

A close-up, partial view of the American flag, showing the blue field with white stars and the red and white stripes, positioned in the top-left corner of the slide.

Building a Collaborative Manufacturing Ecosystem In Support of the Department Of Defense

VIDEO



Welcome!
Video Link



Melody Burnett
President, Visit High Point



Brian Norris
Vice President, Strategic
Initiatives for Business High
Point-Chamber of
Commerce



Patrick Davis, MBA
Executive Director, The
Heroes of High Point



Introduction of
Distinguished Guests

Why DANC?



Tammy Everett

Executive Director
Defense Alliance of North
Carolina (DANC)

DEFENSE ALLIANCE 
OF NORTH CAROLINA

Supporting NC's Military, Business, & Academic Community

The Defense Alliance of North Carolina (DANC) is a private, nonprofit, organization focused on strengthening North Carolina's defense sector and those who support it.

MISSION:

Grow North Carolina's defense economy in a way that creates new long-term investment opportunities

VISION:

Improve the economy of North Carolina by leading high-impact strategic growth initiatives, providing actionable information and networking opportunities to NC entities with defense sector interests, and positioning key organizations and senior leaders to assist in the expansion of defense-related business opportunities throughout the state.

DEFENSE ALLIANCE 
OF NORTH CAROLINA

Supporting NC's Military, Business, & Academic Community

EXECUTIVE BOARD

Chair - Lt Gen Mark Brilakis, U.S. Marine Corps (Ret)

Vice Chair - Bill Sasser, Lockheed Martin Corporation

Secretary - MG Nick Justice, U.S. Army (Ret)

Treasurer - Andrew Cox, RTI International

GEN Dan McNeill, U.S. Army (Ret)

John Bellamy, Fayetteville State University, Center for
Defense & Homeland Security

Tammy Everett, Executive Director

MG JB Burns, U.S. Army (Ret)

MajGen Tim Peppe, U.S. Air Force (Ret)

RDML Cliff Sharpe, US Navy (Ret)

RADM Rick Gromlich, U.S. Coast Guard (Ret)

Chris Edge, Duke Energy

DEFENSE ALLIANCE 
OF NORTH CAROLINA

Supporting NC's Military, Business, & Academic Community

Tammy Everett, Executive Director
Defense Alliance of North Carolina (DANC)
910-690-4450
teverett@defensealliancenc.org

DEFENSE ALLIANCE 
OF NORTH CAROLINA

Supporting NC's Military, Business, & Academic Community

An American flag is partially visible on the left side of the slide, showing the stars and stripes.

Opening Remarks




Phil Mintz

Executive Director,
NC State University Industry
Expansion Solutions (IES)

NC STATE UNIVERSITY

Industry Expansion Solutions

A portion of the American flag is visible on the left side of the slide, showing the stars and stripes.

**Summary of the
Department of
Defense (DoD)
Defense
Manufacturing
Community Support
Program (DMCSP)**



Michael Mullins

Director
Defense Industry Initiatives
NC State University
Industry Expansion
Solutions (IES)

NC STATE UNIVERSITY

Industry Expansion Solutions

**NC STATE UNIVERSITY**

Industry Expansion Solutions


**DEFENSE
INDUSTRY
INITIATIVES**

CONNECTING THE DOTS, EXPANDING OPPORTUNITIES

Industry Expansion Solutions Defense Industry Initiatives

Dr. Fiona Baxter, Associate Executive Director, Industry
Expansion Solutions
Assistant Director, NC Manufacturing Extension Partnership
fmbaxter@ncsu.edu

Michael Mullins, Director, Industry Expansion Solutions Defense
Industry Initiatives
mrmulli2@ncsu.edu

An American flag is visible on the left side of the slide, showing the stars and stripes. The background of the slide is a dark, textured surface.

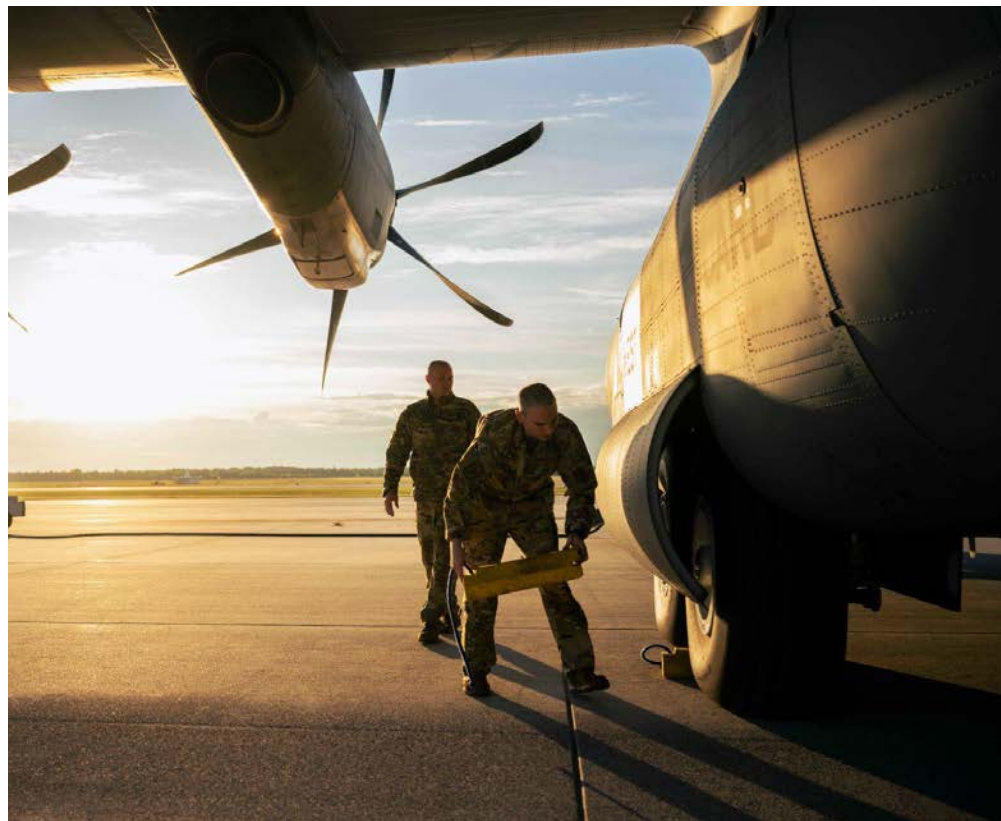
**NC State University
Industry Expansion Solutions
DoD Office of Local Defense Community
Cooperation
(OLDCC) Grants**

Office of Local Defense Community Cooperation (OLDCC) Pilot Grant - Phase I

- » OLDCC Pilot Grant (Phase I) 01/2017 - 10/2018 in the amount of \$2.2 million
- » Established the North Carolina Defense Industry Diversification Initiative (NCDIDI)



- » Conducted supply chain mapping analysis of NC's defense industry
- » Conducted 10-company growth and diversification pilot project



Office of Local Defense Community Cooperation (OLDCC) Pilot Grant - Phase II

- » OLDCC Implementation Grant (Phase II)
10/2018 - 06/2021 in the amount of \$3.0 million
- » Conducted 20-company growth and diversification project (aerospace industry)
- » Conducted company cybersecurity assessments and additive manufacturing training program



On September 22, 2021, the **Department of Defense's (DoD) Office of Local Defense Community Cooperation** awarded **North Carolina State University Industry Expansion Solutions (IES)** one of the five grants under the **Defense Manufacturing Community Support Program (DMCSP)**.

Disclaimer: This North Carolina Defense Manufacturing Community Support Program event was developed with financial support from the Office of Local Defense Community Cooperation (OLDCC), Department of Defense. The content of this event does not necessarily reflect the views of the OLDCC. It is meant to provide business information to defense contractors and others interested in the defense industry.





North Carolina Defense Manufacturing Community Support Program (NC DMCSP)

The NC DMCSP is designed to support long-term community investments that strengthen national security innovation and expand the capabilities of the defense manufacturing industrial ecosystem.

NC DMCSP

Vision Become a best in class innovation ecosystem for smart textiles research, development, and production, in support of warfighter performance.

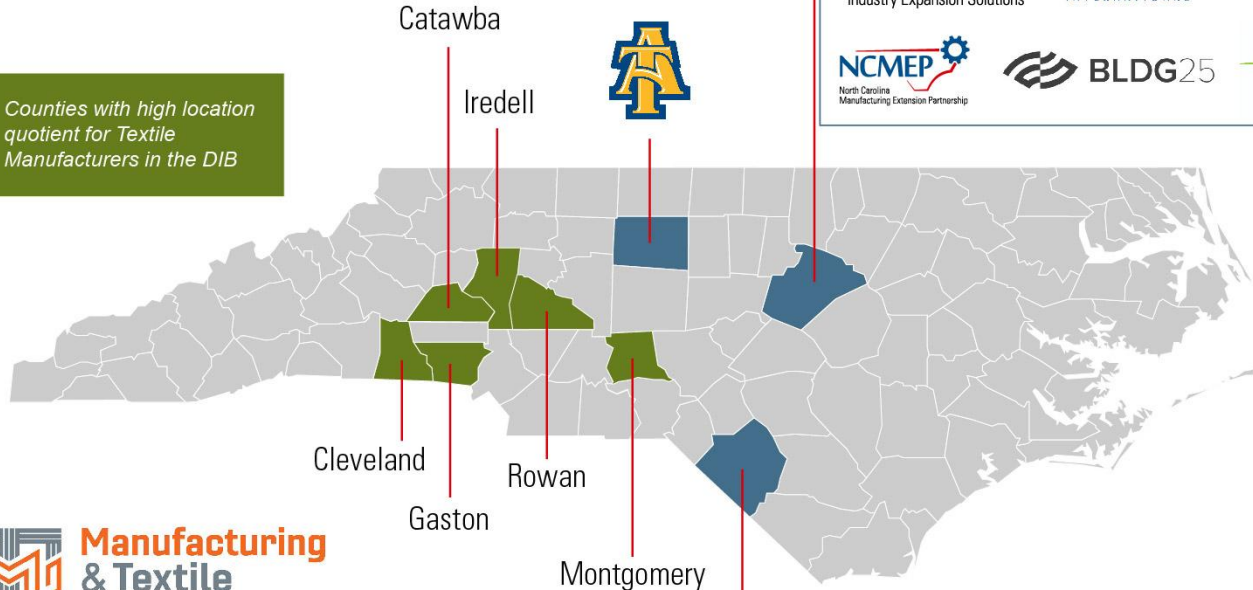


NC DMCSP

Mission Grow textile manufacturer capacity to produce marketable advanced functional fabrics and wearable devices.

NC DMCSP Service Area

Counties with high location quotient for Textile Manufacturers in the DIB





NC STATE UNIVERSITY
 Industry Expansion Solutions



RTI
 INTERNATIONAL



FIRST FLIGHT



NCMEP
 North Carolina
 Manufacturing Extension Partnership



BLDG25



SSIST

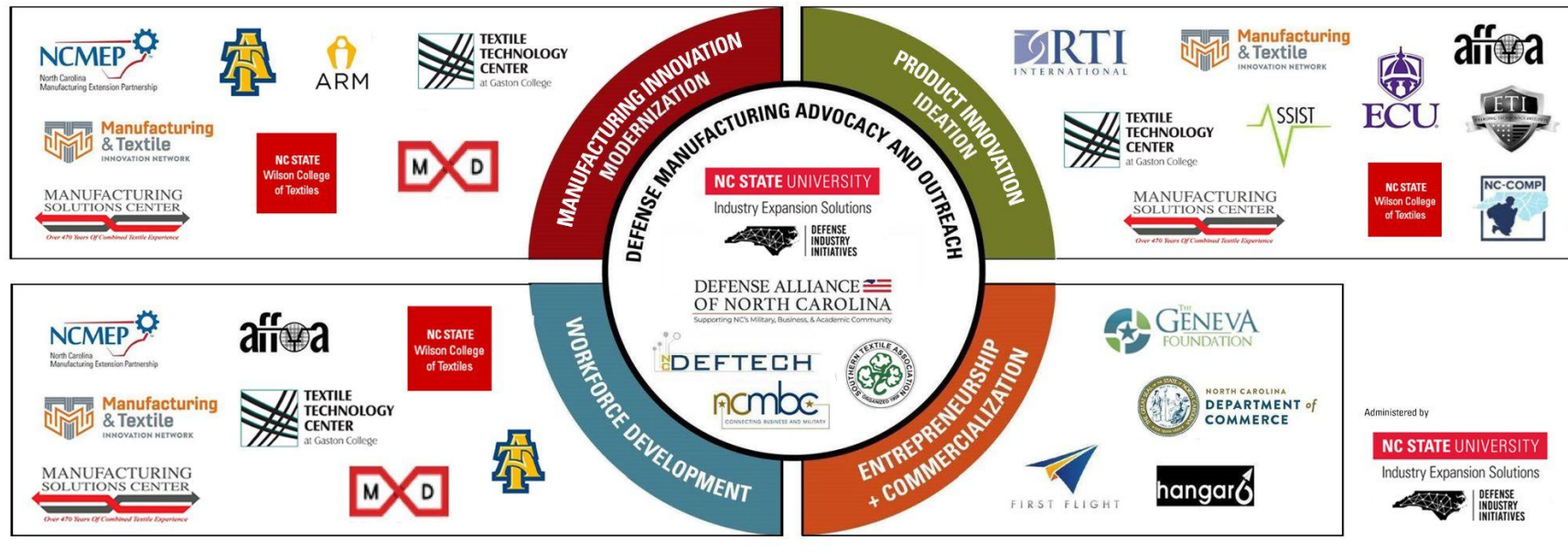


Manufacturing & Textile
 INNOVATION NETWORK
Partners in Gaston & Catawba



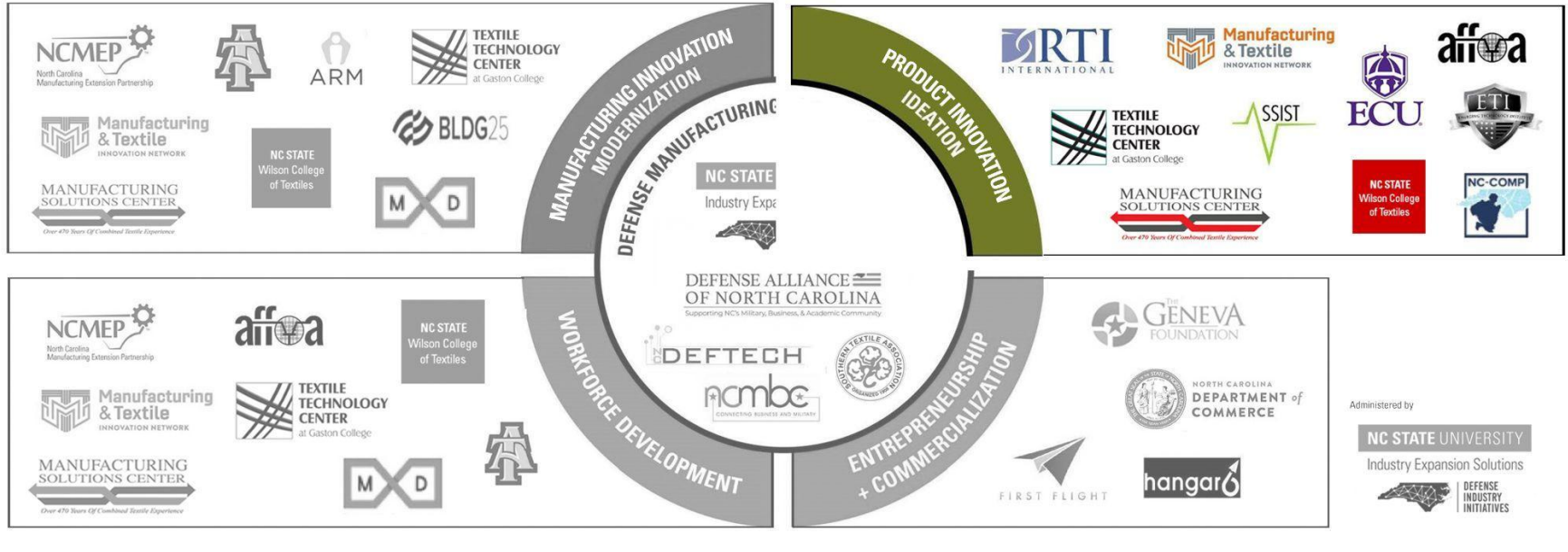
The Ecosystem

The North Carolina Defense Manufacturing Community Support Program (NC DMCSP) Ecosystem



Product Innovation

The North Carolina Defense Manufacturing Community Support Program (NC DMCSP) Ecosystem

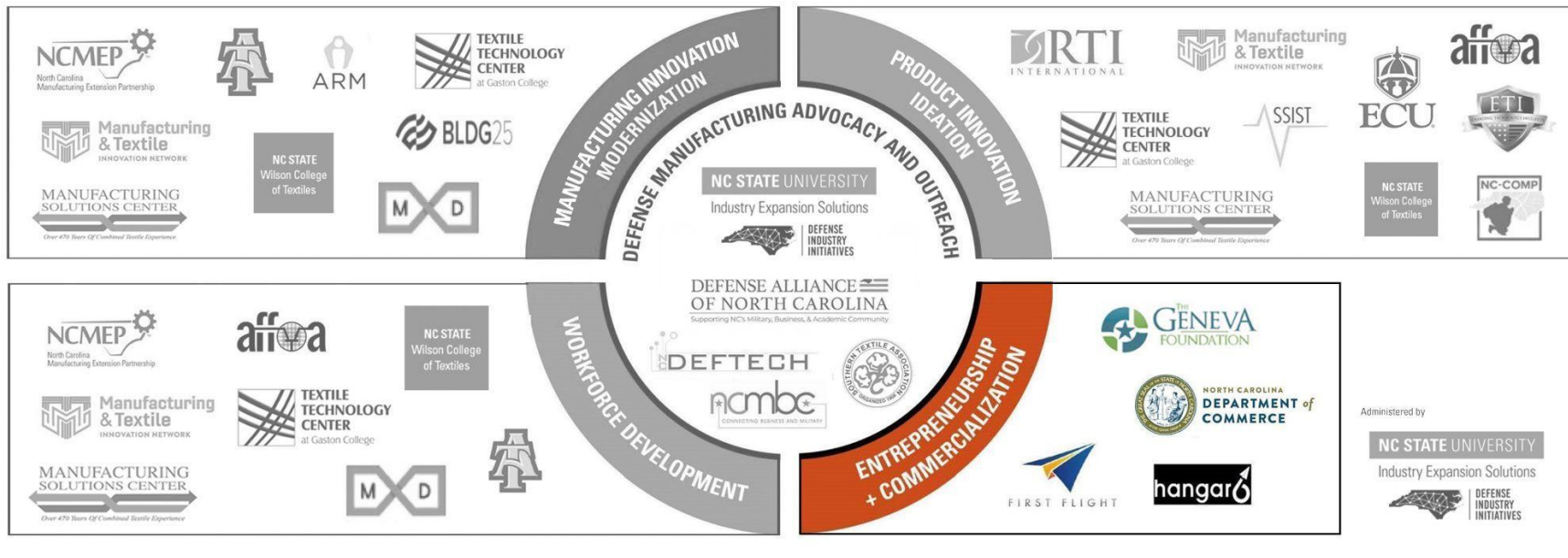


Product Innovation

- Identify and track DoD needs related to optimization of warfighter health and performance
- Identify funding opportunities and resources to accelerate commercialization
- Work with Entrepreneurship Team to identify pre-accelerator candidates
- Assemble teams to pursue funding opportunities
- Provide ongoing support to startups through commercialization
- Expand the DMCSP community
- Meet bi-weekly to plan activities and discuss opportunities & issues

Commercialization

The North Carolina Defense Manufacturing Community Support Program (NC DMCSP) Ecosystem



Pre-Accelerator Program – Cohort 1

Defense Textiles & Wearables Showcase
June 27, 2022



Onda Vision Technologies, Inc.



