



A Message From Our Board Chair **Committed to Better Serving ALL the Manufacturing Supply Chain**



The importance of building our manufacturing capability, resilience and technology leadership has never been more important to our Commonwealth, and our Nation. The need to expand, retool and grow this vital part of our economy is critical. For this reason, the Board of Trustees led an update to the Strategic Plan for GENEDGE focused on expanding our capabilities and partnerships to better meet the needs of the clients we serve and support the growth and resilience of these critical capabilities.

We engaged the manufacturing community with stakeholder sessions across the Commonwealth that provided feedback on the needs and challenges we face as well as potential solutions. Reviewing this input provided clear direction on common themes that aligned with the GENEDGE mission, and the priorities of the NIST MEP National Network™. Key areas of focus that emerged will help us better meet our goal to be the best public resource to help the manufacturing supply chain innovate, compete, and grow. This direction is reflected in the development of five strategic imperatives that will serve to guide our future:

- Promoting Financial Health This includes not only continuing to strengthen GENEDGE's funding to support the mission, but also to increase GENEDGE capabilities and resources to help small and mid-sized manufacturers access funding sources necessary for growth.
- Expanding Services to Smaller Businesses Nearly two thirds of the companies in the manufacturing supply chain in Virginia have less than 20 employees (emerging businesses). We will expand access to services and adopt tiered delivery strategies to increase our ability to service these companies.
- Fulfilling Client, Customer and Employee Needs We will increase awareness by employing a broader range of complimentary services and information tailored to small and medium manufacturing business owner needs.
- Increasing Market Awareness We must continue to promote our successes to increase the recognition of GENEDGE Alliance and our status as the primary public resource focused exclusively on Virginia manufacturing.
- Enhancing Strategic Partnerships We will continue to leverage national, regional, state & local partnerships to gain a substantial increase in market penetration. By engaging with mission complimentary advocates, these partnerships will continue to develop recognition of the GENEDGE Alliance as a world class manufacturing resource.

These imperatives will drive our operating plans and activities to increase the number of companies that we serve by expanding resources and means of support to the manufacturing sector. We will expand partnerships, while building the GENEDGE Alliance to better serve 'emerging' smaller businesses and their diverse needs. We will develop different approaches to provide new and valuable resources to better serve all of Virginia's manufacturing supply chain needs.

As year 2023 approaches. I am prouder than ever to be part of this organization as your Board Chair and genuinely appreciate all the GENEDGE Team, together supporting manufacturing and industry in the Commonwealth. Stay well and thank you.

leffrey laycox Board of Trustees Chair, GENEDGE Alliance President & Owner, Tabet Manufacturing Co.

ASER "GENEDGE continues to be a broad and adaptable resource for small startups like us at Laser Thermal. For example, the opportunity to participate in their GO Virginia retooling program provided solutions to maximize our commercialization opportunities, manufacturing capabilities and identify key gaps for continued success." - John Gaskins, Co-Founder and CEO; Richmond, VA; GO VA Region 9

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A Message From Our Executive Director Driving Growth Across the Manufacturing Supply Chain



The manufacturing sector has some clear challenges to address. Workforce development and availability, supply chain issues, and the need to increase domestic manufacturing capability continue. Through the leadership of the Board of Trustees, GENEDGE continues to evaluate and adjust our strategies to meet these challenges. In 2Q of FY 2022, the Board Strategic Planning Committee was activated, and a new plan created and formally adopted to support GENEDGE's Five Strategic Goals: Enhancing Strategic Partnerships, Expanding Services to <20 Employee Businesses, Improving Client Capital Access, Enhance Fulfillment of Client and Employee Needs, and Increasing Market Awareness. Work is underway to accomplish the five core goals of our revised strategic plan.

We can report the GO VA Retooling Program has exceeded expectations. 54 Virginia manufacturers expanded to support critical domestic supply chains. We are proud of these vested pioneering companies and are pleased to provide a sampling of 15 companies featured in our online Client Showcase (check it out at genedge.org). We are also wrapping up the DEFENDCUI-VA program, which since 2020 has helped over 200 Virginia companies affordably improve their cybersecurity for Controlled Unclassified Information (CUI) posture. GENEDGE services now shift toward piloting a private sector enabled platform-based approach, providing high-quality, low-cost services to the Defense industrial Base (DIB).

