



2024

# ANNUAL REPORT

Empowering Maryland manufacturers through growth,  
innovation and sustainability.



# THE GO-TO RESOURCE FOR MARYLAND MANUFACTURERS

## Who we are

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

Serving manufacturers across all industries and regions of the state, Maryland MEP provides programs, services, and resources that enable manufacturers to improve efficiencies, implement new processes and technologies, realize business growth, and create jobs and opportunities for workforce improvement. As the convener of these resources within the State of Maryland, Maryland MEP is uniquely positioned to assist manufacturers in accessing and leveraging financial and technical assistance at the federal, state, and local levels.

## What we do

We assist Maryland Manufacturers in six key areas of business:

- Strategy & Growth
- Talent & Workforce
- Technology & Cybersecurity
- Supply Chain & Defense
- Process & Innovation
- Energy, Environment & Sustainability

## Strategic Partners



## MEP NATIONAL NETWORK

The Hollings Manufacturing Extension Partnership (MEP) is based at the National Institute of Standards and Technology (NIST). The National Program Office (NIST MEP), which provides the federal government's funding for the MEP National Network™, is located in Gaithersburg, MD.

The MEP National Network is comprised of 51 MEP Centers located in all 50 states and Puerto Rico, with more than 2,500 subject matter experts and practitioners with access to federal and state programs and resources.

- National Network of Centers located in all 50 states and Puerto Rico
- Public-private partnership with local flexibility
- Federal funds, state investments, and private sector fees cover services
- Market-driven program that creates high value for all manufacturers
- Leverage partners to maximize service offerings
- Transfer technology and expertise to small and medium-sized manufacturers



2024 IN REVIEW / A Message from our Director

Maryland MEP and manufacturing in Maryland had another extraordinary year in 2024. A year marked by global changes, significant accomplishments across the sector, and new growth opportunities for many of our nearly 4,000 manufacturers. As we reflect on the past year, we celebrate strides made toward fostering a vibrant manufacturing ecosystem and positioning Maryland as a leader in innovation and excellence.

2024 reaffirmed Maryland’s commitment to manufacturing, and Maryland MEP supported the sector through key programs, including advancing innovation and technology adoption, workforce development and training, and strengthening supply chains.

Innovation remained at the forefront of Maryland MEP and the State of Maryland’s initiatives. This year, we facilitated the adoption of cutting-edge technologies such as Industry 4.0, additive manufacturing, and advanced robotics. We were excited to partner with the Maryland Department of Commerce’s Manufacturing 4.0 Technology Grant and launch the Maryland MADE 4.0 program to encourage small and mid-sized manufacturers to implement new technologies.

Maryland MEP prioritized support for SMEs, providing tailored consulting services, funding access, and business growth strategies. In 2024, we engaged with more than 1,000 small and mid-sized manufacturers and assisted nearly 300, helping them overcome challenges, expand operations, and contribute to the local economy.

A strategic goal in 2024 was to engage more partners and stakeholders to grow the manufacturing ecosystem. Collaboration was key, forging partnerships with educational institutions, government agencies, and industry leaders. These collaborations allowed us to leverage collective expertise, resources, and networks to drive innovation and growth.

Looking ahead to 2025, Maryland MEP remains dedicated to advancing manufacturing excellence. Our focus will be on expanding programs, deepening partnerships, and enhancing the capabilities of Maryland’s manufacturing sector. We are excited about the future and the opportunities that lie ahead.

Our commitment to fostering a thriving manufacturing ecosystem in Maryland remains unwavering. Together, we will continue to drive innovation, growth, and sustainability.

Sincerely,



  
Director, Maryland MEP

2024  
INDUSTRY ENGAGEMENT  
& CLIENT REPORTED  
IMPACTS



1,200  
MFGs SERVED



\$4,000,000  
COST SAVINGS



285  
CLIENT PROJECTS



\$16,400,000  
NEW INVESTMENTS



\$13,400,000  
INCREASED SALES



500  
EMPLOYEES TRAINED



\$61,000,000  
RETAINED SALES



100  
JOBS CREATED

Impacts reflect estimated impacts provided directly by clients through the voluntary impact survey administered by NIST MEP. Although Maryland MEP takes every effort to verify information provided, the impacts above are meant to demonstrate the effectiveness of the program and not intended for financial reporting.