Aarogy Innovative Textiles, LLC



53 Participants

Total

- 38 in person at RTI
- 15 online

Representation

Included:

- DoD
- State of North Carolina
- DMCSP Partners

Custom commercialization support includes:

- Identification of funding opportunities
- Grant writing support
- Market & customer intelligence
- Customer and partner engagement
- Technology scouting
- Partner/contract manufacturer scouting
- R&D expertise & facilities
- Military engagement for technology demonstration

Advanced Functional Fabrics of America (AFFOA) Grant Award Weaving a Talent Ecosystem in North Carolina's Textile Industry

The primary goal of this proposal is to create and cultivate key statewide and regional collaborations to address both the current and next generation workforce in North Carolina.



“RESHORING”

A TALENT ECOSYSTEM IN NORTH CAROLINA'S TEXTILE
INDUSTRY:

Establishing a Model for Workforce Development

NC STATE UNIVERSITY

Industry Expansion Solutions



**DEFENSE
INDUSTRY
INITIATIVES**

CONNECTING THE DOTS, EXPANDING OPPORTUNITIES



les.ncsu.edu | iesservices@ncsu.edu | [@ncstateies](https://www.instagram.com/ncstateies)

An American flag is partially visible on the left side of the slide, showing the stars and stripes.

Overview of NC State University Industry Expansion Solutions (IES)



Kami Baggett

Regional Manager
NC State University
Industry Expansion
Solutions (IES)

NC STATE UNIVERSITY

Industry Expansion Solutions



NC State University Industry Expansion Solutions Overview

Kami Baggett
Regional Manager, Piedmont Triad Region

Kameron_Baggett@ncsu.edu

NC State University Industry Expansion Solutions (IES) is the extension and outreach team for the NC State University College of Engineering.

Industry Expansion Solutions Regional Managers provide **connections, networking opportunities with industry experts** and can help you identify the **resources, tools and customized programs** needed to increase your organization's **productivity, efficiency, quality and profit.**



Past + Present

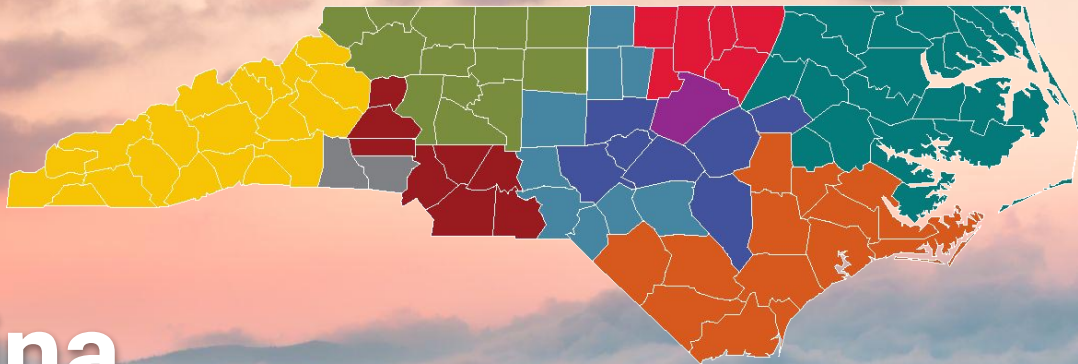
Founded in 1955, IES was initially established to serve the manufacturing sector.

IES now serves the following industries:

- » > Manufacturing
- » > Education and Research
- » > Healthcare and Pharmaceutical
- » > Defense
- » > Energy
- » > Aerospace
- » > Government and Public Sector



IES Serves North Carolina



We employ staff to serve all 100 counties
of the state.



Chris McGraw
Western

828-329-3119
chris_mcgraw@ncsu.edu



Kami Baggett
Piedmont Triad

919-830-7292
kameron_baggett@ncsu.edu



Mitch Poteat
Research Triangle

919-607-0684
mitch_poteat@ncsu.edu



Robert Crew
Wake County

919-830-2941
robert_crew@ncsu.edu



Lori Benn
Northeast

919-988-7475
lbenn@ncsu.edu



Alex Easley
Eastern

910-617-5650
alex_easley@ncsu.edu



Michael Mullins
Defense Industry
Initiatives
Statewide

919-515-8812
michael_r_mullins@ncsu.edu



Jennifer Fielder
Southwest

704-728-7554
jennifer_fielder@ncsu.edu



Jeff Woolard
Charlotte

704-302-7415
jeff_woolard@ncsu.edu



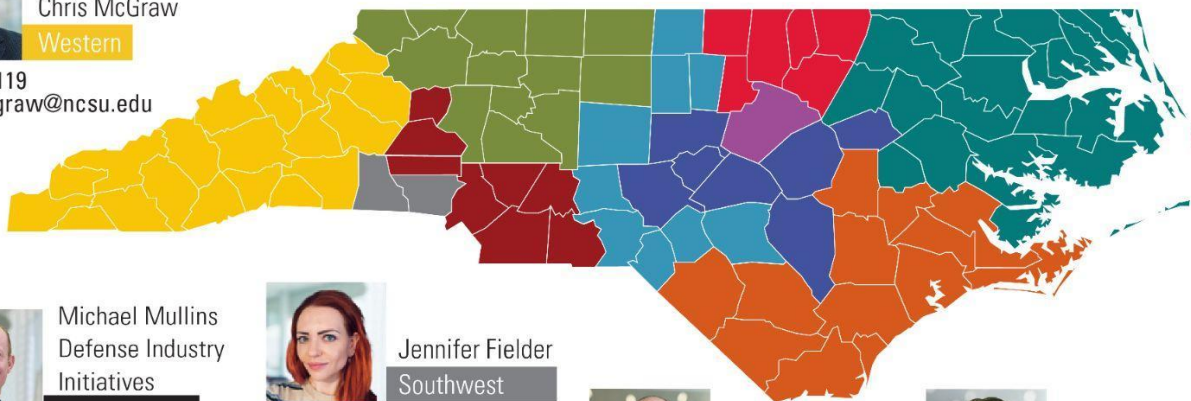
Mary Tillery
Central

910-622-5849
Mary_Tillery@ncsu.edu



Anna Mangum
South Central

919-210-6050
anna_mangum@ncsu.edu



We Can Help.



NC STATE UNIVERSITY

Industry Expansion Solutions

IES Expertise Helps North Carolina

Our team is composed of former business executives, engineers, process leaders and managers with an average of more than 15 years industry experience.





IES Expertise

Our expertise extends to diverse areas

- › Process optimization
- › Quality management
- › Workplace health and safety
- › Sustainability and energy
- › Cybersecurity
- › Business innovation and growth
- › Evaluation services
- › Defense industry initiatives

ies.ncsu.edu/solutions



- › IES oversees the North Carolina Awards for Excellence (NCAfE) Program, modeled on the **Malcolm Baldrige National Quality Award** criteria.

ies.ncsu.edu/ncafe



- › In partnership with the University of Tennessee, IES administers the **Southeastern OSHA Training Institute Education Center** which provides the Department of Labor OSHA Outreach Training program to states in [Region IV](#).
ies.ncsu.edu/otieducationcenter
- › IES manages the **NC State Minerals Research Laboratory** located in Asheville, North Carolina. The lab is equipped with mineral processing equipment and an analytical support facility for mineral characterization.
mrl.ies.ncsu.edu





Advanced Manufacturing & Technology Deployment



Defense Industry Initiatives



Instructional Design



Southeastern OSHA Training Institute



Business Growth, Innovation & Marketing



Environment, Energy & Sustainability Services



Organizational & Leadership Development



Supply Chain & Supplier Scouting



Business & Operational Assessments



Evaluation Services & Resource Development



Process Optimization Training



Workplace Health & Safety



Cybersecurity Strategies



Industrial Engineering



Management & Quality Systems

Supply Chain & Supplier Scouting

IES manages the Manufactured in North (MNC) supply chain database and website

manufacturednc.com



- › Created to showcase the capabilities and innovations of North Carolina companies to domestic and global B2B markets.
- › Find and vet suppliers within the state.
- › All North Carolina manufacturers may register at no-cost.



- › Leverage the strength of the MEP National Network's [Supplier Scouting service](#) on a national, regional or local scale. The MEP National Network's Supplier Scouting service provides a viable means by which U.S. manufacturing can be catalyzed to produce needed items domestically.



SUPPORTING THE DEVELOPMENT OF MANUFACTURING SUPPLY CHAINS

Supply Chain
Optimization
\$2
MILLION
in Increased Sales
and Retained 8 Jobs

Supplier
Improvement
\$1.5
MILLION
in Investments to Work
with Defense Contractors

Supplier
Scouting
100+
CONNECTIONS
for Manufacturers
with Supply Chains

National Institute for Standards and Technology (NIST) Manufacturing Extension Partnership (MEP) Network Program



IES administers the federal NIST MEP Program in North Carolina. IES partners with public-private organizations to create a resource network to support manufacturing.

NC STATE UNIVERSITY

Industry Expansion Solutions

NC COMMUNITY COLLEGES
CREATING SUCCESS



NC STATE

Wilson College of Textiles





Since 2000, IES-led North Carolina Manufacturing Extension Partnership (NCMEP) private-public network efforts have resulted in

\$2.9B economic benefit
for the State of North Carolina.

Planning for May
2024, so stay
tuned for more
information.



BUSINESS
NORTH CAROLINA

MFG CON

THE NC MANUFACTURING CONFERENCE

Powered by NCMEP + Business North Carolina

The Annual North Carolina Manufacturing Conference

NCMEP Partners and Business North Carolina magazine host the annual North Carolina Manufacturing Conference each spring. Manufacturers from across the state are encouraged to attend insightful educational sessions and network with industry professionals.

Check the website for more information.

mfgcon.org



North Carolina Manufacturing Leadership Awards



North Carolina Manufacturing Awards are announced at the Annual North Carolina Manufacturing Conference, recognizing excellence in several categories.

Manufacturers are invited to self-nominate. More information and the nomination forms for each award are available by clicking the award title(s) below.

- [Developing Markets/Economic Development](#)
- [Continuous Improvement](#)
- [Innovation](#)
- [Advanced Talent Management/Workforce Development](#)
- [Sustainable Manufacturing](#)
- [Community Outreach](#)
- [Excellence in Manufacturing](#)
- [CEO of the Year](#)

2024 Manufacturing
Leadership Awards
Nominations will
Open in January



For inquiries about IES solutions, on-site availability of programs,
courses and services, contact:

Kami Baggett | kameron_baggett@ncsu.edu | 919-830-7292

NC STATE UNIVERSITY Industry Expansion Solutions



ies.ncsu.edu | jesservices@ncsu.edu | [@ncstateies](https://www.instagram.com/ncstateies)

News - Subscribe!

[Manufacturing Update
Monthly Newsletter](#)

[Clocking In
Podcast Series](#)

[Safety Guardian
Monthly Newsletter](#)

[IES Defense Industry Initiatives
Quarterly Newsletter](#)

Connect with us!

North Carolina Manufacturing
Extension Partnership



[linkedin.com/company/ncmep](https://www.linkedin.com/company/ncmep)



[facebook.com/ncmep](https://www.facebook.com/ncmep)



twitter.com/ncmep

Industry Expansion
Solutions



[linkedin.com/company/ncstateies](https://www.linkedin.com/company/ncstateies)



[facebook.com/NCStateIES](https://www.facebook.com/NCStateIES)



twitter.com/ncstateies

Southeastern OSHA
Training Institute




[linkedin.com/showcase/southeastern-oti](https://www.linkedin.com/showcase/southeastern-oti)



[facebook.com/OSHAEdCenter](https://www.facebook.com/OSHAEdCenter)



twitter.com/oshaedcenter

An American flag is partially visible on the left side of the slide, showing the stars and stripes.

'Reshoring' A Talent Ecosystem in North Carolina's Textile Industry: Establishing a Model for Workforce Development



**Dominick
Stephenson**

Director, Evaluation
Services NC State
University Industry
Expansion Solutions

NC STATE UNIVERSITY

Industry Expansion Solutions

Year long study

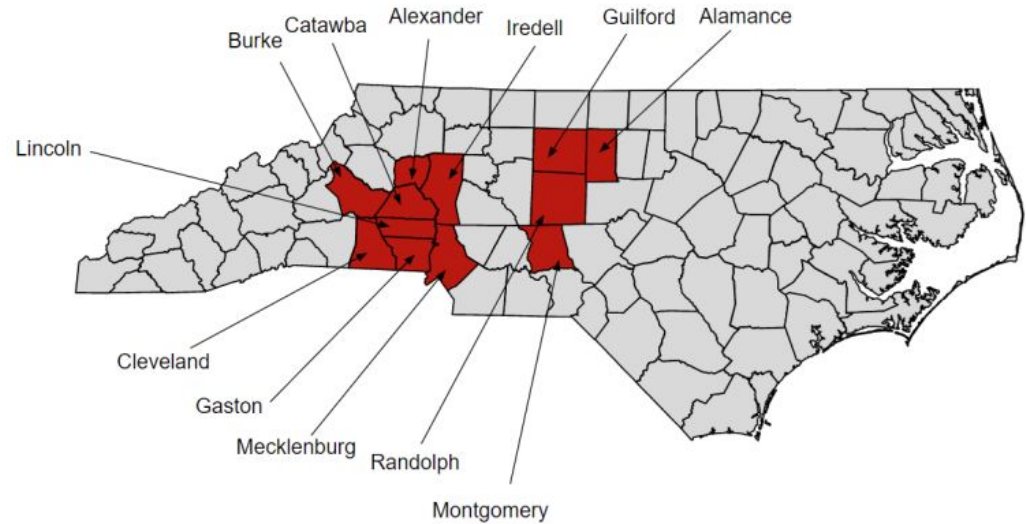
Funded by NextFlex and AFFOA

Manufacturing Institutes

12-county region

Surveys and Interviews with Textile

Manufacturers



Inputs

Partners and Stakeholders

- NC Textile Manufacturers
- Textile Technology Center [TTC] (Gaston and Catawba Valley Community College) Faculty / Staff
- NC State Wilson College of Textiles Faculty / Staff
- NC State Industry Expansion Solutions / NC Manufacturing Extension Partnership Staff
- AFFOA (PM)
- Workforce Development Career Centers in Region
- RTI (3rd Party – Technology Scouting)

Data and Information

- Regional Workforce Studies
- NC Defense Supply Chain Data
- TTC and NCMEP Industry Contacts

Activities

- Convene advisory board
- Engage industry in a demand side workforce gap analysis
- Engage education and training partners in a supply-side asset map of industry recognized credentials and education pathways
- Identify strategies to raise awareness of, and access to textile careers (with a specific focus on underrepresented populations)
- Convene partners and stakeholders to determine and prioritize opportunities to enhance textile education/training pathways to promote diversity and inclusion
- Prepare a final report that summarizes the data collected during the gap analysis and asset mapping exercises, input from advisory group, industry engagement, and

Outputs

- Advisory board minutes and documentation
- Demand-side workforce gap analysis report
- Supply-side asset map report
- Action Plan Matrix with Recommendations, Strategies and Structure of individual Task Forces for each
- Final Report with summary of accomplishments, lessons learned, & recommended next steps

Outcomes

- A replicable and demand-driven strategy for workforce development and education pathways for the textile industry
- Improved coordination between state and local partners to promote a more diverse talent pipeline for textile manufacturing
- Better alignment between technology development in the textile industry and education / training pathways