Our work with the Aircraft Carrier Supply Chain, focused on inserting advanced mfg. technologies, led us to recognize a need to increase technology adoption by small and medium sized manufacturers, especially in the defense industry. In 2022, GENEDGE's Mobile Technology Insertion Program (MTIP) began with Scott Schein, Director-National Network & Supply Chain Programs to build a state coalition to focus on these unmet needs. A new Mobile Technology Insertion Initiative (MTII) will catalyze SMEs in the DIB to access and invest in advanced manufacturing technology, modernize operations, & enhance workforce attraction and retention.

Funded by President Biden's American Rescue Plan and administered by the EDA, the **Build Back Better Regional Challenge** grant of 2022 was awarded to Richmond based Activation Capital to advance the development of the region's advanced pharma cluster. GENEDGE was selected to assist in developing an equitable and robust supply chain supporting this rapidly growing sector. GENEDGE will also begin to establish appropriate cybersecurity risk management systems throughout the supply chain to assure that intellectual property is not compromised.

The Strategic Plan in Action - Focusing on The Emerging Business Market

A clear objective from our strategic planning is the need to reach more companies. Smaller, 'emerging' manufacturers in Virginia (over 9375 companies) have been a challenging segment for us to reach. A recent market research study conducted with representative companies in Virginia highlighted *What* obstacles to growth are holding them back: lack of competitive edge and innovation: obtaining supplies, process optimization, lack of workforce, and market opportunities. We are now focusing on strategic initiatives to improve service delivery and market share to this underrepresented segment now that we refer to as 'emerging' businesses.

"The combined teams at GENEDGE and the IVY Group dug in and asked questions to understand the technical aspects of our new product for germicidal UV applications and provided marketing solutions. The program was a good value for our investment."

- Jim Raymont, Director Sales; EIT - Instrument Markets, Danville and Leesburg, VA; GO VA Regions 3 & 7 Creative Design.
Quality Production.

GENEDGE Alliance Membership - Enhancing Connections Around the Commonwealth

Our market study also provided clear direction on *How* emerging manufacturers prefer to acquire assistance is through online, cohort, podcast, and other remote digital delivery means. We are excited to introduce in CY 2023 the new GENEDGE Alliance Membership – a gateway to valuable content-based services & resources made for manufacturers by manufacturing industry experts. One exciting feature of the Alliance model is access to the CONNEX marketplace, https://genedge.org/connex-virginia-supply-chain-tool/ providing a true marketplace for domestic supply chain growth. Coming soon in 2023, the GENEDGE Alliance Emerging Business Program for qualified manufacturers with less than 20 employees will provide an opportunity to receive one on one coaching to further their growth over time.

Appreciation For Our Commonwealth Alliances

We are fortunate to have great partnerships and would like to thank the members of the GENEDGE Alliance and our incredible Alliance stakeholders; Governor Youngkin's office and administration, including the Secretaries of the Commonwealth, Education, Labor, Commerce & Trade, and Veterans and Defense Affairs; the General Assembly; our Board of Trustees; the GO VA state and regional directors and representatives; employees; partners; third-party service providers; and our clients for your unwavering trust and support for GENEDGE. With the pandemic behind us, together we are stronger than ever heading into 2023 to better assist ALL the manufacturing supply chain in Virginia to *innovate*, *compete* and *grow!*

Bill Donohue

President & Executive Director, GENEDGE Alliance

"Drake Extrusion's marketplace is requesting a more diversified polypropylene product portfolio for addressing our emerging clients' needs for environmental, sustainable, and green (ESG) solutions. GENEDGE previously has provided us consistent business services support with Quality, Lean and Process Improvement initiatives. We decided to approach them with the opportunity of assisting us with our ESG product commercialization, testing, and branding needs. Their expertise and network helped us develop a product launch/branding strategy supported by biodegradability test (ASTM D5511) results demonstrating our processing capabilities. This demonstrated biodegradability capability resonates well for our emerging clients. We appreciate GENEDGE's support on our journey."

- Stewart Little, VP Marketing & Sales; Ridgeway, VA; GO VA Region 3

GENEDGE Leadership Team



Bill Donohue President & Executive Director



Anthony Cerilli Vice President of Operations



Joshua Dawson J.D., M.A., Chief Financial Officer & Business Manager



Scott L. Schein Director, National **Network & Supply** Chain Programs



Dean Young Vice President, Business Transformation

Where We Serve YOU - Regionally

Regional focus, local delivery, customized solutions



Dave Bartlow Regional Growth Manager Northern Virginia





GENEDGE

Administration

Brenda Bowman Office & Security Manager



Cindy DeOms Systems Administrator



Michele Faircloth Accountant



Teddy Martin Human Resources Director



Connie Sharpless Client Relations Specialist



Valerie Simpson Executive Assistant; HR Assistant



Cheryl Carrico, Ph.D., P.E. Program Manager for GO VA-Retooling Virginia Manufacturers for Strategic Industries



