

ANNUAL REPORT 2020



INDUSTRIAL EXTENSION

PART OF THE



MEP
National
Network™



Welcome / From the Director

Welcome to our inaugural annual report which highlights the impact we bring to our customers across the great state of West Virginia. We represent WVU and the national Manufacturing Extension Partnership network.

While 2020 was unusually challenging, we still have many success stories to share about the work we have done. More importantly, we are proud to share the stories of our clients who we hope to have impacted positively from a business perspective as well as from a personal standpoint since we consider our customers to be valued friends.

We expanded business partnerships this year with valued resources that compliment the work we do and who share the same passion for building our economy.

It was my pleasure to meet many dedicated professionals in our region. The team at WVU's Industrial Extension looks forward to building our relationships with trusted resources and customers and to reaching new customers in 2021.



Staci P. Miller,
Director of Operations
WVU Industrial Extension / WV Manufacturing Extension Partnership

THE GO-TO EXPERTS FOR ADVANCING U.S. MANUFACTURING



**NATIONAL
NETWORK**

One Center in
Every State and
Puerto Rico

More Than
1,400


Trusted Advisors
and Experts

More Than

385

MEP Service
Locations



More Than
2,100



Partners

Interacted with
27,574



Manufacturers

WVU Industrial Extension / WVMEP



A study completed in 2020 by Summit Consulting and the W.E. Upjohn Institute finds that the National Institute of Standards and Technology's Hollings Manufacturing Extension Partnership (NIST MEP) Program generates a substantial economic and financial return. The study shows impacts from the projects completed by the nationwide MEP program:

The WVU Industrial Extension is West Virginia's official representative of the NIST/MEP National Network, a unique public-private partnership that delivers comprehensive, proven solutions to U.S. manufacturers, fueling growth and advancing U.S. manufacturing. WVU Industrial Extension, also known as the WV Manufacturing Extension Partnership (MEP), helps WV manufacturers reach their full potential by providing the insight and education they need to stay profitable in global markets, expand and grow their business, and retain WV talent to strengthen the state's economy.

WVU Industrial Extension (WVUIE) is one of fifty-one centers nationwide fulfilling this mission to sustain, grow, and build a stronger manufacturing community. WVUIE works with other MEP centers to connect suppliers and manufacturers, benchmark and share lessons learned, and support one another across state lines when needed.

13.4 : 1

Financial return for \$140M annual investment in MEPs by the federal government

217,000

Total US employment increase as a result of MEP projects (direct, indirect, and induced)

\$22.9 B

Increase in US GDP as a result of MEP projects

\$14.0B

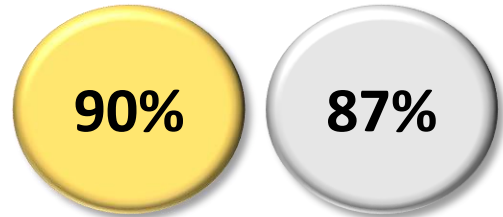
Increase in personal income as a result of MEP projects

Customer Impact / Return on Investment 2020

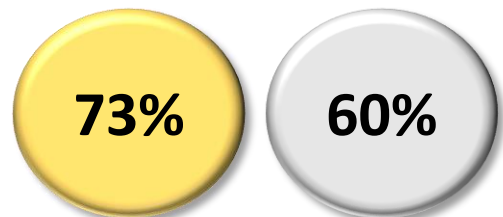
Projects completed by WVUIE are surveyed through an independent third-party firm that is managed by the Federal Department of Commerce (NIST – National Institute for Standards & Technology) who provides the cooperative agreement with the nationwide MEP centers.

The impacts from project work are used to determine the success of the MEP and to compare impacts across the national network. These surveys are critical to ensuring that the funding provided to the national network is used to create positive changes in manufacturing. MEPs focus on projects that can improve and retain sales, identify new markets through innovative products and services and identify opportunities to streamline processes to save costs.

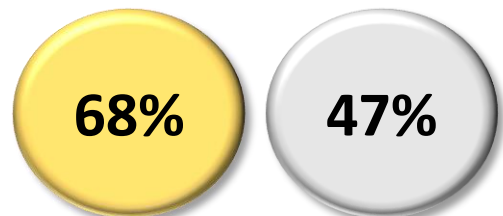
WVUIE prides itself on providing personalized customer service that supports businesses and others that promote the health of the business, retention of workforce, and reduction of risk. Connecting with customers is paramount and given the challenges in 2020, virtual contact was a solid solution to provide project support.