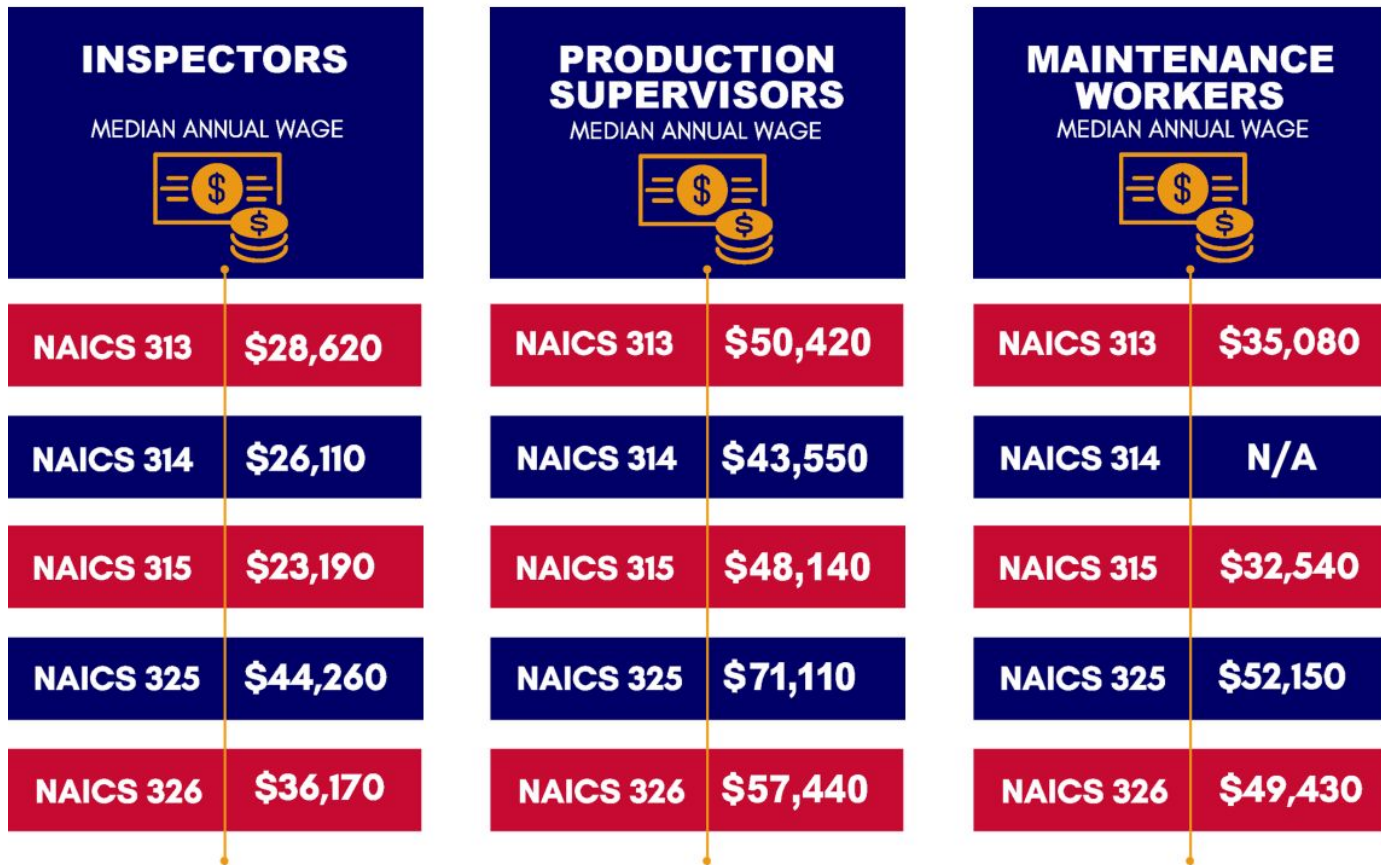


Impacts



- Increased agility of Textiles Workforce Development Ecosystem in NC to meet needs of local and regional textile manufacturers
- Increased diversity in the textile manufacturing workforce
- Long term strategic relationships among workforce and economic development stakeholders that support the textile industry
- Increased footprint of next generation, innovative textiles manufacturing in NC

NC Wages for Top 3 Textile Industry Occupations



Top 3 entry level skills

Work ethic & dependability - generational differences associated with work ethic

Basic math skills - *"simple conversions and reading a ruler"*

Mechanically inclined - *"hire those who like to tinker with things"*

Top 3 skills for advancement

Initiative, work ethic, and willingness to work

Strong track record

Interpersonal skills

Future production needs

- 5 of 8 respondents stated that their company is or plans in the future to manufacture, produce, design, integrate, or assemble smart textile or e-textile components or products
- 3 of 8 respondents said that their company does not now and does not plan in the future to manufacture, produce, design, integrate, or assemble smart textile or e-textile components or products
- 7 of 8 respondents stated that they do anticipate purchasing new machinery or manufacturing equipment or automating some of their manufacturing processes over the next five years

		Industry Domain			
		Fiber & Yarn Manufacturing	Industrial & Technical Textiles	Entrepreneurship & Product Development	Garment Manufacturing
Career Path	Entry Level	<ul style="list-style-type: none"> Lean Six Sigma White Belt Fiber Fundamentals 	<ul style="list-style-type: none"> Fundamentals of Technical Fabrics Dyeing & Finishing Fundamentals PPE: Materials, Design, Production & Testing 	<ul style="list-style-type: none"> Textile Fundamentals 	<ul style="list-style-type: none"> Lean Six Sigma White Belt PPE: Materials, Design, Production & Testing
	Operator Upskilling	<ul style="list-style-type: none"> Lean Six Sigma Yellow Belt Uster Evenness Interpretation Murata MVS & MJS Training Rieter Yarn Development Training 	<ul style="list-style-type: none"> Smart Textiles Immersive Technical Electronics Workshop Clothing Comfort & Protection Science 	<ul style="list-style-type: none"> Software Training (CAD & Solidworks) 	<ul style="list-style-type: none"> Lean Six Sigma Yellow Belt Legwear Development
	Machinery & Facilities	<ul style="list-style-type: none"> Lean Six Sigma Red Belt Industrial Safety 	<ul style="list-style-type: none"> Lean Six Sigma Red Belt Industrial Safety 		<ul style="list-style-type: none"> Lean Six Sigma Red Belt Industrial Safety
	Line Manager	<ul style="list-style-type: none"> Lean Six Sigma Green Belt Hands-on Technical Spun Yarn Manufacturing 	<ul style="list-style-type: none"> Hands-On Technical Textiles Dyeing & Finishing Design & Programming 		<ul style="list-style-type: none"> Lean Six Sigma Green Belt
	Engineering	<ul style="list-style-type: none"> Reliability Analysis and Design for Six Sigma Advanced Lean and DOE 		<ul style="list-style-type: none"> Advanced Applied Statistics and Voice of the Consumer Sustainability in the Textile Industry 	<ul style="list-style-type: none"> Lean Six Sigma Black Belt Lean Six Sigma Master Black Belt Certification Sustainability in the Textile Industry

Implications of Emerging Technology

- Automation (and AI) in garment design and prototyping to streamline and accelerate these processes.
 - As 75% of apparel costs are operational expenses...
- Although there are some protections provided by the Berry Amendment, requiring federal government entities to purchase certain goods from domestic suppliers, including textile products.
 - However, the US cut & sew segment has not invested in newer automated technologies (and some of these technologies are still behind, depending on the application)
- While fiber, yarn, and fabric manufacturing (weaving, knitting) is already highly automated, relatively few companies have fully adopted Industry 4.0 concepts
 - Includes use of sensors and data collection, advanced data analytics, and AI to achieve a highly sophisticated level of process and product control



Figure 7: Automated ring spinning frame setup (Parkdale Mills) and yarn drawing & transport (UNIFI)



Figure 8: Redthread's body measurement app

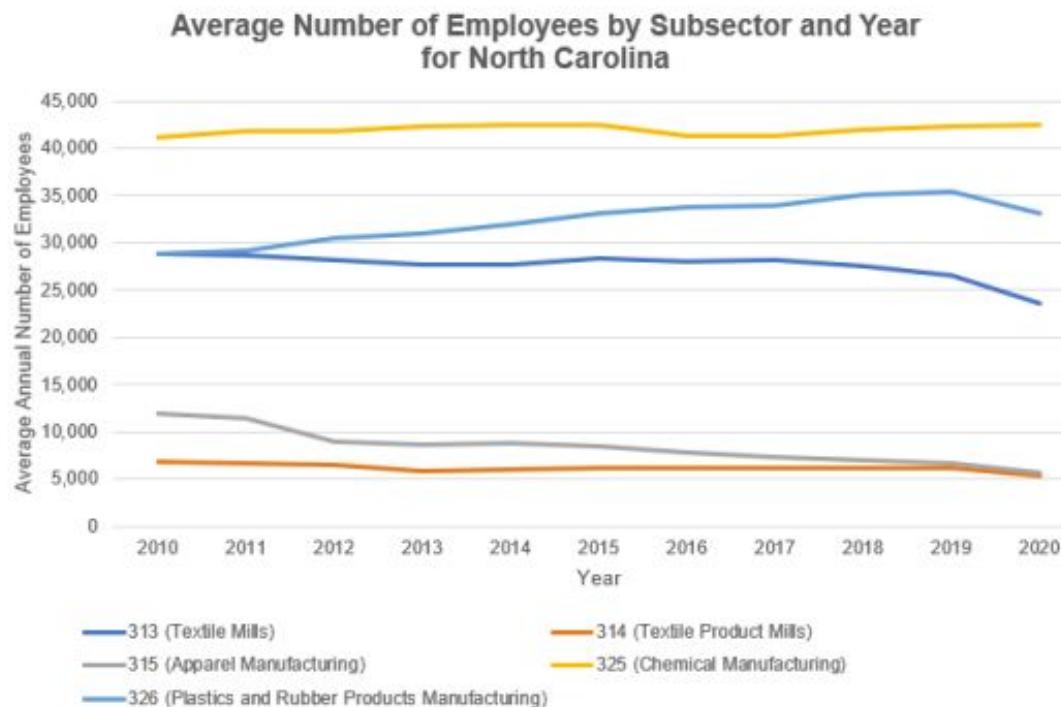


Figure 9: Robot end effector manipulating limp fabric (Source: ARM)



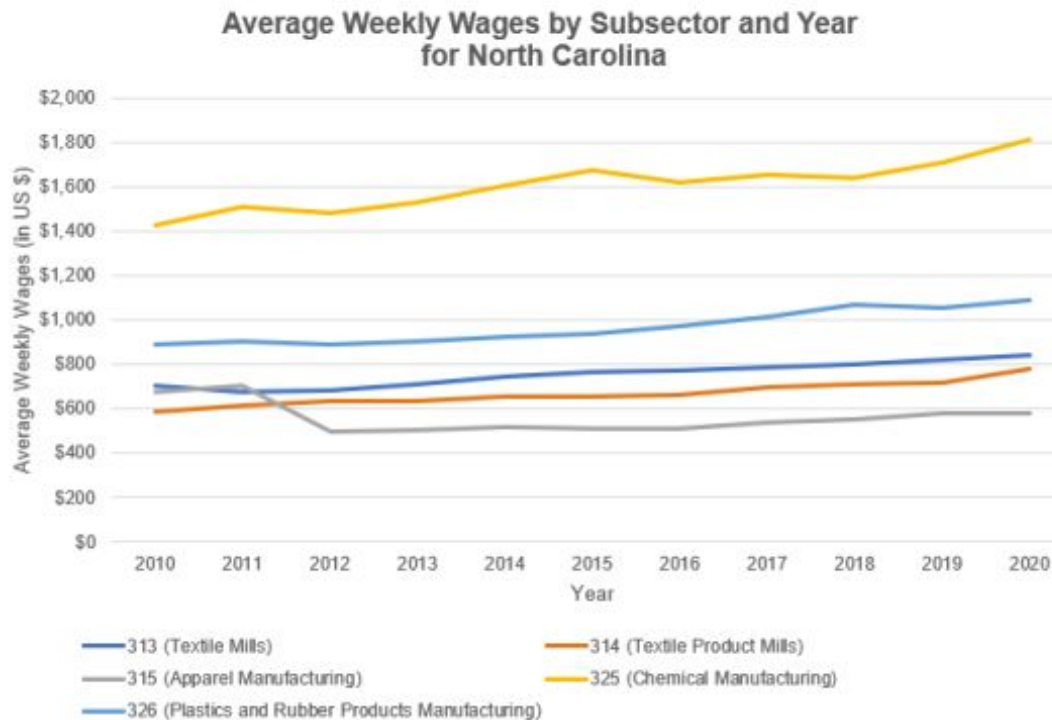
Figure 10: Robot manipulating stiffened fabric in a T-shirt manufacturing process (Source: Sewbo)

Table 6: Average Number of Employees by Subsector and Year for North Carolina



Year	313	314	315	325	326
2010	28,890	6,801	11,892	41,187	28,795
2011	28,602	6,647	11,350	41,724	29,142
2012	28,225	6,568	8,986	41,842	30,503
2013	27,754	5,828	8,711	42,276	30,914
2014	27,644	5,954	8,828	42,475	31,867
2015	28,357	6,150	8,470	42,460	33,037
2016	28,039	6,187	7,872	41,233	33,738
2017	28,235	6,214	7,350	41,275	33,937
2018	27,541	6,191	7,012	41,896	35,008
2019	26,462	6,133	6,726	42,220	35,383
2020	23,538	5,281	5,602	42,398	33,088

Table 5: Average Weekly Wages by Subsector and Year for North Carolina

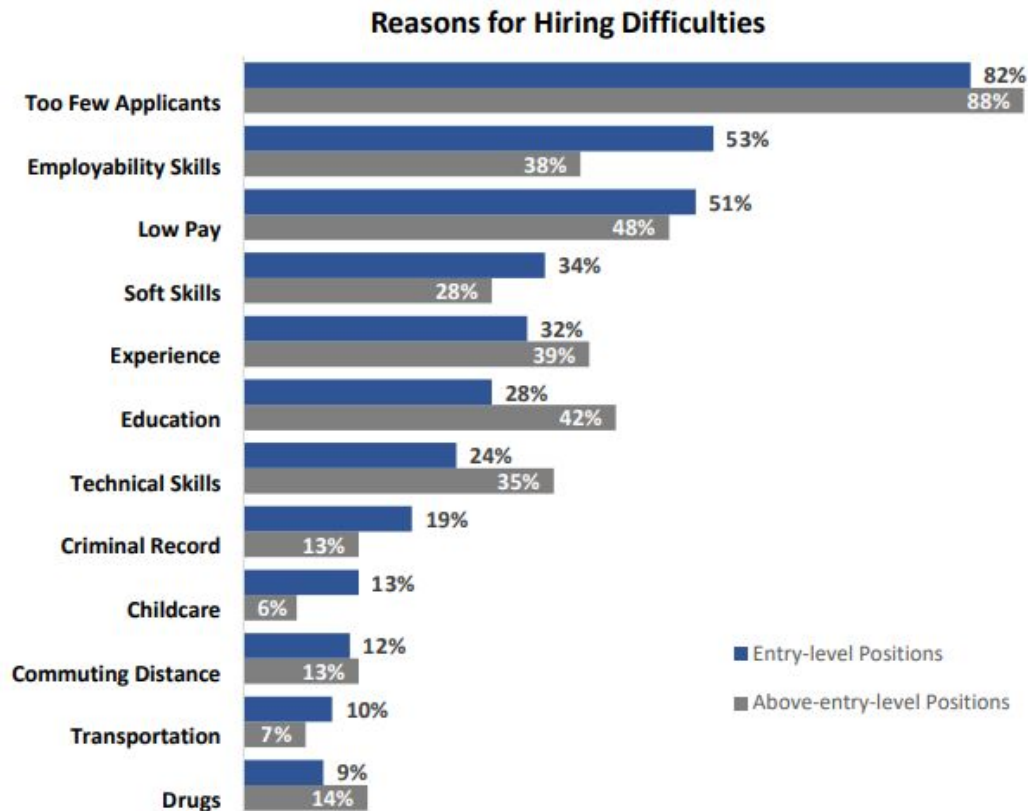


Year	313	314	315	325	326
2010	\$706	\$589	\$674	\$1,430	\$890
2011	\$679	\$611	\$704	\$1,507	\$904
2012	\$685	\$636	\$497	\$1,482	\$891
2013	\$713	\$632	\$506	\$1,534	\$904
2014	\$746	\$657	\$519	\$1,604	\$922
2015	\$769	\$653	\$514	\$1,676	\$941
2016	\$774	\$660	\$511	\$1,617	\$970
2017	\$790	\$695	\$538	\$1,653	\$1,016
2018	\$802	\$714	\$551	\$1,638	\$1,068
2019	\$821	\$721	\$578	\$1,708	\$1,052
2020	\$843	\$779	\$583	\$1,812	\$1,088

