 150 assessments and provided technical and financial assistance to small businesses to improve their overall cyber health.

In addition to cybersecurity, identifying and implementing new technologies to compete in the global economy continues to be challenging and costly. MD MEP's programs and services aim to help manufacturers identify, evaluate and implement the right technologies to meet the changing needs of their industry. This includes a myriad of advanced manufacturing and Industry 4.0 related technologies including robotics, automation, additive, AR/VR and the use of sensors and data to improve productivity.

During 2021, MD MEP supported manufacturers through the delivery of programs and projects to in the follow Technology and Cybersecurity areas:

- **Cybersecurity Assessments & Readiness**
- **Cyber Mitigation & Implementation**
- **Technology Acquisition**
- **ERP Implementation**
- **Robotics & Automation**

## Continued Growth for the Maryland Defense Cybersecurity Assistance Program

Most notably, in the areas of Cybersecurity and Technology, 2021 saw a funding wrap up as well as funding renewal to the [Defense Cybersecurity Assistance Program \(DCAP\)](#). The continuation of the program was crucial in the past year as small businesses are seeing one of the largest changes in the cybersecurity market with the upcoming implementation of the Cybersecurity Maturity Model Certification (CMMC). The CMMC will be a unifying standard for cybersecurity implementation across the Defense Industrial Base (DIB). Unlike prior contractual requirements held by defense contractors, specifically DFARS / NIST SP 800-171, the CMMC will verify through third-party organizations that defense contractors have properly implemented cybersecurity processes.

The DCAP program has been instrumental in improving the overall cybersecurity of defense contractors throughout the State of Maryland and will continue to serve the small businesses navigate upcoming their current and upcoming DoD requirements. In total, DCAP has generated more than **\$668,000,000** of client reported economic impact that would have been lost and / or realized if the program did not exist. Through these contracts retained and/or obtained because of the compliance, DCAP companies were also able to retain the jobs that specifically relate back to the DoD work as well as provide an opportunity to add jobs within their organization due to company growth or because of the need of cybersecurity expertise.

**2021 DCAP Client Reported Impact (Reported impacts include manufacturers and defense contractors):**

- **\$513.4m Retained Sales**
- **\$155.2m Increased Sales**
- **3,051 Retained Jobs**
- **136 Increased Jobs**

In addition to client reported impact, the DCAP Program has been able to serve the small business community in Maryland through direct funding reimbursement over **\$500,000**.



## SUPPLY CHAIN & DEFENSE

### Combating a Broken Supply Chain

The COVID-19 pandemic caused massive disruptions to the global supply chain and exposed how reliant the United States has become on imported products, ranging from microchips and metals to the most basic goods such as cleaning supplies and protective equipment. As the states leading resource for manufacturing, companies turned to MD MEP for solutions and insight on combating supply chain disruptions. Managing through these disruptions involves strategies around communication, demand planning, scheduling and addressing critical supply chain needs.

## Financial Assistance Program for Manufacturers Adversely Affected by COVID-19

In 2021, MD MEP in partnership with the Maryland Department of Commerce received funding to create Maryland's first [Supply Chain Assistance Program](#) to provide resources and assistance to help manufacturers address these critical needs.

This initiative will provide opportunities for Maryland manufacturers to learn and share best practices for improving their supply chains, helping to manage through the current supply chain crisis, improve outcomes, and reduce risk. Additionally, it will help manufacturers connect with local suppliers, customers, and partners.

During 2021, MD MEP supported manufacturers through the delivery of programs and projects to in the follow Supply Chain and Defense areas:

- Supplier Scouting
- Supply Chain Strategy & Certification
- Inventory Management



## PROCESS & INNOVATION

### Improving Processes to Drive Innovation

Maryland is home to one of the most advanced and innovative manufacturing industries throughout the United States. With local access to some of the top technological institutions and universities in the country, Maryland Manufacturers are continuously finding new ways to improve their productivity by investing in employee trainings, process improvement and advanced manufacturing practices.

In 2021, through new partnership and subject matter experts, MD MEP expanded our service offerings around process and innovation to provide solutions that continue to drive growth within the manufacturing community.