Customer Satisfaction Rate



Increased Workforce Skills as a Result of Services



Cost Avoidance as a Result of Services

Increase in Sales

\$9.8M

Retention of Sales

\$9.1M

Cost Savings

\$2.5M

Increase New Products / Processes

\$4.3M

Customer Impact / Outreach & Service Delivery

Products & Services Offered

Occupational Health & Safety



Maintain regulatory compliance; avoid fines; prevent injuries; support business; protect workforce

Management Systems



Develop systems; manage processes; increase customer satisfaction; control business risk

Continuous Improvement



Study processes; identify opportunities; streamline operations; reduce costs; organize the workplace

Workforce / Leadership



Assess cultures; develop leaders; build teams; train through job instructions; develop strategic, succession, continuity plans

Innovation / Growth

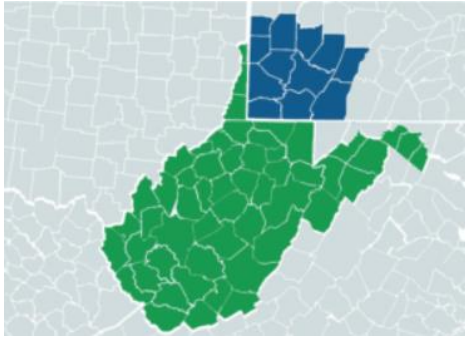


Design products and processes; conduct process simulation; implement automation; expand market opportunities

Products & Services Delivered

Webinars & Roundtables Hosted	43
Webinar & Roundtable Attendance	1,046
COVID & Marketing Outreach	11,411
Direct Connections with Clients	2,517
Projects Completed	91
Employees Trained through Projects	685

Partnerships / Growing Stronger Together



AIM Higher Consortium

In collaboration with 31+ organizations and neighboring MEP, Catalyst Connection, WVUIE is a partner in the AIM Higher Consortium which is funded by the Department of Defense and is designed to strengthen the defense industrial ecosystem in West Virginia and Southwestern Pennsylvania. Catalyst Connection is leading this important initiative and partner companies have a wide range of expertise including technology, academic, and economic development.

This effort includes accelerating research and innovation in defense manufacturing, fostering improvements and growth for defense supply chain organizations, addressing industry needs for workforce development and training, and providing access to capital for growth in the defense sector.

ARC SPC Shale POWER Program

The Appalachian Regional Commission (ARC) has funded a program administered by Catalyst Connection in partnership with Ohio MEP, JARI (Cambria and Somerset Counties in PA) and WVUIE. The POWER mini-grant program is designed to assist coal impacted community's response to negative economic factors. The program does this by diversifying and growing small and medium sized manufacturers through strategic efforts to build capacity, improving efficiencies and demand locally, stimulating job creation and promoting economic impact.

Applicants may request a grant up to 50% of the total advanced manufacturing technology project cost. Awards are made on a first come, first served basis and are between \$1,000 and \$5,000. Mini-grants may be used to support project-related consulting costs, contracted services, software purchases, supplies and one-time costs related to the implementation of advanced manufacturing technology.



**Opportunity lies
below the surface.**

**Connecting Manufacturers to
the Shale Supply Chain**

Connecting with Clients / Everyone Everywhere



I've been working with WVUIE and John Frazer for going on 10 years now and have had great service and training from him. WVUIE has helped Flying W Plastics, Inc. with OSHA mock inspections, Waste Management, Fire Extinguisher training, Emergency Action Plan, and Lock out Tag out training and our employees have benefited from it greatly. I would highly recommend WVUIE and John Frazer to anyone in the Manufacturing Industry for any training they may seek. Flying W Plastics, Inc. would not only like to thank WVUIE and John Frazer for their expert training on these topics but their upmost professionalism along the way. I consider John Frazer a friend and a reliable source to get information from about topics in our industry.

*Nicholas E. Dent, WV Flying W
Safety / H.R. / Payroll*

We work statewide, with clients large and small, and strive to find solutions for all WV businesses.