Regional Growth Manager - SW VA

James Smith Regional Growth Manager Roanoke/New River/ Lynchburg

John Hagwood **Regional Growth Manager** for Central & Southside VA

Sharolyn Graybiel Regional Growth Manager -**Hampton Roads**

GENEDGE Operations



Steve Holcomb **Project Manager**



Michael Levy **Business Services** Director - Growth



Roy Luebke Innovation and Strategic Growth Consultant



Automation and Advanced MFG Practice Manager

Jeff Shook



Joseph J. Stark III **Business Services Director - Operations**

Our team is available throughout the Commonwealth to deliver customized solutions to eligible manufacturing, engineering and technology firms.

Steve Dalton

Regional Growth Manager

Shenandoah/Blue Ridge

Our results-focused services bring Virginia companies of all sizes the right expertise, at the right time, at a great value. And we are focused on delivering services and solutions that will drive our clients' business growth, which means growth for the overall economic health of Virginia and jobs creation, too. Our low-cost, high-value services are designed to meet your team's unique needs so vou can:



Innovate:

Gain insight to leverage innovation, respond to changing technology, and accelerate development



Compete:

Enhance your firm's global competitiveness, improve performance, and respond to a changing workforce



Grow:

Strategically accelerate your growth, develop new markets and customers, and commercialize new technology





Linda Lancaster Marketing & Communications Manager



Jeanette Stevens Marketing & Outreach Manager

Our Values

GENEDGE seeks to apply its expertise and share our values in unique ways to develop long-term relationships with our clients and alliances. GENEDGE associates will be guided by the following values:



Work

Work collaboratively



Always be learning and applying new knowledge



Be inclusive



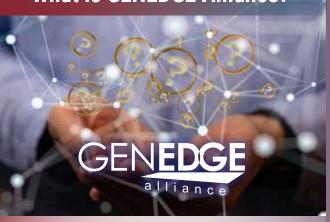
Think creatively



Positive Results (for our clients)



What is GENEDGE Alliance?



Launched in 1992, GENEDGE Alliance is a political subdivision of the Commonwealth of Virginia. It is accountable to a fiduciary Board of Trustees that is appointed by the Governor, consisting of members from industry, higher education, and the Governor's cabinet.

GENEDGE is Virginia's only manufacturing and economic development organization partnered



with the MEP National Network™, a publicprivate partnership that empowers small and medium-sized manufacturers to grow and thrive through educational resources, industry connections, and best practices.

GENEDGE leverages federal and state funding to deliver curated expertise and resources to Virginia manufacturers, businesses, and other organizations. Our experts can help you solve today's toughest problems - like how to increase productivity, keep your workforce safe and healthy, or pivot to produce PPE to meet market demand following the 2020 COVID-19 pandemic. We also deliver longer term planning - like how to improve economic competitiveness and enhance technical capabilities. No matter what the challenge, GENEDGE brings expert solutions to help Virginia companies grow and thrive.



GENEDGE assists in finding technological solutions that fit your business needs as new technology is revolutionizing manufacturing processes and quality control.



impact, data-driven business strategy facilitations, focusing on where your business should position itself to be competitive.



GENEDGE can assess and address IT configuration, management and security capabilities versus your needs. By identifying and prioritizing gaps, we can implement cost effective solutions to create, manage & protect your digital assets, compliant with cybersecurity and privacy requirements.



equipment

as well as

through our

GENEDGE supports **GENEDGE** experts your projects address your with engineers supply chain and experts in challenges materials science. including process design, supply chain management manufacturing. and optimization, integration thousands of other of software, professionals inventory control and supplier national network. scouting.

GENEDGE's mission statement:

"GENEDGE is Virginia's best public resource to help manufacturing and industry innovate, compete, and grow."

GENEDGE's vision statement:

"To be Virginia's go-to resource that accelerates the growth of manufacturing and technology industrial clusters and quality jobs."

Supporting Emerging Businesses in Our Commonwealth

Throughout our history, GENEDGE has done a good job of serving the more established manufacturing supply chain through our core services and traditional approaches. However, we recognize that a large majority of those we could potentially help are smaller or newer firms that still seek growth.

These "Emerging" businesses have different needs and require different approaches to better serve them. We are focused on strategic initiatives to improve service delivery and market share to this under-represented segment of our client base.