# KEY PROGRAMS & INITIATIVES

## Powering Innovation Through the Maryland MADE 4.0 Grant Program

The Maryland MADE 4.0 program, launched in partnership with the Maryland Department of Commerce, is designed to help small and mid-sized manufacturers adopt advanced technologies and drive innovation. In 2024, the program provided critical support through funding, training, and technical assistance, enabling manufacturers to implement Industry 4.0 solutions such as automation, additive manufacturing, and data-driven processes. By equipping businesses with the tools to enhance efficiency, productivity, and competitiveness, Maryland MADE 4.0 has strengthened the state's manufacturing sector and positioned companies for long-term success in an evolving industry.

## Fostering Connection and Collaboration Within Industry

The Make It In Maryland Tour Talks brought together manufacturers, industry leaders, and stakeholders to showcase Maryland's diverse manufacturing sector and foster collaboration. Hosted at manufacturing facilities across the state, these events provided a platform for companies to share insights, discuss industry challenges, and highlight innovations. By facilitating connections and knowledge-sharing, the Tour Talks reinforced Maryland MEP's commitment to strengthening the manufacturing ecosystem and promoting growth, innovation, and community engagement within the industry.

## Building a Resilient Supply Chain for Maryland Manufacturers

The Maryland Supply Chain Resiliency Program delivered in partnership by Maryland MEP, Inc. and the Maryland Department of Commerce aimed to support resiliency building activities for Maryland manufacturers who were adversely impacted by COVID-19 with impacts to operations, workforce and/or sales. Support through the program included educational events, advanced technology working groups, supplier matchmaking, and direct technical/financial assistance to Maryland manufacturers.

## Driving Growth Through Technology Adoption

Maryland MEP believes that technology adoption and implementation is the key to competitiveness for Maryland manufacturers. In 2024, Maryland MEP played a key role in supporting the Manufacturing 4.0 Grant program, providing education, assistance and support to small and mid-sized manufacturers in navigating the process of implementing new technology and advanced manufacturing solutions.

Through direct consulting, workshops, and technical support, Maryland MEP helped businesses integrated Industry 4.0 technologies onto the plant floor.

Additionally, Maryland MEP facilitated connections between manufacturers and technology providers, creating positive outcomes, and maximizing the impact of the Manufacturing 4.0 Grant Program.

## Preparing the Next Generation of Manufacturing Leaders

In 2024, Maryland MEP's Manufacturing Internship Program featured 24 college interns, from 12 manufacturing companies, including Phoenix Mecano, Coty, and Hardwire LLC. With support from the Maryland Department of Labor's EARN Maryland Program and RMI of Maryland, the program provided students with hands-on industry experience, facility tours, and a capstone presentation. This initiative highlights Maryland MEP's commitment to developing the state's next generation of manufacturing talent.

## Connecting Maryland's Manufacturing Ecosystem

In 2024, Maryland MEP launched the Manufacturing Stakeholders Group to unite industry leaders, government, and educators in strengthening Maryland's manufacturing ecosystem. Through regular discussions and strategic collaboration, the group addressed key challenges, identified growth opportunities, and continues to work to shape policies supporting workforce development, technology adoption, supply chain resilience, and more to drive the industry forward.

## Energy Efficiency and Sustainability for Maryland Manufacturers

Maryland MEP's e2m2 (Energy & Environment for Maryland Manufacturers) Program helped 34 manufacturers improve sustainability, reduce energy costs, and enhance environmental efficiency in 2024. Through assessments, training, and strategic support, the program identified a potential Greenhouse Gas Emissions reduction of over 8,000 metric tons and cost savings of \$1.565 million for Maryland manufacturers.