Broader Challenges - All Sectors

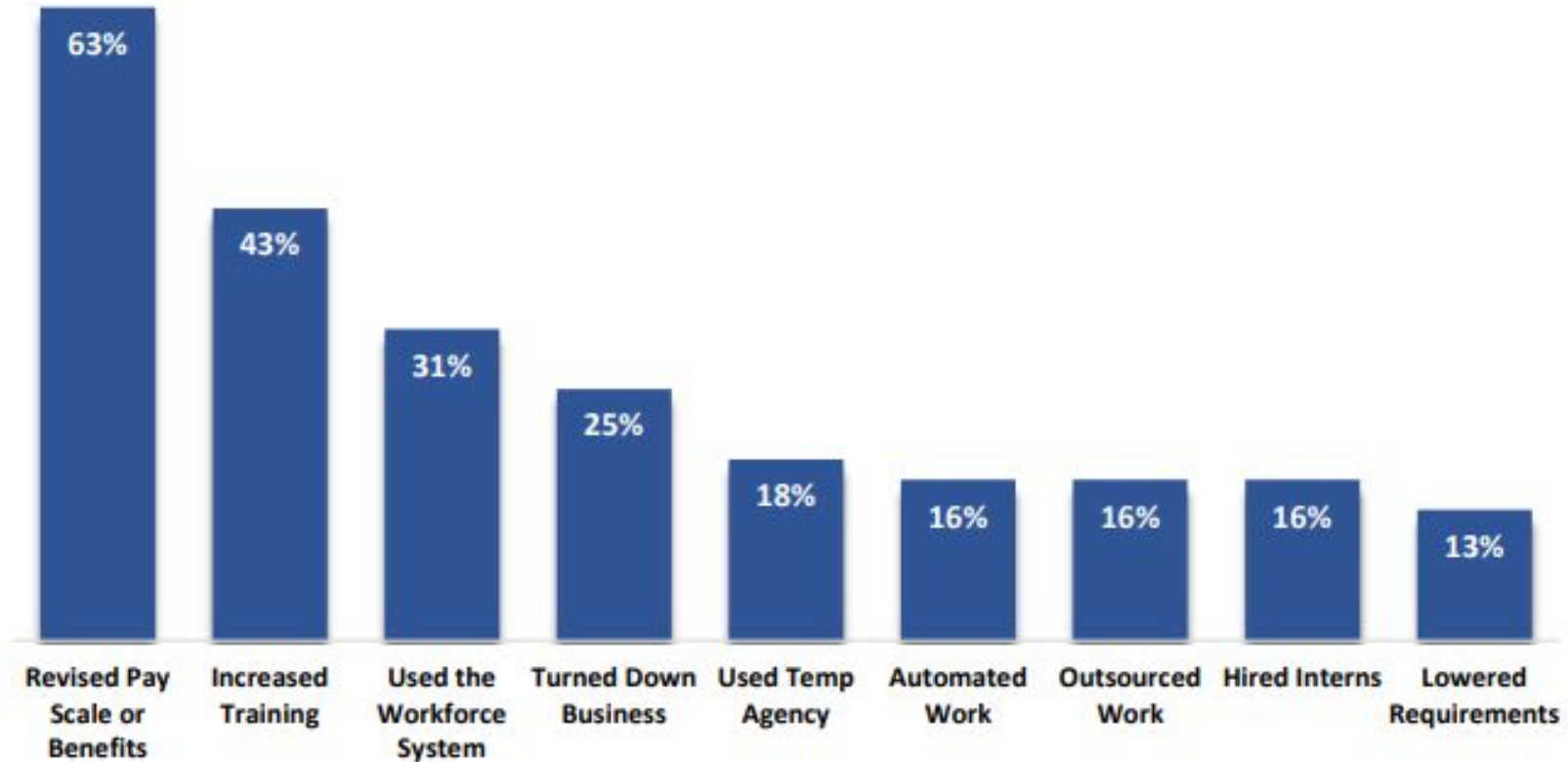
- Declining labor force participation rate (esp. 55+ age)
- Population growth lowest since the 10 yrs following Great Depression
- ~70% of job openings in U.S. do not require college degree
 - In NC, our # of job seekers per job is the lowest it has been in over 20 years
- ~4M more job openings now than prior to the pandemic
- Availability of childcare hampering some's ability to participate in labor force
- Youth employment in North Carolina is declining (lowest it has been)
- Shortfalls in working-age legal immigrant workers compared with decadal trends prior to COVID-19 (although some migration is bouncing back)

Manufacturing Hiring Difficulties (All sectors)

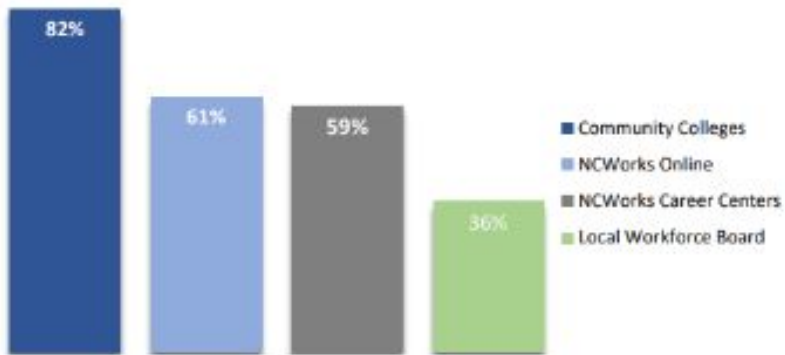


Source: 2022 NC Commerce Employer Needs Survey

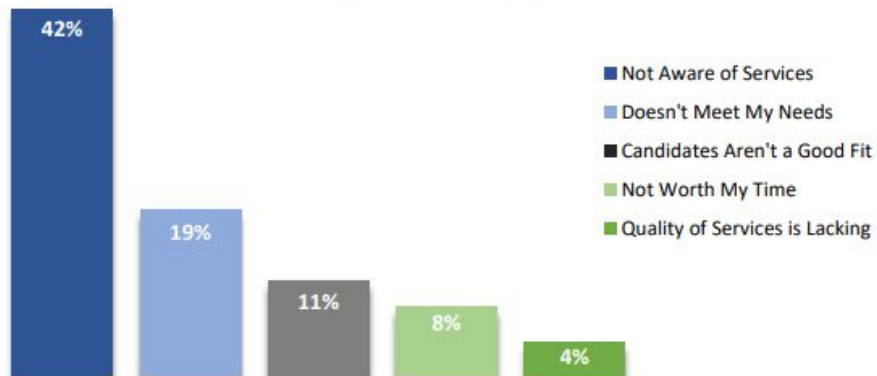
Responses To Hiring Difficulties



Employer Use of Workforce System Resources



Reasons for Not Using Workforce System Resources



Important Resources to Know About

- NC Manufacturing Extension Partnership (www.ncmep.org)
 - Partners include: NC State Industry Expansion Solutions and NC State Wilson College of Textiles, Polymers Center of Excellence, Manufacturing Solutions Center, First Flight Venture Center, EDPNC, and NCCCS Customized Training
 - Manufacturing Resources Page (<https://ncmep.org/about/manufacturing-resources/>)
- NC State IES Defense Industry Initiatives (<https://www.ies.ncsu.edu/defense-industry-initiatives/>)
- NC Commerce LEAD (<https://www.commerce.nc.gov/about-us/divisions-programs/labor-economic-analysis-division>)
- NC Works (<https://www.ncworks.gov/>)
- Full Report: [Reshoring a Talent Ecosystem in NC's Textile Industry](#)

An American flag is partially visible on the left side of the slide, showing the stars and stripes.

NC Frontline of the Future



Denny Lewis

Business Development
Manager
Defense Industry, Economic
Development Partnership of
North Carolina (EDPNC)



ECONOMIC
DEVELOPMENT
PARTNERSHIP of
NORTH CAROLINA

#NC Frontline of the Future



ECONOMIC DEVELOPMENT PARTNERSHIP of

NORTH CAROLINA

**SUPPORTING DOD:
NORTH CAROLINA AS A NATIONAL
SECURITY TECHNOLOGY AND
INNOVATION LEADER**

27 April 2023

Dennis Lewis
703-217-3127
dennis.lewis@edpnc.com

WHY?

WHO CARES?

HOW DOES IT HELP ME?

SHOW ME THE \$\$\$!

WHY? *More govt agencies -> more business -> more opps -> \$\$\$*

WHO CARES? *State, municipalities, business, etc - who doesn't care!*

HOW DOES IT HELP ME? *Growth, revenue, security, QOL*

SHOW ME THE \$\$\$! *~ \$9B in Federal contracts last year; DoD \$5.5B*

HOW? *Marketing Campaign*

TARGETS? *DoD Agencies/Decision Makers & DoD Primes and OEMs*

#NC Frontline of the Future

Why NC for Defense

1. Thriving dual-use tech innovation ecosystem
2. Deep DoD, industry, and academic partnerships
3. Expansive commitment to national defense

#NC Frontline of the Future

1. Thriving Tech Innovation Ecosystem

- **#1 Best State for Business**
4 years running
- **Largest research park in North America**
- **2 of the Nation's Top 5 Metros for Innovation**
- **96% Patent Growth over recent 10 year period**
- **Largest Manufacturing workforce in the SE (455k)**
- **#1 Nonwoven Workforce**
- **#3 Textile workforce**
- **#2 in the nation for the % of women in the tech workforce**
- **52 colleges & universities**

#NC Frontline of the Future

1. Thriving Tech Innovation Ecosystem

IT, AI, Cyber



Aerospace & Automotive



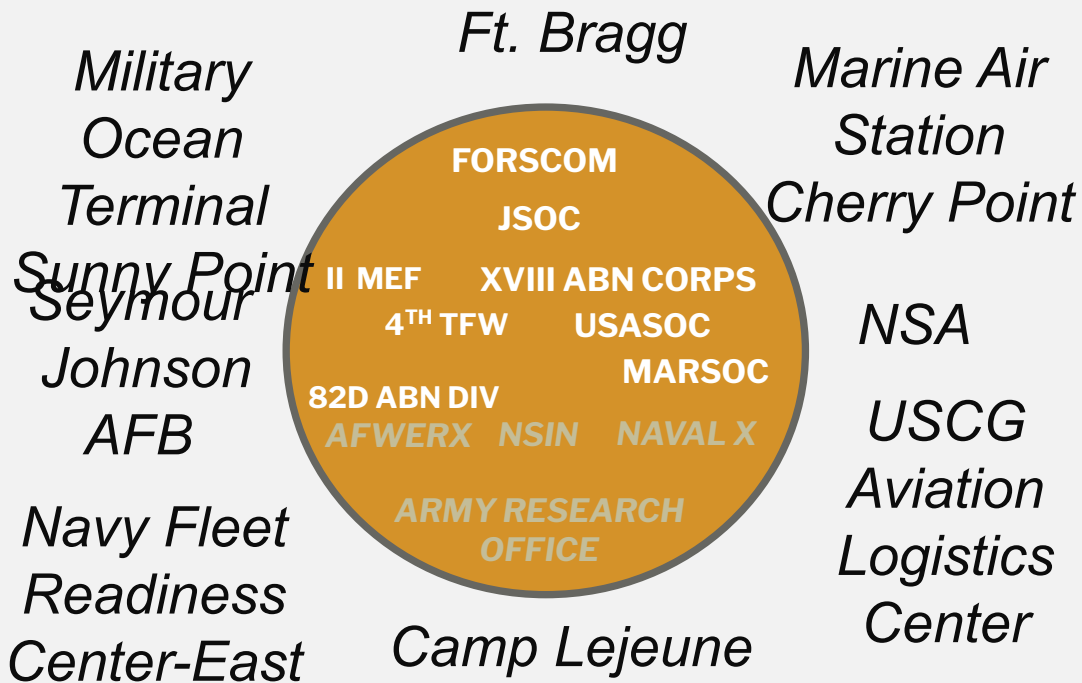
Textiles & Nonwovens



#NC Frontline of the Future

2. Deep DoD, Industry, and Academic Partnerships

- 4th largest active duty military population; 7 major bases
- Healthy defense industry sector
- Robust on-going DoD, industry, academic partnerships: JSOC, USASOC, NSA, DARPA, USAF, ARO, Navy, Marines Corps, XVIIIth Abn Corp, etc.



#NC Frontline of the Future

2. Partnerships: UNC SYSTEM

UNC-led national centers of excellence



Activities:

- SME access
- Sponsored research
- Engineering design
- Prototype development
- Internships at military commands
- Military fellowships at UNC
- Custom education programs

Outcomes:

- Innovation
- Patents
- Spin-outs
- Prototypes
- Fielded solutions
- Talent pipeline
- Cost savings

DoD partners:



USASOC



JSOC



NC National



Guard



NSA



ARL/ARO



XVIII ABN Corps



82nd ABN Div



Novoly



#NC Frontline of the Future

2. Partnerships: UNC SYSTEM

Major Technology and Innovation Centers

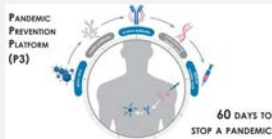
AI/Edge Computing Quantum



Autonomy



Biomedical



Christensen Center for Innovation

Duke Design Defense and Duke Design Health



Materials



Partners include: Fort Bragg, Camp Lejeune, Seymour Johnson AFB, Norfolk Naval Base, XVIII ABC, 82 ABD, NSIN

#NC Frontline of the Future

3. Expansive Commitment to National Defense

- Dedicated offices
- Enduring public-private partnerships responsive to DoD requirements
- State-funded entities helping businesses support National Defense
- Lower cost of doing business
- Excellent quality of life
- Government & public-private organizations supporting the business of defense innovation



#NC Frontline of the Future

3. Expansive Commitment to National Defense

NC Board of Science, Technology & Innovation (NC Dept of Commerce)




**NC DEPARTMENT
of COMMERCE**
BOARD OF SCIENCE, TECHNOLOGY
& INNOVATION

Incentive Fund Grants to reimburse (up to \$12,000) NC businesses for a portion of the costs they incur when preparing Phase I SBIR/STTR proposals to federal agencies

Matching Fund Grants to match (up to \$200,000) NC businesses that have received federal Phase I SBIR Program/STTR awards

Strategic Initiative to grow NC's defense innovation economy with more strategic focus, improved state leadership, and increased funding



ONE NC SMALL BUSINESS PROGRAM

Helping small businesses develop & commercialize technologies

Small Business Innovative Research (SBIR)
Small Business Technology Transfer (STTR)
2021-2022 **Incentive Funds** Program Solicitation

Application Submission Dates: July 1, 2021, through June 30, 2022
Closing Date: 5:00 PM, June 30, 2022

Funding Opportunity Number: NCBSTI-FY21221

North Carolina Board of Science, Technology & Innovation
North Carolina Department of Commerce
301 South Wilmington Street
1526 Mail Service Center
Raleigh, NC 27699-1526
919-814-4641
<http://www.nccommerce.com>
ncbi@nccommerce.com

Solicitation Release Date: January 14, 2022



ONE NC SMALL BUSINESS PROGRAM

Helping small businesses develop & commercialize innovative technologies

Small Business Innovative Research (SBIR)
Small Business Technology Transfer (STTR)
2021-2022 **Matching Funds** Program Solicitation

Application Submission Dates: July 1, 2021, through June 30, 2022
Closing Date: 5:00 PM, June 30, 2022

Funding Opportunity Number: NCBSTI-FY2122M

North Carolina Board of Science, Technology & Innovation
North Carolina Department of Commerce
301 South Wilmington Street
1526 Mail Service Center
Raleigh, NC 27699-1526
919-814-4641
<http://www.nccommerce.com>
ncbi@nccommerce.com

Solicitation Release Date: January 14, 2022



**ADVANCING
DEFENSE
INNOVATION**

*Increasing U.S. Department of Defense (DoD)
Funding for North Carolina Small Business
Technology Development & Commercialization*

NORTH CAROLINA
BOARD OF SCIENCE, TECHNOLOGY
& INNOVATION

REPORT OF THE NORTH CAROLINA DEFENSE INNOVATION TASK FORCE, COMPILED BY THE NORTH CAROLINA BOARD OF SCIENCE, TECHNOLOGY & INNOVATION

#NC Frontline of the Future

Why NC for Defense?

1. Thriving dual-use tech innovation ecosystem
2. Deep DoD, industry, and academic partnerships
3. Expansive commitment to national defense

Need your help -- spread the word!
A rising tide floats all boats!

Dennis Lewis 703-217-3127
dennis.lewis@edpnc.com

The logo for DEFTECH features the letters 'NC' in a stylized yellow font to the left of the word 'DEFTECH' in a large, bold, blue sans-serif font. The letters are set against a white background with a thin grey border.

INNOVATION, SCIENCE, TECHNOLOGY
SIMPLIFIED ACQUISITION PROCEDURES
BASIC RESEARCH – RAPID PROTOTYPING - COTS



The North Carolina Defense Technology Transition Office (DEFTECH) is a **state funded** entity of the **North Carolina Military Business Center**. DEFTECH **enables** elements of the **NC Innovation Ecosystem (NCIE)** to **address complex** national security **problems**.