During 2021, MD MEP supported manufacturers through the delivery of programs and projects to in the follow Process and Innovation areas:

- Facility Layout
- Continuous Improvement Implementation
- Value Stream Mapping
- ISO Training & Certifications
- Food Safety & Quality Compliance

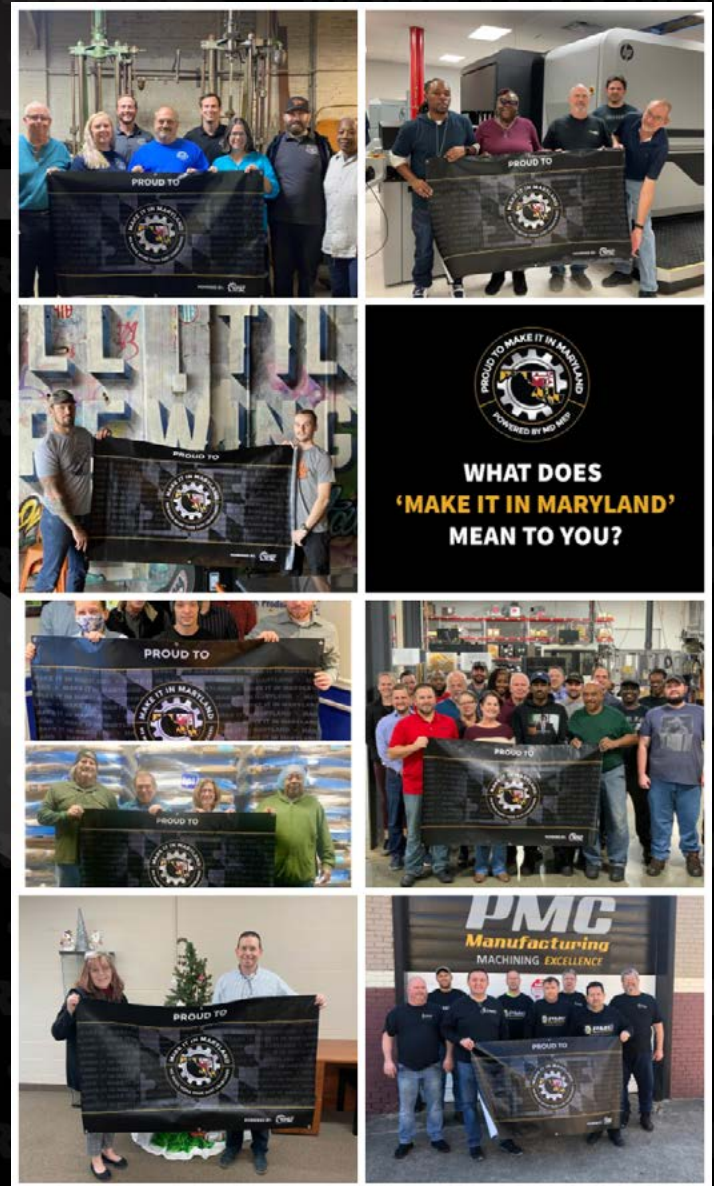




## Showing our Maryland Manufacturing Pride

To kickoff MFG Day 2021, MD MEP relaunched our Make It In Maryland initiative with the new ['Proud to Make It In Maryland' banner campaign](#)

'Proud to Make It In Maryland' is a social media campaign to highlight manufacturers and tell the story of manufacturing in Maryland. MD MEP's goal is to get a 'Proud to Make it in Maryland' banner hanging in every manufacturing facility in Maryland! Photos, images and stories will be shared through social media platforms and other media channels to raise the level of awareness of manufacturing in Maryland.



## Board of Directors

The MD MEP Board of Directors is a representation of the state's industry leading organizations that exemplify and assist Maryland manufacturers. Their supportive leadership makes certain that the tasks taken on by MD MEP are concentrated to fulfill an ongoing need that will help Maryland manufacturing grow and prosper. We wish to thank these individuals for their leadership and investing their time.

- **Mick Arnold**, President, Arnold Packaging
- **Lisa Davis**, Regional HR Director, Berry Global
- **Jim Glowacki**, Director of Strategic Operations, Textron Systems
- **Anne Sennet**, CEO/Executive Vice President Space & Defense Division, SAFT America Inc.
- **Emily Tunis**, President / Chief Operating Officer, Hardwire
- **Heather Gramm**, Senior Director, Strategic Industries & Entrepreneurship, Maryland Department of Commerce
- **Thomas Williams**, Resource Manager, NIST Manufacturing Extension Partnership

## Thank You For Your Continued Support!

Moving forward into 2022, the MD MEP will continue to work with industry to address the ever changing workforce challenges, implement new technologies and protect critical information, innovate and improve processes and procedures, solidify supply chain networks, and align organizations with a path to success.



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