## Accelerating New Careers Through the Biotech Boot Camp

In August 2024, the fifth Biotech Boot Camp successfully graduated fourteen participants, supported by four sponsor companies: Val Source, Kite Pharma, Precision for Medicine, and Thermo-Fisher. Following graduation, graduates participated in interviews with not only the sponsor companies but also additional industry leaders like Millipore Sigma, AstraZeneca, National Institute of Health, VaLogic, Texcell, and Lonza. As a result, several graduates secured full-time positions with benefits, including roles such as Biorepository Technician at Precision for Medicine, Quality Assurance Technician at Thermo-Fisher, and Cell Therapy Specialists at Kite Pharma, among others. This initiative continues to demonstrate Maryland MEP's commitment to workforce development in the growing biotech sector.



# STRATEGY & GROWTH

Maryland MEP believes that strong leadership and organizational growth provides the foundation and road map for the long-term success of a business. A strategic focus on growth has proven to help increase market share, allow a business to broaden and improve its supply chain and create long-term opportunities for the organization.

Maryland MEP has worked with companies of all sizes to expand their reach and improve top-line growth through areas such as:

- Strategic Assessment
- Growth Planning
- Leadership Development
- Market Development

53%

of Maryland MEP’s 2024 client engagement focus on Strategy and Growth

**Manufacturers Include:**

- Hub Labels
- Itaberco
- INPRO Technologies
- MaxCyte
- Arnold Packaging



CASE STUDY

## INPRO Technologies

### From Solutions to Success: How Sales Mastery Boosted Customer Engagement and Revenue

INPRO Technologies, Inc. (INPRO), a Maryland-based company, provides specialized equipment solutions for manufacturers, focusing on enhancing production efficiency and quality through advanced technologies like UV curing, surface treatment, and web cleaning systems. With over 30 years in the industry, INPRO has earned a reputation for customer-centric, custom-engineered solutions across diverse manufacturing needs. Although known for supplying cutting-edge equipment, INPRO expanded its services by developing a skilled team to design custom-built machines. However, their full range of capabilities remained relatively unknown outside their existing client base.

To overcome this challenge INPRO partnered with Maryland MEP and Sandler Sales to implement the Sales Mastery Training Program. The goal of the initiative was to elevate the skills of INPRO’s leadership and sales team by refining sales strategies, enhancing communication, and focusing on customer-oriented discussions. Training emphasized understanding clients’ needs through insightful questioning and active listening, fostering a shift from traditional selling to meaningful dialogue around client goals.

The program proved transformative, resulting in a 45% increase in sales and enabling INPRO to diversify revenue streams, secure larger, more profitable automation projects and continue to grow their position in the market. With improved sales skills and confidence, INPRO’s team has expanded its customer base and is positioned for long-term growth in new markets. This enhanced approach has allowed INPRO to build trust with new customers, communicating the full extent of their expertise and custom solutions effectively.

- 45% increase in sales**
- Sandler Sales Mastery Certification**
- Expansion into new markets**

“The training we received helped us have meaningful conversations with customers. With better conversations, came better understanding. And when we better understand our customers in manufacturing, we can better serve them.”

**Eric Couch**  
President, INPRO Technologies



# TALENT & WORKFORCE

Attracting, training and retaining a skilled and knowledgeable workforce is critical for the long-term success of any organization. Over the past ten years, Maryland MEP has worked in unison with our state’s manufacturers to design workforce services that meet the needs of industry. These trainings and programs have been developed to be dynamic, customizable, easy to navigate and focused on providing manufacturers with the right resources so that their teams are prepared to adapt along with the ever-shifting technologies and practices.

We support manufacturers through:

- Leadership Development
- Human Resource Planning and Compliance
- On-boarding
- Assessments and Training

500

manufacturing employees trained through Maryland MEP’s programs, workshops, and events

100

individuals placed into new jobs within Maryland manufacturing

*\* figures rounded to the nearest 100*

## CASE STUDY



### PRS Guitars

#### Building a Stronger Workforce: How PRS Guitars Elevated Talent Development with Maryland MEP

Paul Reed Smith (PRS) Guitars, a globally recognized manufacturer of high-quality electric and acoustic guitars, has been an icon in Maryland manufacturing since 1985. Based in Stevensville, Maryland, PRS serves professional musicians across genres, producing instruments known for exceptional sound and aesthetics. As the company grew, PRS saw the need to enhance workforce skills, leadership, and communication. To address ongoing and expected workforce challenges and needs, PRS partnered with Maryland MEP to provide critical support in implementing a workforce development initiative, to train and upskill their workforce.