- **Scouts** the state for breakthrough technologies
- **Coaches** industry to identify defense applications for their technologies
- **Communicates and connects** federal technology needs
- **Assists** in positioning businesses to meet requirements
- **Represents** North Carolina to federal customers
- **Conducts** emerging technology forums
- Serves as the North Carolina *liaison* to DoD and federal innovation offices

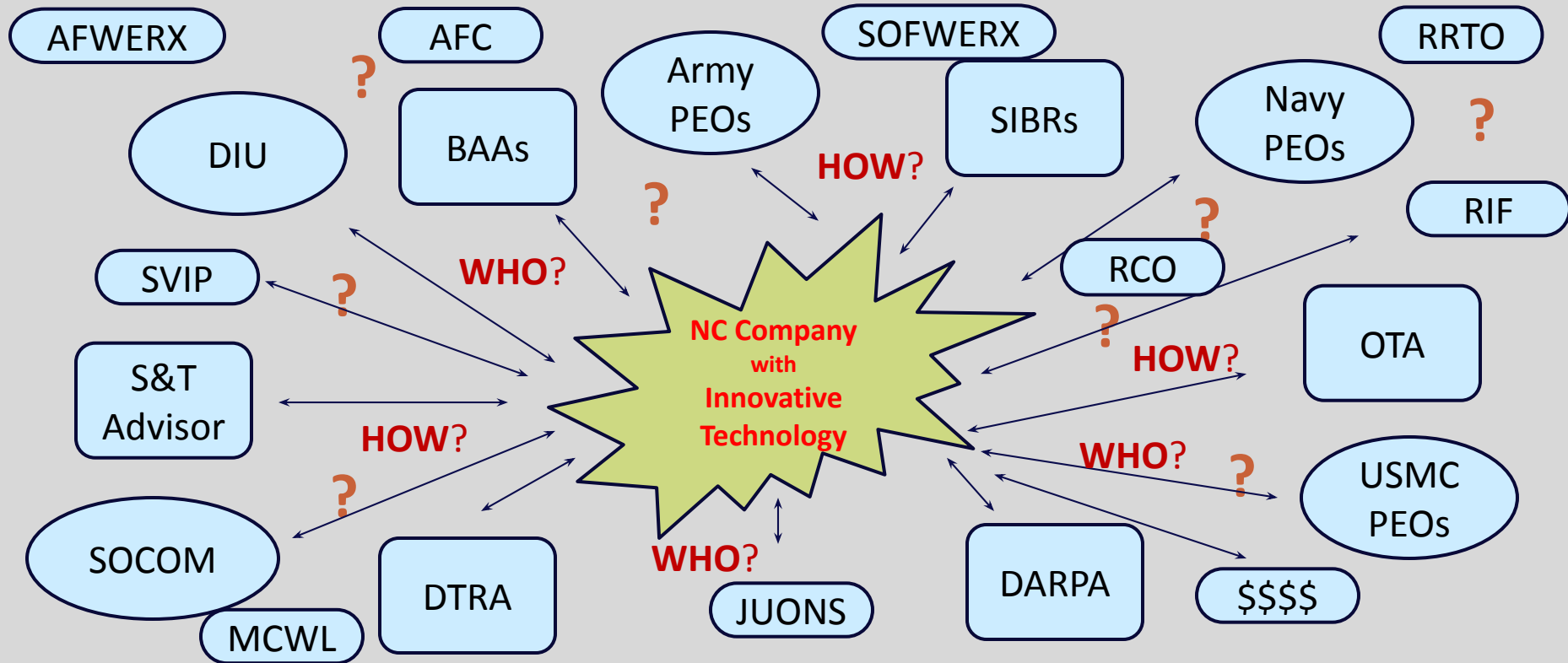
NC Industry Challenge

*suspicion
distrust*

*IP
time*

*cost to pursue
ROI*

Pwin



DEFTECH



Rapid Prototyping

Other Trans Auth (OTA)

DIU AFWERX

SOFWERX VULCAN

XTECH SEARCH AFC

NAVALX MCWL

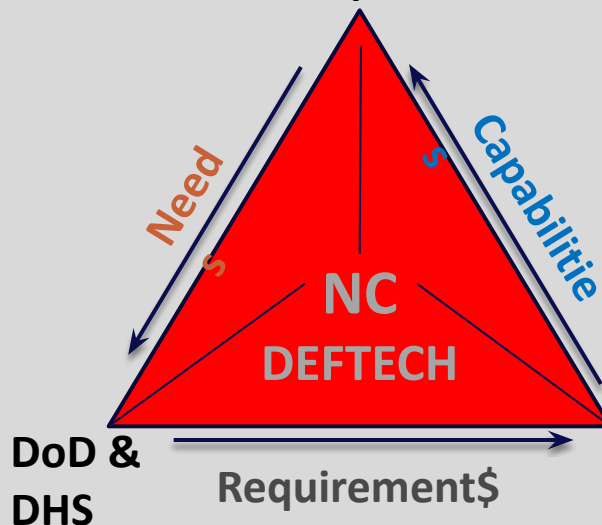
NASA DOE DHS SVIP

Service LABS DARPA

11 Department

SBIR Offices

**Warfighters
1st Responders**



**DoD &
DHS**

Requirement\$

NC BUSINESSES ACADEMIA

PUBLIC PRIVATE DEF ORGS

NC MILITARY BASES

NC GOVT INVESTORS

NC Innovation Ecosystem
Companies, Academe, Organizations, Military

DEFTECH



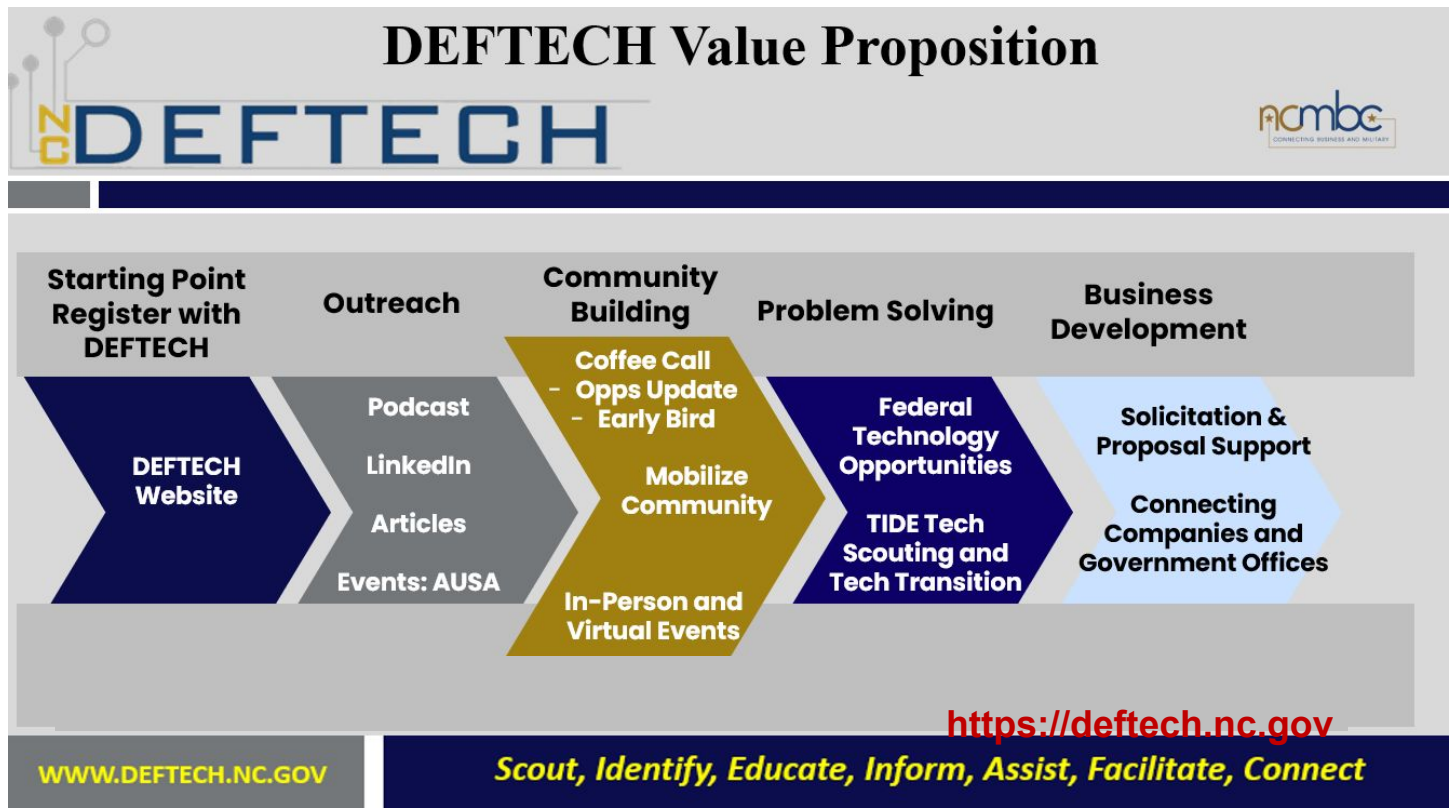
The Process:

1. **Identify & Review the OTA Opp (not always on SAM.GOV).** *Determine if: your technology/solution can be of significant value in solving the stated problem. If so...*
2. **Submit...***typically no more than a 5-page white paper or 15 slides*
3. **Govt will downselect white papers and discuss 1 on 1, invite to make a presentation, or request a formal proposal**
4. **Govt Makes Award....***typically in under 90 days*

****DEFTECH can help with understanding, review your submission, provide insights****



“Outcome-Based whole of state approach for National Security”
synchronized to position NC as the “Frontline of the Future.”



DEFTECH

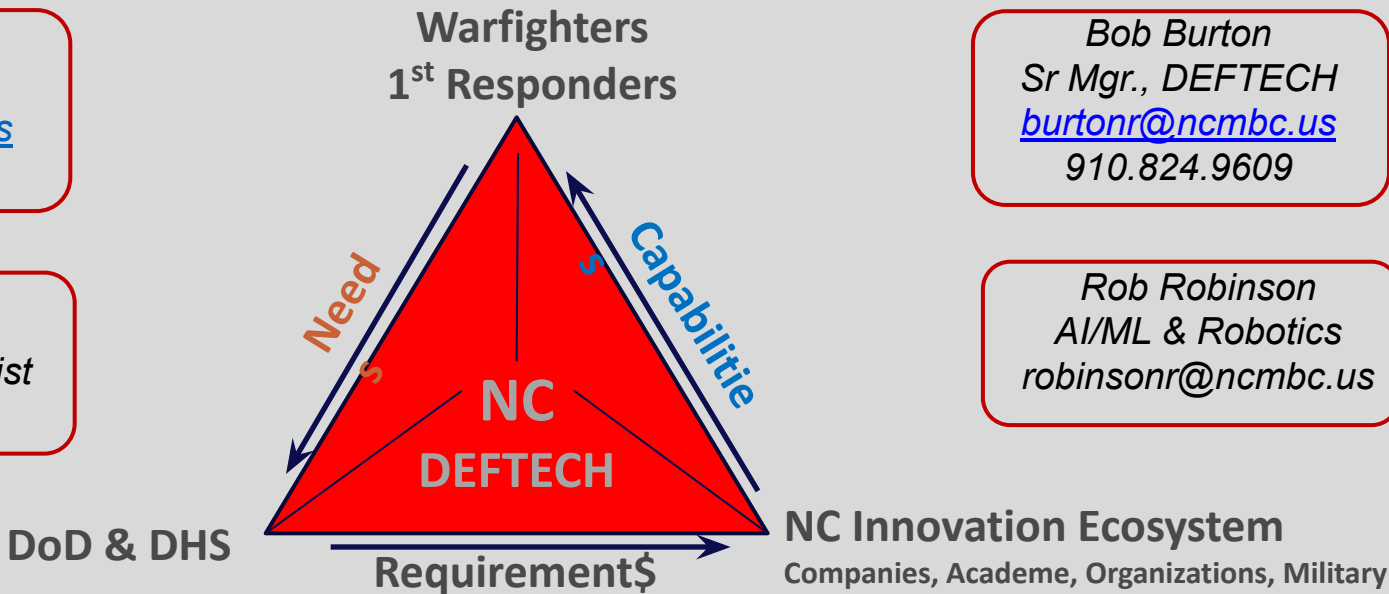



Dennis Lewis
 Dir, DEFTECH
lewisd@ncmbc.us
 703-217-3127

Kim Kotlar
 Innovation Strategist

Bob Burton
 Sr Mgr., DEFTECH
burtonr@ncmbc.us
 910.824.9609

Rob Robinson
 AI/ML & Robotics
robinsonr@ncmbc.us



An American flag is partially visible on the left side of the slide, showing the stars and stripes.

North Carolina Military Business Center (NCMBC)



Rick Gilmore

Business Development
Specialist,
North Carolina Military
Business Center



Building a Collaborative Manufacturing Ecosystem in Support of the Department of Defense

27 APR 2023

Presented by:

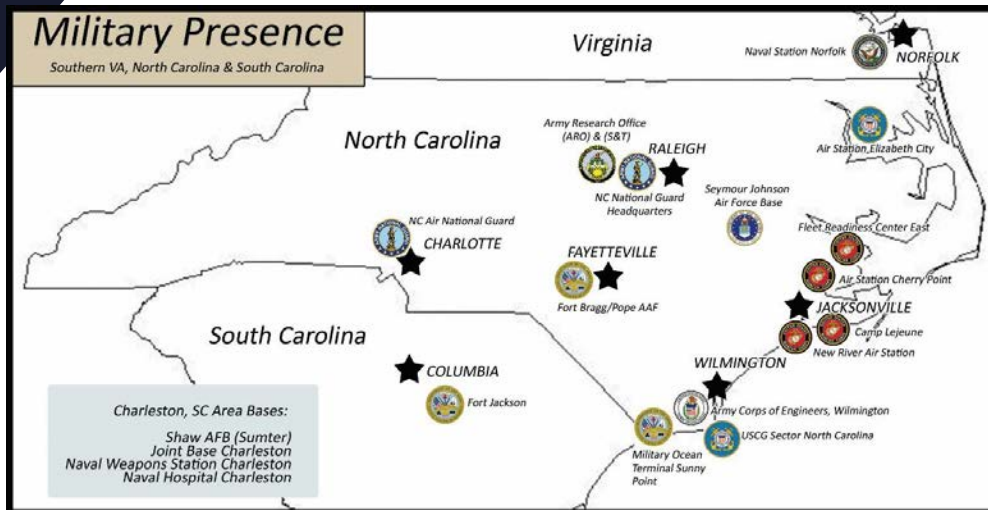
Rick Gilmore
gilmorer@ncmbc.us



ncmbc.us DEFTECH.nc.gov MatchForce.org



Situation: Military Presence



- 4th highest active duty military presence in US
- 6 major installations (5 DoD/1 DHS)
- Over 100 National Guard & Reserve facilities
- 134,000 active, Guard and Reserve personnel
- 18,000 annual transitions





Situation: Military Impact

Total annual military impact*

- \$79.7 billion in Gross State Product: 12.7% GSP (2d largest sector)
- Over 653,000 jobs impacted: \$49 billion, personal income
- Military/civilian payroll: \$19.2 billion
- Federal contracts:
 - Prime contracts (FY2022): DoD \$5.51b; Federal \$8.93b**
 - Subcontracts: additional billions

*"The Economic Impact of the Military on North Carolina," NC Department of Commerce, 2015

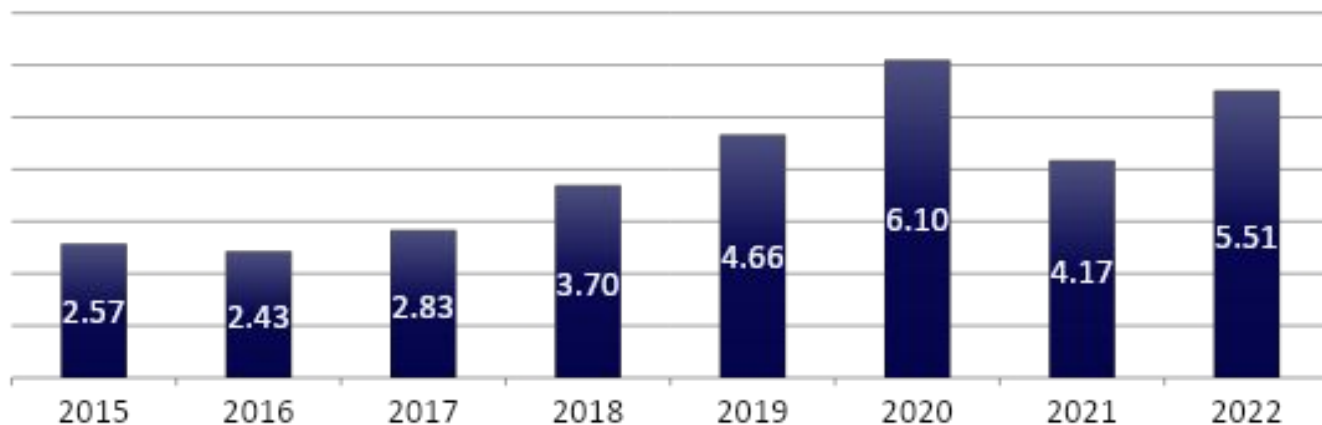
**Federal Procurement Data System, now beta.SAM.gov, as of 06 JAN 2021





Situation: Federal Procurement, FY2022

- Prime contracts, DoD in NC: **\$5.51 billion** (77 Counties):



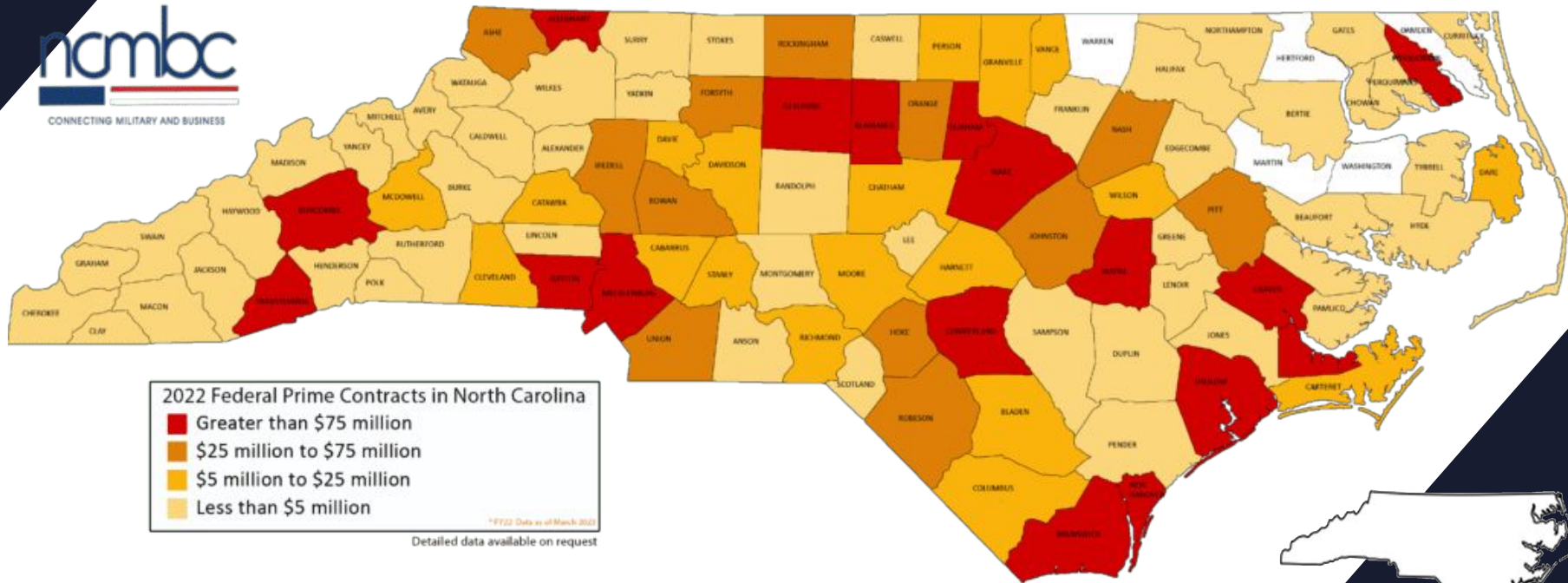
- Prime contracts, federal in NC: **\$8.93 billion** (95 Counties)

*FY2022 Data: FPDS, as of 03 MAR 2023





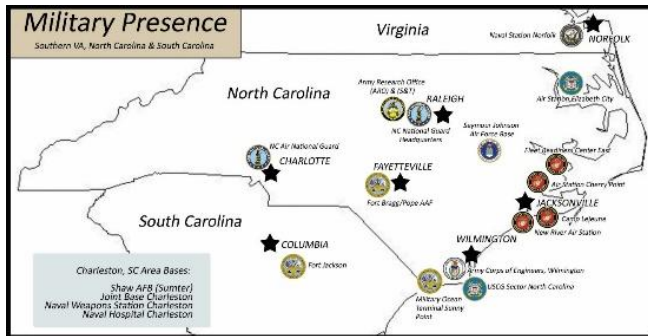
Situation: Federal Procurement, FY2022





Situation: NC Assets for Defense

- State goal: sustain installations/warfighters, grow defense economy
- Business capacity: manufacturing, services, infrastructure
- Innovation ecosystem: diverse, applicable to defense, nurtured
- Workforce capacity: diverse, growing, adaptable – civilian/military
- Business infrastructure: best in US, Community Colleges NCMBC





Who We Are

- The NCMBC is a statewide, business development and technology transition [entity of the State of North Carolina](#), embedded in the state's community colleges and headquartered at Fayetteville Technical Community College
- Totally State-funded, the NCMBC is the [only statewide, military-focused economic development entity in the US](#), and the only NC entity solely focused on growing the defense economy through existing industry





Mission, Goals and Outcomes

Mission: To leverage military and federal business opportunities to expand the economy, grow jobs and improve quality of life

Goals and Operations

- 1 - Increase federal revenues for businesses
- 2 – Support technology transition to federal agencies
- 3 - Support integration of military into workforce
- 4 - Support defense-related business recruitment

Outcomes: Contracts (4,865), revenues (\$17.42b), jobs!