A recent market research study conducted with small, medium, and large manufacturers in the Commonwealth of Virginia highlighted specific obstacles to growth, competitive edge, and innovation:

- Getting supplies whether that be in the United States, in general, or overseas
- Identifying ways to optimize processes
- Finding the workforce to get the job done
- Learning how to grow their companies

Our Answer - The GENEDGE Alliance, made for manufacturers by manufacturing industry experts. Get helpful resources, content, and tools to help you find what you are looking for!

What will you get by joining the Alliance?

By becoming a member of the GENEDGE Alliance, you will have access to information sharing, direct consulting services from a GENEDGE manufacturing expert, third party subject matter experts, or even university-based student intern teams, our expert resources will help your company innovate, compete, and grow.

Manufacturers from around the Commonwealth of Virginia can initially join the Alliance for free.

As part of participation in the GENEDGE Alliance you will receive:

- Access to online / On-Demand training (ie: Tooling U; LMS) (read more below)
- Virginia state & CONNEX™ National Marketplace supply chains (read more below)
- Manufacturing NOW in Virginia Podcast (read more below)
- Industry content relevant to your business
- Relevant manufacturing content & resources



- Program information
- GENEDGE partners plus in-house expertise and more!

And coming soon in 2023!

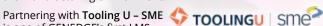
GENEDGE Alliance Emerging Business Program

For qualified manufacturers with less than 20 employees, we will provide direct service methodology using a consulting/coaching model.

- An initial assessment will be completed to help understand priority of needs
- Engagement with Emerging Business Program Manager to develop growth plans
- Completion of online, self-paced learning for baseline awareness
- Assign Emerging Business Coach for follow up
- Fixed price delivery of direct service, either in plant, through remote support, or a combination thereof
- Cost partially underwritten by GENEDGE

A Learning Management System (LMS) eLearning platform is now underway. The use of Computer Based Training (CBT) content as the mainstay of the learning function frees GENEDGE staff to leverage their expertise with SMMs - coaching and mentoring the trainee to use and apply their new knowledge in the manufacturing environment.

is one of GENEDGE's first LMS



initiatives. Tooling U - SME's more than 500 unique online classes provide a broad offering of manufacturing training topics. Plus, every online course has been reviewed and validated by industry experts. Convenience is another benefit through on-demand courses that is accessible when it suits your schedule.

CONNEX™ Virginia is the exciting new online tool that puts you

deeply into the Virginia supply chain network and seamlessly integrates with the highly respected **CONNEX™**

Marketplace, sponsored by the National Association of Manufacturers (NAM).

Sponsored by GENEDGE Alliance with partner support by the Virginia Manufacturers Association (VMA), CONNEX Virginia is designed to be the premier system for domestic supply chain sourcing and networking. CONNEX highlights a member company's assets, certifications, equipment, material types and other relevant industry information to help other manufacturers find them plus more unique features.



relevant topics and issues affecting Virginia's manufacturing community. GENEDGE Alliance members will also benefit from education, special guests, and access to new and upcoming programs and services.



In keeping with our motto, "Get Answers, Get Support, Get Rolling", the Manufacturing NOW in Virginia Podcast will assist its listeners to better address challenges and achieve greater success. As a GENEDGE Alliance member, you get first access to the latest episodes and content.

Commonwealth partners supporting membership into the GENEDGE Alliance:



















Virginia's Defend CUI Program (DEFENDCUI-VA)

This successful program greatly improves compliance with DoD Cybersecurity Requirements for contractors working with DoD in Virginia, in conjunction with a fast-growing private sector provider network.



Since fall 2020, GENEDGE's DEFENDCUI-VA program has actively been helping Virginia companies affordably improve their cybersecurity for Controlled Unclassified Information (CUI) with over 85 companies being helped to develop their plans for compliance and over the life of the program will have assisted over 200 companies.

As the program winds down in 2022, GENEDGE is currently piloting a platform-based approach used to scale these services positioning Virginia as the primary provider of commercial cybersecurity services in the nation.

GO Virginia Retooling Virginia Manufacturers for Strategic Industries Program

In the summer of 2021, GENEDGE forged ahead into the heart of the pandemic with continued access challenges into customer facilities, and talent attraction issues as the national workforce had permanently shrunk by over four million. We were able to rise to the occasion, by supporting MEP and Commonwealth of VA objectives to accelerate shifts from overseas sources to domestic suppliers of goods for critical industrial sectors through the creation of the GO Virginia Retooling Virginia Manufacturers for Strategic Industries Program.



