This training solution provided by Maryland MEP focused on key areas critical to PRS’s success. Through the development and delivery of a series of workshops and training solutions, PRS was able to effectively strengthen their team, engage workforce and expand critical thinking and skills. Through the delivery of a series of “Advanced Interviewing Skills Workshop” improved hiring strategies through strategic questioning and mock interviews. The proprietary “Leading with Influence” (DiSC Management Profiles) training helped managers adapt leadership styles to better support teams, and the “Mastering Communication” workshops enhanced verbal and written communication, teaching employees to interpret non-verbal cues and articulate complex ideas. Focused on providing these skills to new managers and supervisor, the workshop series strengthened team dynamics, employee engagement, and productivity.

With Maryland MEP’s support, this training led to measurable improvements in operational efficiency, leadership, and workplace communication. PRS Guitars now benefits from stronger hiring, adaptable leadership, and a culture of continuous learning. This partnership has positioned PRS for sustained success in the competitive manufacturing industry.

-  Improved hiring strategies
-  Strengthened leadership development

“By focusing on leadership, communication, and hiring, we helped PRS build a strong foundation for growth. It’s rewarding to see these efforts drive their continued success in manufacturing.”

**Kerry Wells**  
Maryland MEP - Director of Partnerships & Program Development



# TECHNOLOGY & CYBERSECURITY

As Industry 4.0 continues to evolve, and labor shortages continue to affect businesses, technology adoption is becoming more and more critical to overall business success and essential for manufacturers to maintain a competitive edge. The identification, adoption and implementation of Advanced Manufacturing Technologies and Industry 4.0 Technologies continues to be a challenge for manufacturers throughout the state. In response, Maryland MEP works to educate and inform on these technologies, and provide assistance to reduce the risk and costs associated with successfully implementing them.

We continue to support manufacturers with technological services in areas such as:

- Robotics and Automation
- Smart Manufacturing and Data Analytics
- Visual Management/Dashboarding
- Cybersecurity
- Enterprise Software Selection

25%

of manufacturers engaged are committed to adoption of new technology and cybersecurity

**Manufacturers Include:**

- Control Cable, Inc
- Kemp Proteins
- K&L Microwave
- Meggit
- Marine Air Supply Co.

CASE STUDY

## Parker Plastics

### Enhancing Production Efficiency: Parker Plastics Leverages M4.0 Grant with Maryland MEP's Support

Parker Plastics, Inc. is a custom blow molder of plastic bottles and containers. Since 1989, Parker Plastics has focused on developing customer-driven packaging solutions with the highest quality products and customer service levels. PPI utilizes extrusion blow molding and re-heat and blow processes to manufacture products made of PET, HDPE, LDPE and Polypropylene resins.

Parker Plastics identified an opportunity for implementing a vision system and auto case filling system to streamline a production line process. The goal was to improve the output, quality, and consistency of bottle containers to their customers, by detecting and avoiding any quality defect issues during the production of the bottle containers. The project would improve the plant productivity and quality, increase production capacity, efficiencies and provide new capabilities for quality check to be done with visual technology to ensure a quality product. The automatic case packing will provide 100% accuracy of bottles per bulk container verses the current state of operator counting. For help, Parker Plastics turned to Maryland MEP, part of the MEP National Network™.

In support of Parker Plastic's goal, Maryland MEP worked closely with the Parker leadership team to understand technology needs and goals, identify and evaluate new technologies, and identify opportunities for funding and technical support to achieve these goals. Throughout this process, the Maryland MEP team provided ongoing support, guidance and assistance resulting in Parker Plastics applying for and receiving financial assistance that enabled them to procure and implement an automated vision system and automated packaging system, resulting in improved efficiencies, cost savings and increased capacity.