North Carolina Military Business Center Organizational Chart

NCMBC Leadership Team



Scott Dorney
Executive Director



Courtney Smedick
Director of Operations



Denny Lewis
Director of Economic and Technology Development

Business Development Team



Fran Perez-Wilhite
Charlotte



Joe Tew
Flat Rock



Rick Gilmore
Greensboro



Vacant
Fayetteville



Tonia Rivers
Fayetteville



Reena Bhatia
Raleigh



Daniel Quinn
Raleigh



Darleen Stein
Elizabeth City



Erin Ananian-Gentile
New Bern



Donna Walton
Jacksonville



Olivia Chávez-Carroll
Wilmington



Randy Chandler
Morehead City



Lee Moritz
Hickory



Bill Simons
Goldsboro

Headquarters Team



Tim Malone
Data Admin



Teresa Earl
Admin & Logistics



Rachel Rocker
Research Analyst

Defense Technology Transition (DEFTECH) Team



Bob Burton
Senior Manager



Rob Robinson
Artificial Intelligence



Kim Kotlar
Information Security



James Hargrove
Industry Professional

Strategic Industry Team



Sue Kranes
Infrastructure



Bernie Salter
Contracting



John Cassani
Textiles & Warfighter Systems



Heather Port
Installation Support



Diane Cherry
Energy & Environmental



TJ Gilroy
Tactical Equipment



Don Davis
Defense & Industrial Aerospace



Operations: Business Development

Operations at Colleges	Future Opportunities	Current Opportunities
Recruit to market	Identify, analyze	ID, analyze most lucrative
Engage in market	Connect to businesses	Connect to businesses
Training, webinars	Market intelligence	Solicitation support
Counseling, 1-on-1	Pre-positioning	Proposal support
Events, statewide	Teaming, subcontracting	Contract execution

CY2005 - CY2022

Opps distributed: 53,524

Connections: >40 million

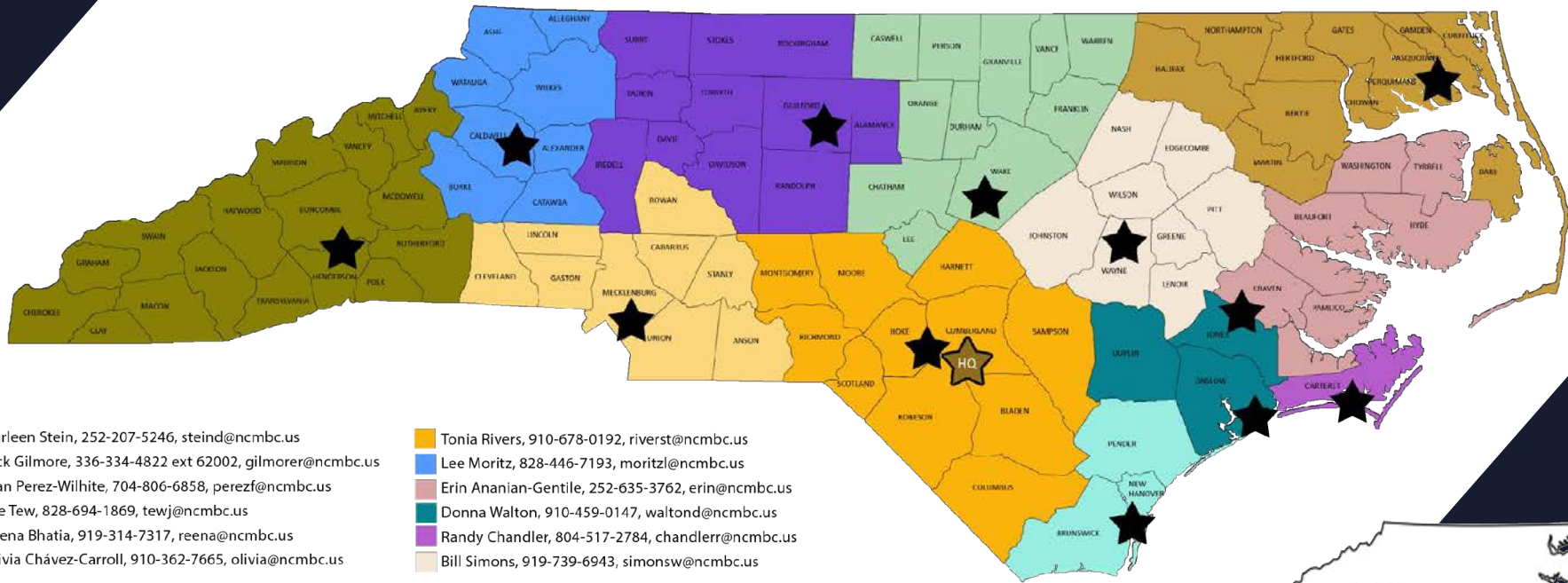
BD Wins: 3,486 contracts

Total min value: \$13.0 billion





Operations: Business Development





Operations: MatchForce.org

MatchForce Next Generation Matches:

NC businesses to federal opportunities

Contracting staff to NC businesses

Prime contractors to NC subcontractors



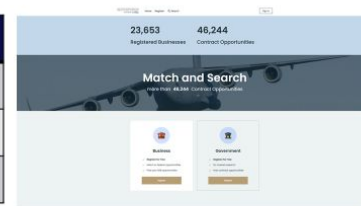
Operations: MatchForce.org

MatchForce Next Generation Matches:

NC businesses to federal opportunities

Contracting staff to NC businesses

Prime contractors to NC subcontractors



CY2005 - CY2022 | Opps distributed: over 2.0 million | Connections: over 400 million

MatchForce wins: over 1,737 | Total min value: over \$7.3 billion



CY2005 - CY2022

Opps distributed: over 2.0 million

Connections: over 400 million

MatchForce wins: over 1,737

Total min value: over \$7.3 billion





Operations: MatchForce.org




MATCHFORCE
PRESENTED BY NCMBc

MATCHFORCE **BUSINESSES** FUTURE OPPS

timothy Malone
YOU HAVE NEW MATCHES!

LOGIN TO MATCHFORCE

YOUR MATCHES

	DEPT OF DEFENSE Solicitation Number: FA860422QB034 Location: None	VIEW
	ENVIRONMENTAL PROTECTION AGENCY Solicitation Number: SNAPRFQ-R6-22-52622-426_01 Location: 77099, Houston, UNITED STATES, TX	VIEW
	HEALTH AND HUMAN SERVICES, DEPARTMENT OF Solicitation Number: RF-2022-0002 Location: 86033, Kayenta, UNITED STATES, AZ	VIEW

MatchForce Opportunity Email (0500)

Raw, unfiltered opps, **ALL federal agencies**

Opps matched to specific business

Business gets one email, up to 6 matches

Business receives full list on dashboard





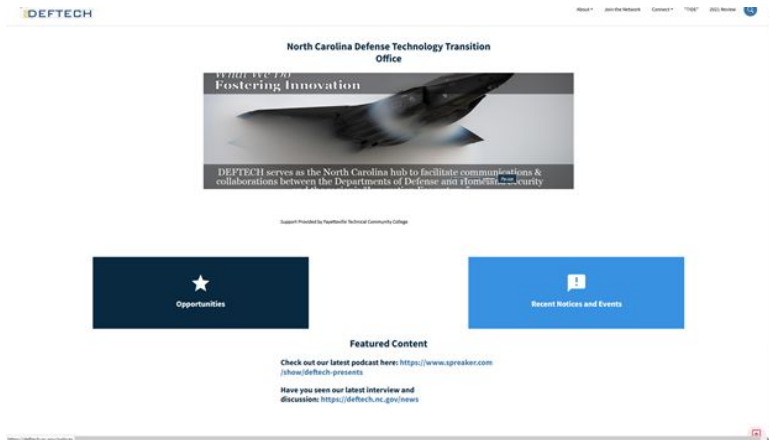
Operations: Tech Transition (DEFTECH)

Leads State, growing defense innovation

Sources DoD tech needs to ecosystem

Scours state, tech w/defense application

Helps navigate agencies and processes



CY2020 - 2022

Opps distro: 1,396

Innovation events: 100+

Podcasts: 55

2021: at least 12 winners

Total min value: \$20 million





Operations: 2023 Major Events

- Federal and Defense Textile Summit, FEDTEX (MAY 23-24, RAL)
- Medical, Human Performance Symposium (JUN 13-14, Chapel Hill)
- Defense Technology Summit (JUL 25, FAY)
- Defense Subsistence Summit (NOV, TBD)
- Components, Supplies and Services Summit (DEC TBD)



Hosted by:

Office of US Senator Thom Tillis
NC Military Business Center
NC Defense Technology Transition Office

Partners:

- Defense Alliance of North Carolina (DANC)
 - eTextileCommunications.com
 - NC Textile Technology Center at Gaston College
 - Manufacturing Solutions Center at Catawba Valley Community College (MSC)
 - Manufacturing & Textile Innovation Network (MTIN)
 - NCDMCSP, a program of Industry Expansion Solutions
 - National Council of Textile Organizations (NCTO)
 - Southern Textile Association (STA)
 - Advanced Textile Association (ATA)
-
- POC NCMBC/FEDTEX
Courtney Smedick courtney@ncmbc.us
Lee Moritz moritzl@ncmbc.us
JD Cassani cassanij@ncmbc.us

FEDTEX

Individual and Unit Tactical Gear, Uniforms and Personal Protective Equipment

May 23-24, 2023 Raleigh, North Carolina

<https://fedtex.ncmbc.us>

FEDTEX 23 Objectives

- **Engage** with existing contractors and attract new capable businesses into the federal and defense clothing, textiles, and tactical equipment marketplace.
- **Encourage and support** existing textile supply chain suppliers and attract new component suppliers to enter the federal marketplace. Connect and team component suppliers with other federal prime contractors.
- **Inform** the industrial and academic R&D ecosystem about desired future military technology requirements, and likewise inform DoD agencies about emerging and future textile innovations.
- **Establish** a productive and DIRECT dialogue between businesses, government, and academia around critical warfighter issues in the defense textile marketplace - including workforce, supply chain, inflation challenges, and barriers to entry.



Individual and Unit Tactical Gear, Uniforms and Personal Protective Equipment

May 23-24, 2023 Raleigh, North Carolina

<https://fedtex.ncmbc.us>

2023 AGENDA

Government/DOD Participation:

- **Keynote: Colonel Matthew T. Harnly**, Director, Defense Logistics Agency Troop Support Clothing and Textiles
- **Keynote: Scott L. Baier**, Professor and Department Chair, The John E. Walker Department of Economics, Clemson University
- **Wade Yamada**, Deputy Director of Staff, Office of the Chief of Space Operations, US Space Force
- **Brigadier General David Walsh**, Commander, Marine Corps Systems Command
- Defense Logistics Agency Troop Support
- Defense Logistics Agency- Clothing and Textiles
- US Army PEO Soldier
- DEVCOM Soldier Center Soldier Protection Directorate
- Navy Exchange Service Command (NEXCOM)
- Navy Clothing and Textile Research Facility
- Marine Corps Systems Command
- US Space Force
- US Air Force Life Cycle Management
- US Coast Guard Military Uniform Branch (invited)
- Seymour Johnson Air Force Base
- Marine Corps Installations East
- US Coast Guard , Army and Navy from Natick



Individual and Unit Tactical Gear, Uniforms and Personal Protective Equipment

May 23-24, 2023 Raleigh, North Carolina

Legend: ■ Room 1 B/C ■ Room 2
■ Room 6 ■ Room 1 A/D ■ Off-Site

TUESDAY, MAY 23, 2023

12:00 p.m. – 4:00 p.m.	Exhibitor Early Set-Up: NC State University, McKimmon Conference Center - 1101 Gorman Street, Raleigh, NC 27606
2:15 p.m. – 3:30 p.m.	Tour and Briefs: NC State University, The Nonwovens Institute, The Center for Technology & Innovation (CTI) 1010 Main Campus Drive, Raleigh, NC 27606
3:30 p.m. – 5:00 p.m.	Tour and Briefs: NC State University, Wilson College of Textiles; Textile Protection and Comfort Center; and ASSIST Center – 1020 Main Campus Drive, Raleigh, NC 27606
5:00 p.m. – 7:00 p.m.	Evening Welcome Social, NC State University, Wilson College of Textiles 1020 Main Campus Drive, Raleigh, NC 27606

WEDNESDAY MAY 24, 2023

Summit Venue: NC State University, McKimmon Conference Center - 1101 Gorman Street, Raleigh, NC 27606			
7:00 a.m. – 8:00 a.m.	Registration, Check-in and Light Refreshments		
8:00 a.m. – 8:30 a.m.	Welcome and Orientation: Scott Dorney, Executive Director, North Carolina Military Business Center Brigadier General Christopher D. Schneider, Program Executive Officer Soldier, US Army PEO Soldier (invited)		
8:30 a.m. – 8:40 a.m.	Break	Trade Show and Networking	
8:40 a.m. – 10:00 a.m.	Dialogue, Military and Industry: The Future of Textile Technologies, Innovation and New Product Development Mini-Brief by Technology Innovators		
10:00 a.m. – 10:10 a.m.	Break		
10:10 a.m. – 11:00 a.m.	Military Service Dialogue with Industry: US Army / PEO Soldier & Special Operations		DLA Commodity Focus: Dress Clothing, Combat Clothing & Accessories Virtual Remote Demonstration
11:00 a.m. – 11:10 a.m.	Break		
11:10 a.m. – 12:00 p.m.	Dialogue, Workforce, Inflation, Supply Chain and Other Market Forces Impacting Acquisition and Delivery of Clothing, Textiles and Tactical Equipment to the Military		
12:00 p.m. – 1:35 p.m.	Lunch Remarks: Colonel Matthew T. Harnly, Director, Defense Logistics Agency, Clothing & Textiles Scott L. Baier, Professor and Department Chair, The John E. Walker Department of Economics, Clemson University Mini-Brief by Technology Innovators		
1:35 p.m. – 1:45 p.m.	Break	Trade Show and Networking	
1:45 p.m. – 2:45 p.m.	Military Service Dialogue with Industry: US Air Force & US Space Force		DLA Commodity Focus: Individual Equipment, Safety, Tentage, Shelters and Environmental Clothing
2:45 p.m. – 3:00 p.m.	Break		
3:00 p.m. – 4:00 p.m.	Military Service Dialogue with Industry: US Navy & US Marine Corps		DLA Commodity Focus: Special Purpose (including Flight and Shipboard) Clothing and Footwear
4:00 p.m.	Adjourn		

DEFENSE LOGISTICS AGENCY, CLOTHING & TEXTILES

DLA **Clothing and Textiles** provides clothing, textiles and equipment to U.S. service members, other federal agencies and partner nations.

- DLA Troop Support, located in Philadelphia, PA
- Every soldier, sailor, airman and Marine around the world, from their first day of service in boot camp, to camouflage uniforms worn on the battlefield and service dress uniforms.
- C&T procures more than 8,000 different textile items ranging from uniforms, footwear and undergarments, body worn textile individual equipment, flags, patches/pins and tents.
- C&T manages more than 50,000-line items (including sizes).

Brigadier General Eric P. Shirley
Commander, Defense Logistics Agency, Troop Support



Program Executive Office PEO Soldier

PEO Soldier delivers 130 programs of record and 253 products, such as essential capabilities from body armor, helmets, smart textiles, sensors and lasers to legacy weapon systems.