Success Story / Mister Bee Potato Chip

Operational Improvements from Energy Assessment

Mister Bee Potato Chip was founded in 1951 in Parkersburg, West Virginia. In November 1962, the company was moved to a new location also in Parkersburg, West Virginia, where the chips are still made today. Mister Bee now operates as West Virginia Potato Chip Company, LLC / DBA: Mister Bee Potato Chip and is the only producer of potato chips in West Virginia.

Mister Bee Potato Chip recognized that dated, facilities, equipment, and procedures were having a large impact on their energy expenses. They needed an accurate assessment of their

current energy usage and projections of savings for the proposed/discovered upgrade needs.

The WVU Industrial Extension working with WVU's Industrial Assessment Center completed an Energy Assessment at Mister Bee Potato Chip and provided a comprehensive report detailing recommendations for the energy assessment. The energy assessment covered all energy consumers in the plant and was tailored to fit the needs of the operation.

Increased investment in
new products / processes

\$3M

Increased investment in
plant equipment

\$5M

Investment in workforce
practices and employee
skills

\$70K



WVUIE provided Pollution Prevention (P2), Energy Assessments, and Efficiencies for Manufacturing for the Mister Bee Potato Chip facility. Utilizing all of the energy, waste, and lean recommendations – we were able to minimize organic waste, with energy efficiencies, lean improvements, and cost-effective manufacturing upgrades. Our adherence to the WVUIE services allowed us to successfully apply for WV USDA REAP funding to allow for Efficiency Upgrades and Efficient New Production Equipment and Processes.

*MaryAnne Ketelsen,
Owner/President*

Success Story / Phillips Machine

ISO Assistance Spurs New Investment at Phillips Machine

Phillips Machine Service has grown to be one of the largest full-service companies of its type in the world. Since operations began in 1976, the company has set the pace for equipment service and support. Today Phillips is an OEM and is involved in almost all phases of mining equipment, including rebuilding continuous miners, roof bolters, scoops, and feeder breakers; remanufacture of shuttle cars; repair and remanufacturing of cutter drums; as well as the sale of used equipment.

Phillips was seeking support to provide objective and independent evaluations of their quality management system. Their customers require ISO 9001 certification and the business is dependent upon having a strong, sustainable program that not only ensures that customers are receiving the best products possible but also gives Phillips an outside perspective on the system performance.

WVUIE conducted internal audits to identify system weaknesses that were mitigated through corrective action ensuring customer orders were fulfilled with solid controls and accuracy. Corrective actions were used to assess other areas of the operations to ensure that potential system gaps were avoided leading to improved sales and operational costs savings. Through the conduct of audits, education was provided to the individuals being audited as well as the teams involved with conducting root cause analysis on the audit findings. These hands-on training efforts were integrated into the process itself which saved downtime in production without having employees off the shop floor. Results of audits and corrective actions were discussed during formal management reviews which directly supported management decisions including the need for improved equipment and software.

Quality is a key factor to the success of Phillips. WVU Industrial Extension assistance in this area was invaluable. Their professionalism, knowledge and support guided our team to the results we wanted. I and others at Philips would highly recommend the WVU Industrial Extension to anyone and look forward to a long working relationship with them.

*John Jones
Quality Manager*

Sales Impacts



Increased Sales \$3.7M
Retained Sales \$1.2M

Cost Impacts



Cost savings \$110K
Cost avoidance \$25K

Investments



New products/processes \$500K
Plant/equipment \$250K
Information systems/software \$700K
Workforce/employee skills \$180K
Job creation 7

Success Story / Uncle Bunks

Plant Layout to Plan for Expansion

Uncle Bunk's is a specialty food company that is owned and operated by Larry Young, his wife Rose Marie, and their daughter Stacey Young Kasun. Located in Sistersville, WV, Uncle Bunk's manufactures, sells, and distributes gourmet products including pepper sauces, mustard relishes, and sweet pickles based on old-time Appalachian recipes. The company goes beyond these products to offer a variety of spices for various cooking recipes.

Uncle Bunk's is planning for significant growth in the coming years. This plan to expand market penetration and grow their wholesale/distributor business. To accommodate this growth, Uncle Bunk's needed to move to a facility that could accommodate the anticipated needs and growth. After searching for a building that would meet their needs, Uncle Bunk's determined that it would be best to build a new facility.