**\$65,000 grant awarded**



**\$5,000 in cost savings**



**\$120,000 in new investment**



*Receiving the M4.0 grant is a milestone for Parker Plastics, enabling us to enhance efficiency, sustainability, and competitiveness through new technologies. This resulted in upgraded operations, reduced waste, and boosted productivity. We appreciate Maryland MEP's partnership in driving innovation in Maryland manufacturing.*

**Michael Genevro**

Plant Manager, Parker Plastics





# SUPPLY CHAIN & DEFENSE

Establishing and maintaining a strong supply chain is critical to the success of any manufacturing organization. The global pandemic shined a light on the importance and need for supplier redundancies as well as understanding the true cost of sourcing, and the impacts and potential risks to the business. Maryland MEP and our team of experts are positioned to help manufacturers evaluate their supply chains, identify and qualify new suppliers and minimize the overall risk to their daily business operations.

We support manufacturers through supply chain services such as:

- Supply Chain Assessment
- Supplier Scouting
- Supplier Qualification
- Supply Chain Analysis and Development

# 378

national supplier scouting requests fielded by Maryland MEP

# 134

potential supplier matches identified through Maryland MEP's network

## Netzer Metalworks

### Identifying New Pipelines Through Supplier Scouting with Maryland MEP

With over 50 years of expertise in sheet metal fabrication, CNC machining, painting, welding, and assembly, Netzer Metalworks has built a strong reputation for delivering high-quality manufacturing solutions across industries such as aerospace, defense, medical, and food/beverage. Operating from their AS9100D/ISO9001-certified facility in Essex, Maryland, Netzer remains committed to meeting stringent industry standards while continuously evolving to address new manufacturing challenges.

When a critical client project required prototype injection-molded parts, Netzer encountered difficulties in sourcing suitable suppliers. Recognizing the need for a reliable solution, they turned to Maryland MEP for assistance. Leveraging Maryland MEP's robust network and database of suppliers and the access to the entire MEP National Network, Maryland MEP was able to quickly identify and introduce Netzer to eight potential new suppliers, streamlining the sourcing process and providing valuable industry connections. Through these interactions, Netzer reviewed and updated its product development and production processes, ensuring a better alignment with current and future market needs.

This collaboration not only helped Netzer secure the necessary suppliers but also positioned the company for long-term growth. By strengthening its supply chain and optimizing production strategies, Netzer is now better equipped to deliver innovative solutions to clients, expand its capabilities, and pursue new business opportunities.

- Improved product development and production processes to align with market needs
- 8 potential new suppliers identified

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*When we needed specialized parts for a project, Maryland MEP's network quickly connected us with a local injection molding company and a Michigan supplier, providing valuable design feedback. This fast response enabled us to deliver a cost-effective solution, exceed expectations, and uncover future opportunities.*

**Brad Rockstroh**

Partner, Netzer Metalworks

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# PROCESS & INNOVATION

Creating a culture of continuous improvement and innovation is instrumental in helping a company adapt, evolve and ensure that operations run efficiently and effectively. Maryland MEP works with companies to refine their processes by assessing the operations, evaluating “pain points”, identifying opportunities for improvement and implementing recommendations to improve in a systematic manner across all levels of business.

Maryland MEP’s programs and partners in place to support manufacturers through:

- Operational Assessment
- Lean Manufacturing
- Quality
- Facility Layout and Optimization
- ISO Certification Assistance

## >\$20m

new investments and cost savings realized from Maryland MEP projects and services

### Manufacturers Include:

- Dixon Valve
- Chesapeake Specialty Products
- American Wood Fibers
- Miltec UV

## CASE STUDY

### US Valve

#### Driving Continuous Improvement and Enhancing Efficiency Through Lean Principles

US Valve, a leading manufacturer of high-performance industrial valves and flow control solutions, sought to enhance efficiency and foster a culture of continuous improvement. The company faced challenges with problem-solving and process optimization, as employees often relied on individual expertise rather than a structured, team-based approach. To address these inefficiencies, US Valve partnered with Maryland MEP to provide targeted training in Lean Principles and Root Cause Corrective Action (RCCA).