Locations: Ft Belvoir, VA

PEO Soldier has four (PM) Offices

- Soldier Survivability
- Soldier Lethality
- Soldier Maneuver and Precision Targeting
- Integrated Visual Augmentation System (IVAS)
Project Director Soldier and Squad Integration

Brigadier General Christopher D. Schneider,
Program Executive Office Soldier, US Army PEO
Soldier



Individual and Unit Tactical Gear, Uniforms and Personal Protective Equipment

May 23-24, 2023 Raleigh, North Carolina

<https://fedtex.ncmbc.us>

DEVCOM SC

Current Thrust Initiatives

DEVCOM (U.S. Army Combat Capabilities Development Command Soldier Center) Natick, MA in collaboration with PEO Soldier

Protected, Unburdened and Enabled Soldier

- Increased Soldier Protection- Arctic Equipment and Advanced Environmental Capabilities, Increased Threat Level Helmets, Eyewear with increased Frag Protection, Advanced Materials for Ballistics Protection, Modelling of Soldier Loads/Reduction of Soldier loads.

Invisible Soldier

- Camouflage, concealment and deception across the electromagnetic spectrum.

Enhanced Soldier

- Human Performance Tech -wearables, biosensors, exoskeletons, human performance data management systems, soldier/robotic interface, training simulation (combat and technical)

Sustained Soldier

- Water generation, Lighter, nutrient-dense rations, novel solutions for remote re-supply operations.



Individual and Unit Tactical Gear, Uniforms and Personal Protective Equipment

May 23-24, 2023 Raleigh, North Carolina

<https://fedtex.ncmbc.us>

FEDTEX MOMENTUM

2022 Participation Statistics

- Participation from **19 states** ranging from North Carolina to California and Texas to Massachusetts. International participation from **Canada**
- **134 unique business**, academia and government organizations participated
- Attendee Demographics
54% from North Carolina
46% outside of North Carolina
- 2022 Headcount: approx. **260**
- **Expected growth in 2023** due to location; access to NCSU, Wilson College of Textile facility tours; and greater availability for exhibit space



Individual and Unit Tactical Gear, Uniforms and Personal Protective Equipment

May 23-24, 2023 Raleigh, North Carolina

<https://fedtex.ncmbc.us>

Questions?


The NCMBC team thanks you for your support!

FEDTEX

Individual and Unit Tactical Gear, Uniforms and Personal Protective Equipment

May 23-24, 2023 Raleigh, North Carolina

<https://fedtex.ncmbc.us>



**Office of Science,
Technology & Innovation
(OSTI One North Carolina
Small Business Program)**

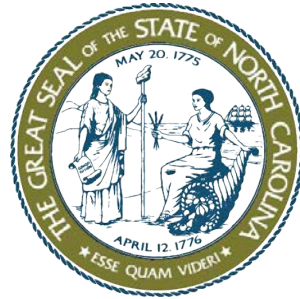


Chris Schmidt

Grant Manager
Office of Science,
Technology & Innovation
(OTI)



NORTH CAROLINA
**DEPARTMENT of
COMMERCE**



NORTH CAROLINA
DEPARTMENT of
COMMERCE

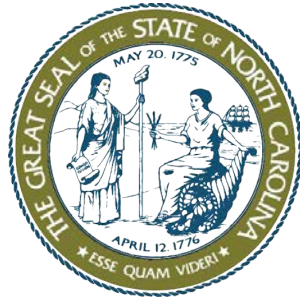
Welcome!

Chris Schmidt
Grants Manager

Office of Science, Technology & Innovation

Chris.Schmidt@commerce.nc.gov

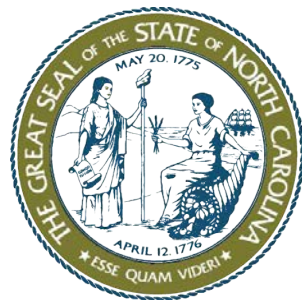
919-814-4668



NORTH CAROLINA
DEPARTMENT of
COMMERCE

What we will cover today –

- What is the SBIR/STTR program and why it should be on your list of funding sources
- One N.C. Small Business Program
 - Distinguish between two grant opportunities within the program
 - Eligibility requirements
 - Important dates
 - How to apply
 - Plenty of time for questions



NORTH CAROLINA
DEPARTMENT of
COMMERCE

Our mission is to improve the economic well-being and quality of life for all North Carolinians.



NORTH CAROLINA
DEPARTMENT of
COMMERCE

One N.C. Small Business Program

- Incentive Funds Program
- Matching Funds Program



What does SBIR stand for? **Small Business Innovation Research**

What type of businesses participate as lead in the SBIR/STTR program?
Qualify as a Small Business Concern as defined by SBA

Why should you apply? **Non-dilutive funding**

Participating Federal Agencies



Small Business Administration



Department of Agriculture



Department of Commerce



Department of Defense



Department of Education



Department of Energy



Department of Health and Human
Services



Department of Homeland Security



Department of Transportation



Environmental Protection Agency



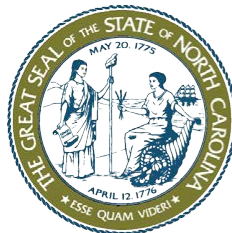
National Aeronautics and Space
Administration



National Science Foundation

Three Phase Process





NORTH CAROLINA
DEPARTMENT of
COMMERCE

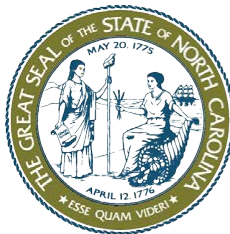
One N.C. Small Business Program

- SBIR/STTR Phase I Incentive Funds Program

The goal of the Incentive Program is to increase the number, quality, company and technology diversity, and geographic breadth of NC applications for Federal SBIR and STTR Phase I awards.

- SBIR/STTR Phase I Matching Funds Program

The goals of the Matching Program are to help NC companies bridge the funding gap period between the final Phase I payment and the first Phase II payment in the Federal Program and increase the intensity of the research conducted under Phase I, making NC small businesses more competitive in the competition for Phase II funds.



NORTH CAROLINA
DEPARTMENT of
COMMERCE

INC

MATCH

Phase I
Concept Development
6 months – 1 year
~ \$50,000 – 250,000

Phase II
Prototype Development
24 months
~ \$500,000 – 1.5M

Phase III
Commercialization
Not SBIR funding

Funding Levels FY23

Incentive Funds Program

Tier 1 and 2 – Reimbursement Rate 75%

Tier 3 – Reimbursement Rate 50%

Maximum Award - \$12,000

Matching Funds Program

50% of Federal SBIR/STTR Award

Maximum Award - \$75,000

Stage 1 – 75% Stage 2 – 25%

Eligibility Requirements

- ✓ Registered with the North Carolina Secretary of State
- ✓ North Carolina is primary place of business
- ✓ Requirements can vary from year to year

Important Dates

Solicitation period:

July 1 – June 30 or until funds are exhausted, whichever comes first

How to Apply

www.commerce.nc.gov/grants-incentives/technology-funds

[Technology Funds | NC Commerce](#)

Register in CyberGrants

Required Documentation

Incentive Funds Program

Notarized Application (in-State notary)
Certificate of Existence or Authorization
Conflict of Interest Policy
Copy of Federal Phase I Solicitation
Copy of Submitted Proposal
Submission Confirmation
Detailed Expense Documentation

Matching Funds Program

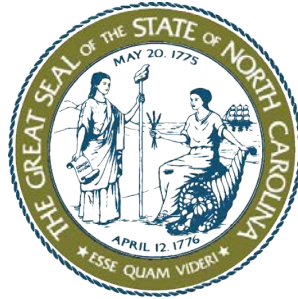
Notarized Application (in-State notary)
Notarized Location Certification
Certificate of Existence or Authorization
Articles of Incorporation
ByLaws or Operating Agreement
Copy of Federal I Phase I Solicitation
Copy of Submitted Proposal
Official Award Notification/Contract

Incentive Funds Program – What's Eligible?

- Proposal preparation consulting fees paid to others
- Typing/word processing services
- Project-related supplies and postage
- Database search fees for project-related literature searches
- Rental of space and/or equipment directly related to the preparation of the Federal proposal
- Salaries paid to individuals who were directly involved in preparation of the Phase I proposal
- Educational program fees directly related to the preparation of the Federal proposal
- Indirect Cost Rate [General and Administrative (G&A) and/or Overhead]

Not Eligible for Reimbursement

- Travel
- Equipment purchases over \$300
- Facility improvements
- Legal or patent preparation costs
- Fringe benefits



NORTH CAROLINA
DEPARTMENT of
COMMERCE

Questions?


Chris Schmidt

Grants Manager

Office of Science, Technology & Innovation

Chris.Schmidt@commerce.nc.gov

919-814-4668

An American flag is visible in the top-left corner of the image, showing the stars and stripes. The rest of the background is a dark, textured surface.

**US Marine Corps Reserve Color Guard
Greensboro, North Carolina
Featured Soloist
Reagan Glover**

**Luncheon
Sponsored lunch**

**Catered by
Kitchenology**





BAGS ON A MISSION

CAMERON CRUSE

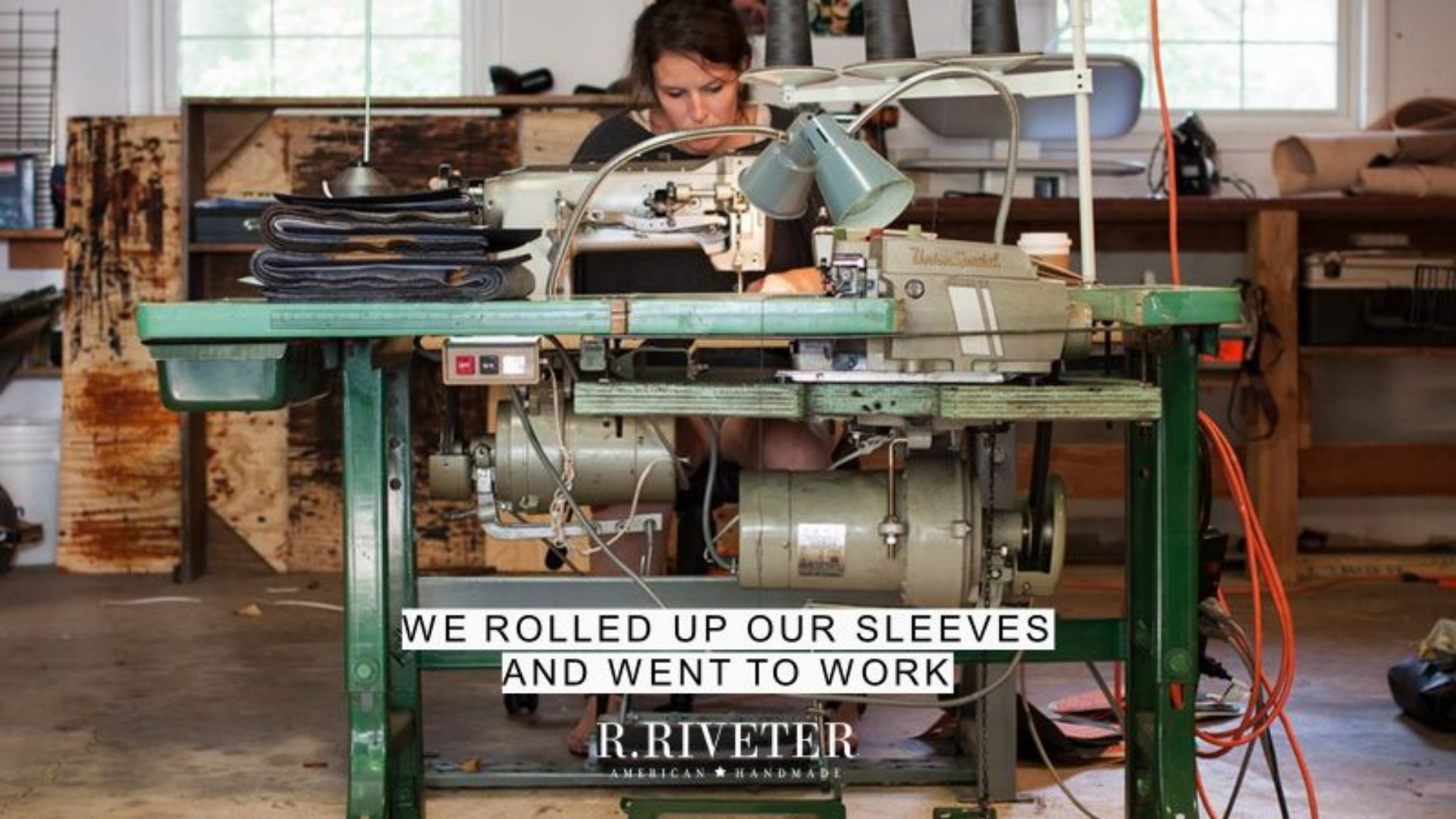
FEMALE FOUNDER, MOTHER OF TWO,
MILITARY SPOUSE, BAG LADY..





DAHLONEGA, GA

**middle of nowhere*

A woman with dark hair is focused on operating a vintage green sewing machine. The machine is mounted on a sturdy green metal stand. To the left of the machine, a stack of dark fabric is neatly folded. A green lamp is positioned above the machine, providing light. The background shows a workshop environment with wooden shelves, a window, and various tools and materials. The overall scene conveys a sense of craftsmanship and hard work.

WE ROLLED UP OUR SLEEVES
AND WENT TO WORK

R. RIVETER
AMERICAN ★ HANDMADE



+
OPPORTUNITY
INNOVATION
DETERMINATION

positive impact

R.RIVETER
AMERICAN + HAWAII

RECLAIM YOUR CONTROL

IF NOT ME, THEN WHO?

R. RIVETER
AMERICAN MADE
EACH RIVETER ID IS A MAKER'S STORY
LINER RR108
SEMBLY



START A REVOLUTION

IF IT DOESN'T SCARE YOU,
YOU'RE PROBABLY NOT DREAMING BIG ENOUGH

REMAIN ON COURSE

YOU CAN CHOOSE **COURAGE**, OR
YOU CAN CHOOSE **COMFORT**.
BUT YOU CANNOT CHOOSE
BOTH.

-B. BROWN

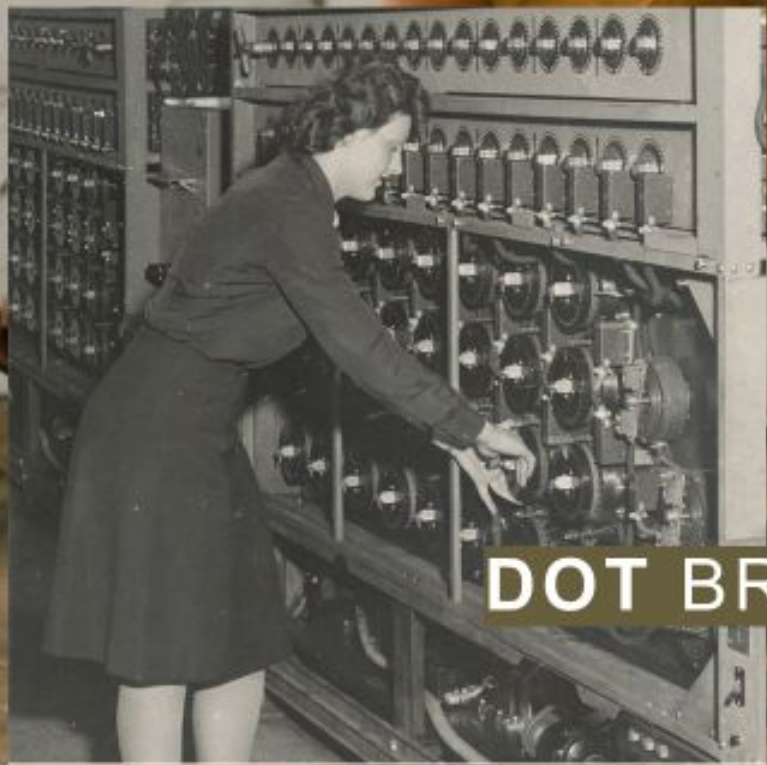


2017
**Inc.
5000**
LIST

2018
**Inc.
5000**
LIST



NAOMI PARKER FRALEY



DOT BRADEN





OVETA CULP HOBBY

WHAT WOULD ROSIE DO?

R. RIVETER
AMERICAN ★ HANDMADE

"Veterans Supporting Manufacturing"



Panel Moderator:

Patrick Davis, MBA

Executive Director, The
Heroes of High Point



Lauren Houston

Greensboro Employment
Center, NC National
Guard



Lucas Waniewski

Recruit Military



Aaron Harper

VP of Employment
Veterans Bridge Home



Craig Wymer

Hire Our Heroes US
Chamber of Commerce

NORTH CAROLINA NATIONAL GUARD EMPLOYMENT CENTER



North Carolina National Guard & Reserves

Approx 11,000 National Guard Service Members

Approx 30,000 Reserve Service Members (all branches)

Over 18,000 Guard and Reserve Spouses

Over 24,000 Guard and Reserve Children

We have over 6,000 people in our database

WHAT WE DO

OUR SERVICES

- Resume preparation/review
- Career assessment and employment pathways
- Military to civilian work translation
- Mock interviews
- Access to our nationwide database (MSCCN/CASY)
- Hiring events/Job fairs
- Direct contact to our network of veteran friendly employers



OUR GOALS

- Establish on going relationships with Veteran friendly employers within the state of North Carolina (two sided communication)
- Place clients within our North Carolina employer network in mutually beneficial positions that help achieve client's career goals

NCNG EMPLOYMENT CENTER LOCATIONS



ASHEVILLE

Jeff Wheeler
 (984) 661-4339
jeffrey.a.wheeler.mil@army.mil

MOORESVILLE

John Barna
 (984) 661-2102
john.j.barna.ctr@army.mil

GREENSBORO

Lauren Houston
 (984) 661-5608
lauren.t.houston.ctr@army.mil

RALEIGH

Juliann Breeden
 (984) 664-6248
juliann.m.breeden.ctr@army.mil

RALEIGH

Victoria Knott
 (984) 664-6081
victoria.g.knott.ctr@army.mil

CHARLOTTE

Jeff Wheeler | John Barna
 (984) 661-4339 | (984) 661-2102
jeffrey.a.wheeler.mil@army.mil
john.j.barna.ctr@army.mil

FAYETTEVILLE

Jeff Wyatt
 (984) 661-4917
jeffrey.r.wyatt2.ctr@army.mil

WILMINGTON

George Millsap
 (984) 661-6919
george.r.millsap.ctr@army.mil

WINTERVILLE

Sandra Wyatt
 (984) 661-3190
sandra.wyatt6.ctr@army.mil

Connect with us

Office

(919)614-8644

Website

www.ncngemploymentcenter.com

Social Media

www.facebook.com/ncngemployment

Linked In

www.linkedin.com/groups/5118915

www.linkedin.com/in/laurenhouston

An American flag is draped across the top half of the image, with the stars and stripes clearly visible. The flag is set against a dark, textured background.