Two thirds of the way through the Retooling program, our efforts helped 20 companies assess opportunities to move into infectious disease control product lines, with the majority going into FDA approved production. Another 37 companies later began similar journeys to develop new offerings to replace, offset, or make obsolete offshore sources of supply. With the successful Retooling VA Program coming to a close in 2023, it has exceeded expectations in supporting over 50 Virginia businesses during the pandemic with the intent of growing their businesses to strengthen the supply chain in the U.S. and Virginia. We are very proud of these pioneering companies vested in turning the tide of offshoring.

The companies served are located across the Commonwealth, include a variety of critical industries, and represent a variety of supply chain levels. We are pleased to provide the sampling above of 15 participating companies. Their information and links to products or services are featured in our online Client Showcase at: https://genedge.org/go-virginia-retooling-virginia-manufacturers-strategic-industries-program. We think this showcase of companies and their products/services shows the ingenuity, agility, and "can do" of Virginia companies!

"LiteSheet Solutions is a manufacture of LED lighting for commercial and industrial applications. During the pandemic, we re-utilized our creativity from lighting to helping develop technology for protection from infection. This led to



the development of the UVC Disinfecting Cabinet and a spin out company called PureWorks. GENEDGE was pivotal in locating professional services to test, market, and bring our new technology to market and the grants to support those services. GENEDGE has delivered, and continues to deliver, services that we value and services that we would not have been able to organize and effect on our own." - Tara Clay, Executive Administrator; Forest, VA; GO VA Region 2

"We undertook several projects with VERDEX GENEDGE, each being critical in taking our business to the next level. Their entire team was very helpful, knowledgeable, and professional." - Damien Deehan, Co-CEO; North Chesterfield, VA; GO VA Region 4



"Participation in this GO Virginia Retooling program has been a welcome and necessary transitional step

for Breathe Healthy. It is helping to form a sustainable foundation to ensure continuity and control in our marketing process should a future crisis occur." - Michael Vahey, Owner of Michael Vahey LLC, DBA Breathe Healthy, Williamsburg, VA; GO VA Region 5

"The process of putting together a commercialization plan was a great experience for us and a learning experience of thinking outside our box."





- Beattie Sturgill, Business Manager; Charlottesville, VA; GO VA Region 9



POLIMASTER "GENEDGE offers a variety of services that are critical for businesses in Virginia from are critical for businesses in Virginia, from Cybersecurity to Strategy and Marketing.

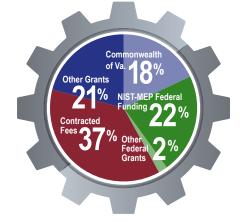
Polimaster has worked with GENEDGE on multiple projects, and each time the GENEDGE team has been helpful and professional." - James Mehalchick, President and COO; Sterling, VA; GO VA Region 7

"Our mission statement here at Blue Wolf is to develop and deliver products to the consumer and industry which provide value and greatly exceed expectations. We feel these projects with GENEDGE will strategically position us to effectively grow into new markets like DoD Supply Chain and diversify more to remain sustainable." - Danny Lester, President, Blue Wolf Sales & Service, Inc., Bluefield, VA; GO VA Region 1

Return on Investment

Since 2012, **GENEDGE** has delivered over in Cumulative **Economic Impact** for our clients.





Our value comes from

improving yours...

For every invested in **GENEDGE** services

returns to your

bottom line!

Clients rated their customer experience well above industry benchmarks and indicate a strong likelihood of recommending the MEP Center, like GENEDGE, they worked with to another company or colleague - from data Q2/FY2022

Projected Revenues FY2023

*Source: GENEDGE Budget

2017-2022 GENEDGE Client Impact





Key Alliances & Partnerships

GENEDGE values collaboration, and is grateful for the support and results achieved because of our strong relationships with the following key allies and partners.

Association of Energy Engineers

Batten College of Engineering and Technology at Old Dominion University

Center for High Performance Manufacturing at Virginia Tech

Commonwealth Center for Advanced Manufacturing (CCAM)

GO Virginia

James Madison University

MEP National Network™

National Institute of Standards and Technology's Manufacturing

Extension Partnership (NIST MEP)

Performance Review Institute

ReInvent Hampton Roads

Southwest Virginia Alliance for Manufacturing

Third Party Service Providers of GENEDGE

U.S. Food & Drug Administration

U.S. Small Business Administration

Virginia Community College System

Virginia Homeland Security Division

Virginia Department of Emergency Management

Virginia Department of Health

Virginia Economic Development Partnership

Virginia Economic Development Partnership International Trade

Virginia Hospital & Healthcare Association

Virginia Innovative Partnership Corporation (VIPC)

Virginia Small Business Development Centers

Virginia State University

Virginia Tech



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