Maryland MEP delivered a comprehensive program for 18 employees, introducing Lean concepts such as process mapping, planning, and practical tools for continuous improvement. The RCCA training provided structured problem-solving techniques, including the 8D process, FMEA tools, and graphical analysis, while promoting teamwork and open communication. Employees gained a standardized methodology to identify and address root causes, reducing inefficiencies and improving overall operations.

By integrating Lean principles with a systematic approach to problem resolution, US Valve strengthened its ability to drive continuous improvement. Employees now work collaboratively to analyze and solve issues, leading to greater efficiency and long-term operational success. This initiative has positioned US Valve for sustained growth in a competitive industry.



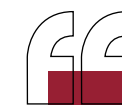
**Improved operational efficiency**



**Enhanced problem-solving through RCCA training**



**Strengthened collaboration and teamwork**



*Lean principles are essential for driving efficiency, reducing waste, and improving collaboration. At Maryland MEP, we're proud to help manufacturers like US Valve adopt these practices, enabling them to enhance operations and position themselves for long-term success.*

**Mike Kelleher**

Director, Maryland MEP





# ENERGY, EVIRONMENT & SUSTAINABILITY

Maryland MEP helps Maryland manufacturers improve energy efficiency, sustainability, and reduce environmental impact through energy assessments, sustainability audits, and actionable recommendations. Through leveraged partnerships with organizations like the Maryland Energy Administration (MEA) and RMI, Maryland MEP supports manufacturers in adopting energy-saving technologies and optimizing processes to achieve cost savings and environmental improvements.

Key areas of support include:

- Energy Audits & Baseline Assessments
- Process Optimization for Energy Efficiency
- Adoption of Green Technologies & Sustainable Practices
- Assistance with Energy-Saving Grants & Financial Incentives

34  
manufacturers served through  
the e2m2 Program in 2024

8,000mt  
identified reduction in  
Greenhouse Gas Emission

\$1.57M  
identified energy savings for  
Maryland manufacturers through  
the e2m2 program

## CASE STUDY

### Soupergirl

#### From Bottleneck to Breakthrough: How Soupergirl Scaled Up with Sustainable Innovation

Soupergirl, a women-owned manufacturer of plant-based, ready-to-heat soups and other seasonal products, was founded in 2008 by a mother-daughter duo with a mission to revolutionize the broken industrial food system. Today, their soups and gazpachos are sold in hundreds of stores along the East Coast and beyond, including Whole Foods, Costco, Safeway, Shopright, Acme, Kroger, and MOM's, making their mark in the plant-based food industry. The company experienced significant growth in the aftermath of the COVID-19 pandemic. As demand surged, Soupergirl knew they needed to scale their operations to meet the needs of their expanding customer base

Through the e2m2 Program, Maryland MEP and RMI helped Soupergirl pinpoint inefficiencies in its production process, particularly the cooling of hot prepared food. The company had been using blast chillers, which were effective at low production levels but became inefficient as demand increased. Blast chillers, using air as a cooling medium, consumed large amounts of energy and hindered scalability.

To improve production efficiency and reduce energy costs, Soupergirl replaced its blast chillers with a water bath chiller, a more energy-efficient system. This change allowed the company to cool its entire production capacity in just two hours, compared to the 12 hours required by the blast chillers. The new system reduced annual electricity consumption by 76,278 kWh, resulting in significant cost savings and enhanced scalability. Soupergirl was also able to secure \$250,000 in grant funding to support the new energy-efficient systems, underscoring its commitment to sustainability and operational excellence.

- Improved productivity and reduced downtime
- Reduced electric consumption by 76,278 kWh annually
- \$250,000 in new investment

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The Maryland MEP team has been extraordinarily supportive since the day we opened our production facility in Lanham, Maryland. They consistently provide the support we need to expand efficiently - setting us up for a long and healthy future in Maryland.

Sara Polon  
CEO, Soupergirl

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**Maryland MEP**

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