RecruitMilitary

**Empowering The Military Community Through
Meaningful Career Opportunities**

About



No Strangers to the Military Employment Space

RecruitMilitary is trusted by and partnered with well-known veteran organizations:



VETERANS' EMPLOYMENT & TRAINING SERVICE
UNITED STATES DEPARTMENT OF LABOR



HELPED OVER 1.5 MILLION VETERAN JOB SEEKERS CONNECT WITH EMPLOYERS THROUGH:

- CAREER FAIRS
- PLACEMENT SERVICES
- JOB BOARD
- AND OTHER OFFERINGS



Mission

Empowering YOU Through Meaningful Career Opportunities



START YOUR TRACK TO CAREER SUCCESS
WE WILL HELP YOU STEER THE COURSE



- CREATE**
Create and complete your **professional profile**. A completed profile is the primary way to be found by the employers that want to hire and retain you.
- CONNECT**
Connect with a specialist from RecruitMilitary who will guide you to ensure a meaningful search experience; Be on the lookout for an initial phone call or email.
- APPLY & REGISTER**
Apply for open roles on RecruitMilitary's job board and register for in-person and/or virtual hiring events exclusive to the military community.
- PREPARE**
Prepare yourself with **best practices** and free resources to maximize your experience.



NASCAR Xfinity Series driver Ryan Vargas (#6) partnered with RecruitMilitary to show support for the military community over Memorial Day weekend 2022 at Charlotte Motor Speedway.

WHAT YOU CAN EXPECT WITH RECRUITMILITARY:

- Ongoing Outreach**
 - Opportunity Leads
 - Hiring Event Notifications
 - Success Touchpoints
- Access to Resources**
 - Hundreds of thousands of **job listings**
 - In-Person and virtual **hiring events**
 - Professional development tools for **military members, veterans, and spouses**
 - Search & Employ **Magazine**
 - VetTen (job seeker newsletter)
 - Partnerships/Mentors

READY TO GO?



Digital Tools: Profile Builder | Job Board

Features

- Military Exclusive Job Board
- Job searches powered by Google Cloud Talent Solutions, including MOS|NEC translation
- Target Job & Hiring Event Alerts
- Resume Generator
- Virtual Resource Centers offering resume and interview guidance, mentorship opportunities, hiring event preparation and more
- A.I. Chatbot Support

START YOUR JOB SEARCH

SEARCH LOCATION **FIND JOBS**

77 Jobs near your location

EMPOWERING VETERANS & MILITARY SPOUSES THROUGH MEANINGFUL CAREER OPPORTUNITIES

Whether you are starting a new career, going back to school, or looking for a fresh opportunity, RecruitMilitary has thousands of partners who are looking for military talent just like you.

I'M A JOB SEEKER **I'M AN EMPLOYER**

1,596,098
Job Seeker Accounts
+ 30 TODAY

6,120,269
Job Seeker Profile Views
+ 263 TODAY

332,576
Active Jobs
+ 7,588 TODAY

Profile completion progress

Thank you for completing your profile.

100

Army

pay grade: 0-3 status: Separated

years in service: 7 separation date: 04/30/1996

Military Schools

Army Field Artillery Officer's Advanced Course

search military schools

Military Occupational Specialties

13A search MOS codes

Start a new candidate search **Advanced Search**

Keywords: technician Location: Houston, TX

Keyword Search Tips Example: "Cincinnati, OH" or "455140"

Distance: 30 miles

Search

Local, National, Global and Remote Opportunities

Find your next opportunity by searching via your MOS, NEC or Keyword

[Tips](#)
[Job Search Tips Video](#)
50 miles

16A job listings in Norfolk, VA, USA for veterans

Found 51 jobs

Refine your search

Category

- Management/Supervision (3)
- Government/Public Sector (2)
- Operations (2)
- IT Systems Analysis (13)
- Security (1)

SHOW MORE

Organization

- Public Consulting Group, Inc. (5)
- General Dynamics (4)
- Exalon Corporation (4)
- Cotiviti (3)
- Military Sealift Command (2)

SHOW MORE

City

- Norfolk, VA (3)
- Newport News, VA (2)
- Hampton, VA (2)
- Chesapeake, VA (1)
- Smithfield, VA (1)

3rd Officer

Military Sealift Command | Norfolk, VA

8 days ago

Maintains a proper lookout and an accurate ship's position at all times while on watch. Provides the Master information immediately about ship's position, course, and speed, using any and all means available. Adheres to the Collision Regulations (...)

Manager, Program/Project III

General Dynamics | Norfolk, VA

4 months ago

We are GDIT. The people supporting some of the most complex government, defense, and intelligence projects across the country. We deliver. Bringing the expertise needed to understand and advance critical missions. We transform. Shifting the ways c...

Program Analyst

General Dynamics | Chesapeake, VA

1 day ago

We are looking for a Program Analyst to support and advise the Program Manager in planning, managing, and evaluating programs, operations, and processes. The Program Manager's responsibilities include conducting research, analyzing complex data se...

Upcoming Career Fairs for Veterans

- Hampton Veterans Job Fair February 2, 2023
- Greater Washington DC Area Veterans Job Fair March 30, 2023
- Job Fair at Naval Station Norfolk May 4, 2023
- Eastern Region Virtual Career Fair for Veterans February 7, 2023

See all career fairs for veterans



In-Person & Virtual Hiring Events | Prep Webinars

Why Attend A RecruitMilitary Job Fair?

They work
110,000+ OFFERS MADE

They're efficient
MEET 50+ COMPANIES

They provide
GREAT NETWORKING

Since 2006 RecruitMilitary has ...

Held
1,659 Events
in 100+ cities

With
71,173 Exhibitors
from 1,500+ industries

For
808,732 Veterans
from all service branches

EVENT-TO-HIRE WEBINARS

Here at RecruitMilitary, we want to provide you with a holistic approach to your job search and equip you with these additional tools to be successful in your journey.

RecruitMilitary is now offering two live webinars that will provide best practices and knowledge to network more effectively at our hiring events and get your resume noticed by employers.

EVENT PREP BEST PRACTICES

This discussion provides professional guidance on what to expect at a RecruitMilitary Hiring Event. Topics include making a great first impression, crafting your elevator pitch, effective networking, follow-up tips, and more.



FAQS:

Q: What do I need to do in order to attend the event?
A: Register prior to attending, or we can register you on-site.

RESUME ESSENTIALS AND REVIEW

This webinar provides professional guidance through actionable tips and feedback. Enhance your resume and connect with a subject matter expert who will answer your questions live to help you create a top-notch resume.

These sessions run from 12pm-1:00pm EST and for evening sessions- 7pm EST

FEBRUARY

- February 13th, 2023
- February 13th (PM session), 2023
- February 27th, 2023

MARCH

- March 13th, 2023
- March 13th (PM session), 2023

IDA V | **RECRUIT MILITARY**

National Virtual Career Fair for Veterans

REGISTER

March 14, 2023
12:00 PM - 4:00 PM EST

EXHIBITOR REGISTRATION

Online recruiting event open to all US military, veterans and their spouses seeking new careers.

DOWNLOAD ATTENDEE FLYER

Online Virtual Hiring Event

52 Registered Exhibitors

Corporate Sponsors

Announce Your Presence in the Workforce



YOUR POST MILITARY CAREER STARTS HERE.
recruitmilitary.com

RECRUIT  MILITARY®



MISSION

UNIT

SUPPORT

Military Life



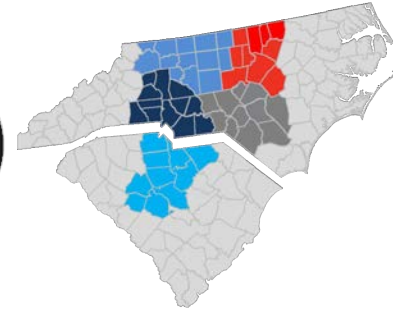
How to "Bridge" the Transition Hurdle?

PURPOSE

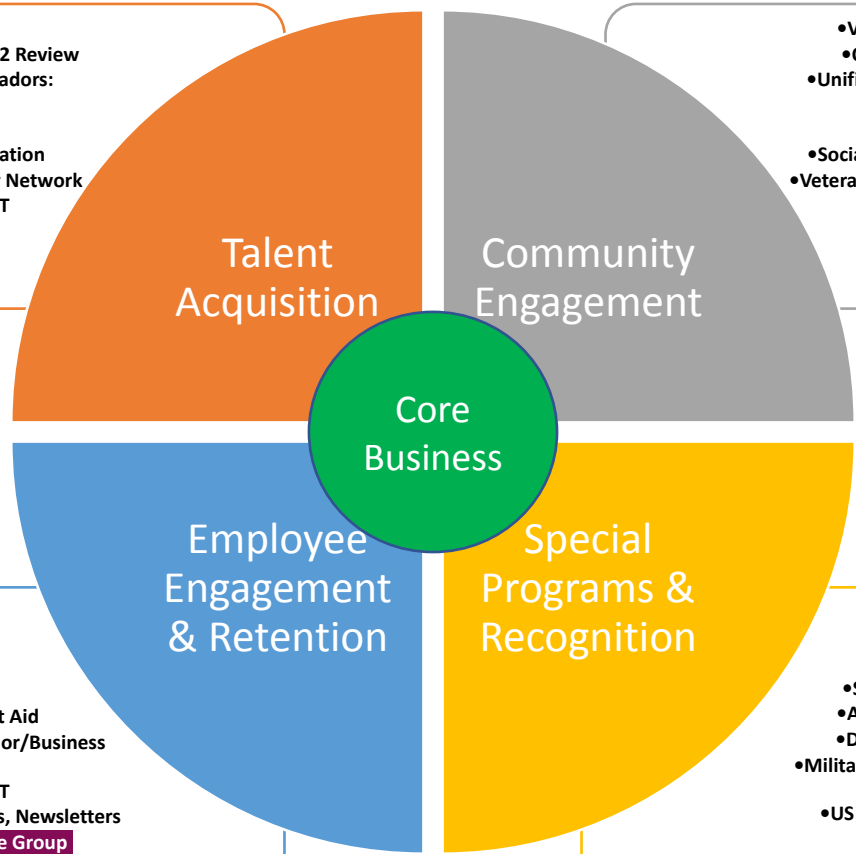
CONNECTION

CARE

Civilian Life



Veteran Ready Employer Framework



- Resume Review
- DD214/NGBForm22 Review
- Recruiting Ambassadors: TAP/ACAP
- Tax Incentives
- Hiring Leader Education
- Hiring Fairs/Career Network
- Apprenticeship/OJT
- Skill Bridge

- Volunteer Opportunities
- Corporate Engagements
- Unified community projects (with other BRGs)
 - Event planning
- Social Enrichment functions
- Veteran Service Organizations

- Demographics
- Pulse Survey
- Mental Health First Aid
- Mentor/Ambassador/Business Buddies
- Apprenticeship/OJT
- Celebrations, Cards, Newsletters
- Employee Resource Group
- Social Determinants of Health

- Specialized programs
- Awards opportunities
- DoD Freedom Awards
- Military Friendly Employer Awards
- US DOL VETS Medallion
 - VET Index
 - Forbes List

www.veteransbridgehome.org

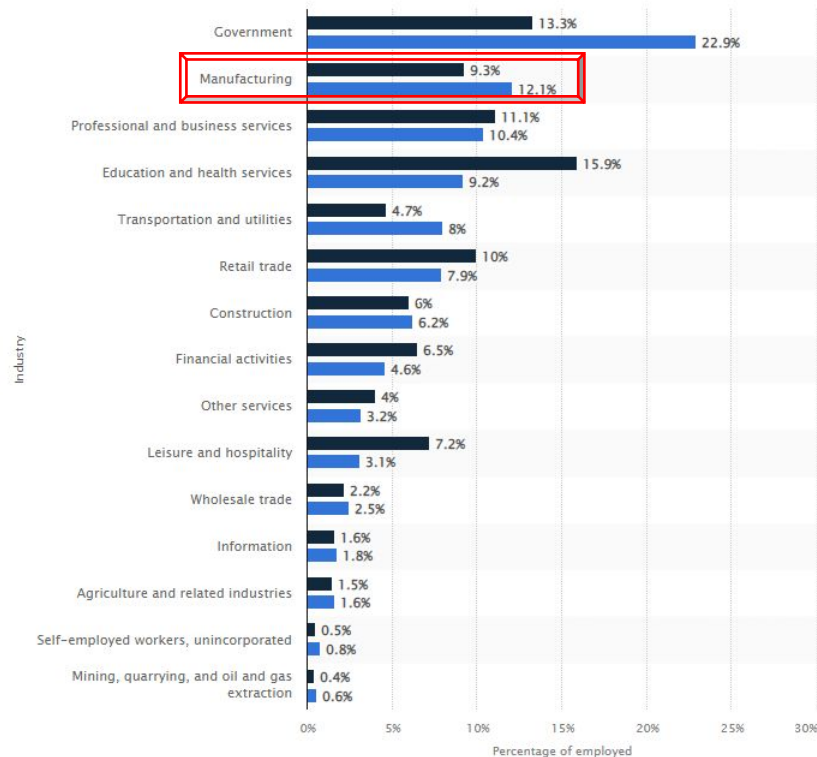


Veteran Data

- 200K Military members transition annually
- 2.5% Veteran Unemployment (Mar 2023 USBLS)

Veteran Employment – Employer Incentives

- Work Opportunity Tax Credit
- Apprenticeship programs
- DoD Skill Bridge Program
- VA Special Employer Incentive Programs
- Manufacturing Institute Heroes MAKE America
- Heroes CONNECT: Military to Manufacturing



2023 Military Friendly Employers (Manufacturing)



- Rankings are based on a 150+ question survey completed by employers across the nation
- Additional assessments for military-veteran employer awards/recognition: US DOL Hires Vets Medallion Award, Best For Vets recognition, Forbes Best Employers for Veterans, Hiring Our Heroes, VETS Indexes
- Department of Defense ESGR Freedom Award North Carolina winners: Aerodyn Wind Tunnel, Bank of America, Atrium Health, DH Griffin Wrecking, Duke Energy, East Carolina University, FMI Corp, Food Lion, Lowe's, NuCor Corp, Skyline Membership Corp, TCDI, The Independence Fund, The Steel Network, Wells Fargo, WombleCarlyleSandridgeRice, Zapata

Manufacturing Company Name	Company Size	Ranking
<u>The Boeing Company</u>	\$5B+	Top 10
<u>Builders FirstSource</u>	\$5B+	Silver
<u>Tokyo Electron</u>	\$5B+	Silver
<u>ADM</u>	\$5B+	Bronze
<u>Ashley Furniture Industries</u>	\$5B+	Bronze
<u>Cummins, Inc.</u>	\$5B+	Bronze
<u>Eastman</u>	\$5B+	Bronze
<u>Micron Technology</u>	\$5B+	Bronze
<u>Schneider Electric</u>	\$5B+	Bronze
<u>Trane Technologies</u>	\$5B+	Bronze
<u>onsemi</u>	\$5B+	Bronze
<u>Airgas, an Air Liquide Company</u>	\$1-5B	Gold
<u>Schnitzer Steel Industries, Inc.</u>	\$1-5B	Gold
<u>Worthington Industries</u>	\$1-5B	Gold
<u>ClarkDietrich Building Systems</u>	\$1-5B	Silver
<u>MSC Industrial Supply</u>	\$1-5B	Silver
<u>Crown Equipment Corporation</u>	\$1-5B	Bronze
<u>Vontier</u>	\$1-5B	Bronze
<u>Stryten Energy</u>	<\$1B	Gold
<u>Safespill</u>	<\$1B	Gold
<u>Advanced Technology Services (ATS)</u>	<\$1B	Silver
<u>Calgon Carbon Corporation</u>	<\$1B	Silver
<u>Ateios Systems</u>	<\$1B	Bronze
<u>Leadec Corp</u>	<\$1B	Bronze
<u>TurbineAero, Inc.</u>	<\$1B	Bronze

"Growing North Carolina Manufacturing Through Defense Contracting"



Panel Moderator:
Michael Mullins
Director, Defense Industry
Initiatives
NC State University
Industry Expansion
Solutions (IES)



James Freeman
Founder and President,
Emerging Technology
Institute (ETI)



Ashley Bullock
Government Sales Manager
Raeford Uniforms and
Product Procurement
Manager, Burlington
Industries/Elevate Textiles

An American flag is partially visible on the left side of the slide, showing the stars and stripes.

Closing Remarks



Brian Norris

Vice President, Strategic
Initiatives for Business High
Point-Chamber of
Commerce

**BUSINESS
HIGH POINT**
CHAMBER OF COMMERCE

An American flag is partially visible on the left side of the image, showing the blue field with white stars and the red and white stripes. The background is a dark, textured surface.

*Thank You
Partners and Guests*