WVUIE met with the team to learn more about potential changes with production, warehouse, and administrative space needs. The proposed building site was evaluated and with using the principles of lean manufacturing, a design was created that would allow Uncle Bunk's to grow in this new space and operate as efficiently as possible. This would allow them to maintain existing markets and grow into new ones. Future expansions were considered so that current production would not be interrupted. WVUIE met with Uncle Bunk's to provide a detailed review of the layouts developed and discuss how production would flow through the new facility. The drawing was used to begin the bidding process for their new facility.



The WVUIE's ability to combine lean manufacturing principles with their knowledge of our business and the constraints we operate within proved to be invaluable. They were able to provide Uncle Bunk's with a layout that met all our needs and expectations, in the smallest footprint possible, but with considerations that would allow for expansion without disrupting production when that time comes. I could not be more pleased with the result and look forward to working with the team at WVUIE as we continue to grow Uncle Bunk's.

Stacey Young Kusan, Co-Owner

Investment in new building and equipment

\$200K

Growth for wholesale/distribution

35%

Production area increase to 4,000 sq ft

65%

Overall sales increase

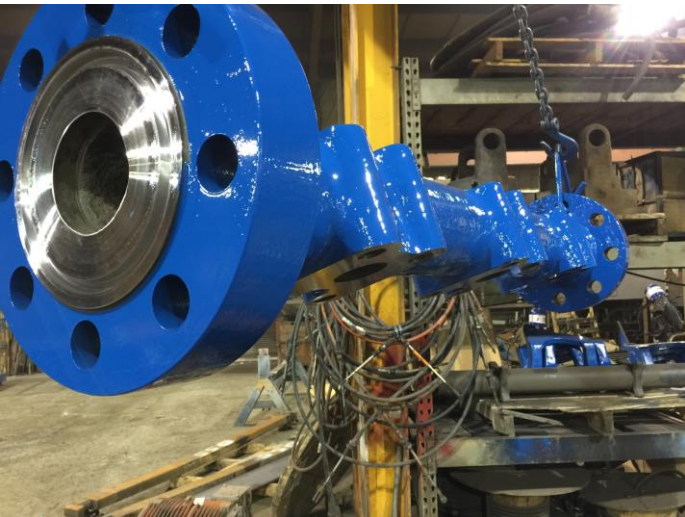
85%

Success Story / Progressive Industries

Business Management Support Provided

Progressive Industries is just one of several organizations owned and managed by Heather Cyphert. The Progressive Industries facility is in Westover, just outside of Morgantown, WV. Dating back to 1959, Charles Cyphert Sr. and his brother Glen started Charter Engineering. Charter Engineering served as an underground mining equipment rebuild shop. Being one of the first rebuild shops in the United States, Charter Engineering grew with the booming coal industry. In 1972, Charles, along with his sons, transformed Charter Engineering into Progressive Industries.

Progressive Industries, a 52,000 square foot facility, specialized in rebuilding underground mobile mining equipment. In 2017 Precision Tool was added to expand service offerings to customers. Precision Tool's Quality Management System is certified to ISO 9001:2015. In 2017, Performance Hydraulics was added to the family of companies, providing solutions for hydraulic requirements. Both businesses were founded on the same values that have helped Progressive Industries become an industry leader.



The Progressive family of businesses have engaged with WVUIE on multiple projects for many years and across several disciplines. This partnership is transformational and one that WVUIE hopes to foster for many years to come. Having these kinds of long-standing customer relationships is what we hope to create with all our customers.



Personalized, on-site support is one of WVUIE's biggest strengths. The technical consultants are skilled at understanding the needs of the customer and helping develop a solution that is practical for our operations. We've engaged with the MEP for support with our ISO 9001 management system, development of a strategic plan and market analysis, development of processes to manage International Trade Arms Requirements as well as health and safety compliance. They offer wide range of services and bring much needed talent to our small team at Progressive Industries and Precision Tool.

*Heather Cyphert,
Owner, Progressive Industries / Precision Tool
Chair, WVUIE Advisory Committee*



Supplied photos on front cover from left to right:
 Brake Supply Company, Inc., Princeton, WV;
 West Virginia Great Barrel Company, White
 Sulphur Springs, WV; Level 1 Fasteners,
 Huntington, WV; Dale Morton Studios,
 Hurricane, WV; American Muscle Docks,
 Wellsburg, WV; Nate's Nets, Morgantown, WV;
 and Smooth Ambler Spirits Maxwellton, WV



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