

Virginia Tech Center for Economic and Community Engagement

2024-2025 Annual Report



**New River/Mount Rogers Workforce
Development Board**
Addressing rural workforce challenges
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Shenandoah Valley Battlefields Foundation
Studying the impact of battlefield tourism
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A Note to the Reader

The Center for Economic and Community Engagement (CECE), part of Outreach and International Affairs, is pleased to have been a part of more than 30 projects and programs over the last year, garnering more than \$563,722 in new funds to support this work.

We serve as a trusted source of economic and community research providing strategic planning, feasibility studies, and economic impact and market analysis for community and university partners working at the national, state, regional, and local levels. The center also translates work into published scholarship, engages in academic and professional service, and provides opportunities for dialogue and learning, advancing important discussions of policy and practice.

As described in more detail in this year's annual report, our work includes:

- our research program, delivering projects and bringing together assets and opportunities in community; innovation and entrepreneurship; talent and workforce development; and technology
- our engagement in the GO Virginia program, a statewide effort that encourages Virginia's economic development through region-led efforts to grow and diversify the economy
- our role in another statewide effort, the Virginia Talent + Opportunity Partnership, supporting regional internship collaboratives to improve access to work-based learning for students
- our service as a U.S. Economic Development Administration University Center Program, aligning university assets and supporting delivery of CECE services to economically challenged regions of Virginia, and
- the Vibrant Virginia program, a university initiative supporting collaboration and co-investment with community partners on problem-solving and place-based

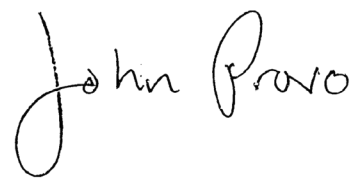
collaborations.

The CECE team is grateful for the trust all our partners and funders named above place in us to join with them in this good work.

I'd like to add my personal thanks and call your attention to our advisory board members, who are named in full on the next page. Their collective and individual insights over the last year were critical to our success. Further, special thanks are due to Guru Ghosh, vice president for Outreach and International Affairs, and Susan Short, senior associate vice president for engagement, for their support.

Last but not least, I am both pleased and proud to come to work at CECE every day with the faculty, staff, and students, also named on the next page. Without their commitment, creativity, and care for this work, none of what you see in this report would be possible.

Regards,



John Provo
Executive Director

OIA Leadership

Guru Ghosh • Vice President for Outreach and International Affairs, Virginia Tech

Susan E. Short • Senior Associate Vice President for Engagement, Virginia Tech

Center Advisory Board

Guru Ghosh • *Chair*, Vice President for Outreach and International Affairs, Virginia Tech

Laura Belmonte • Dean of College of Liberal Arts and Human Sciences, Virginia Tech

John Capps • President, Central Virginia Community College

David Devan • Vice President for Economic Competitiveness, Virginia Economic Development Partnership

Kiyah Duffey • Director of Strategic Initiatives for Fralin Life Sciences Institute, Virginia Tech

Sara Dunnigan • Deputy Director of GO Virginia and Economic Development, Virginia Department of Housing and Community Development (DHCD)

Blair Durham • President and Co-Founder, Black BRAND, Hampton Roads Black Chamber of Commerce

Omar Faison • Associate Vice President for Research, Economic Development, and Graduate Studies, Virginia State University

Leah Fremouw • Chief Executive Officer, Bridging Virginia

Michael Gutter • Director, Virginia Cooperative Extension

Steve Harrison • Vice President of Business Intelligence & Communications, Hampton Roads Alliance and Immediate Past President, Virginia Economic Developers Association

Conaway Haskins • Vice President for Entrepreneurial Ecosystems, Virginia Innovation Partnership Corporation

Keith Holland • Associate Vice President for Research and Economic Development, James Madison University

Erik Johnston • President and CEO, Virginia Community Action Partnership

Tracy Krauchun • Director of Foundation Relations for LINK, Virginia Tech

Elizabeth McClanahan • Chief Executive Officer, Virginia Tech Foundation

Marc Nelson • Director of Economic Development, City of Roanoke

Karen Roberto • Executive Director at the Institute for Society, Culture, and Environment, Virginia Tech

Susan E. Short • Senior Associate Vice President for Engagement, Virginia Tech

Lauren Stuhldreher • Economic Development Representative for Virginia, U.S. Department of Commerce, Economic Development Administration

Pamela VandeVord, N. Waldo Harrison Professor and Director of Research & Scholarship, Virginia Tech Institute for Critical Technology and Applied Science

Christina Winn • Executive Director, Prince William County Department of Economic Development

Center Faculty and Staff

Dylan Andrews • Economic Development Specialist

Emma Brown Carroll • Research Associate

Holly Carroll • Business Manager

Margaret Cowell • Associate Professor of Urban Affairs and Planning, Affiliated Faculty

Samantha Dunn • Student Researcher

Kim Gray • Office Assistant

Will Heltzel • Student Researcher

Bryan Jones • Economic Development Specialist

Rachel Jones • GO Virginia Region 2 Program Coordinator

Julia Kell • Communications Specialist

Katie Lee • Student Researcher

Sarah Lyon-Hill • Director for Research Development

Makenzie Mann • Student Researcher

Sadhana Manthapuri • Student Researcher

Allison Mays • Director of the Southwest Center

Afroze Mohammed • Associate Director of Strategic Alliances

Ashley Posthumus • Economic Development Specialist

John Provo • Executive Director

John Register • Project Coordinator

Jemma Sabokrouh • Program Manager, GO Virginia Region 2 and Region 2 Internship Collaborative

Scott Tate • Associate Director for Community Innovations

Elli Travis • Associate Director for Impact and Evaluation

Mallory Tuttle • Associate Director of the Newport News Center

Brenna Valle • V-TOP Region 2 Internship Collaborative Program Coordinator

Doris Waddell • Administrative Assistant

Emmalee Wagner • Project Coordinator, Talent Pathways Initiative

Cover photo by Julia Kell for Virginia Tech.



Executive Director John Provo speaks at a CECE advisory board meeting in October 2024. Photo by Julia Kell for Virginia Tech.



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「Economic development specialist Ashley Posthumus speaks at a strategic planning session for the New River/Mount Rogers Workforce Development Board. Photo by Julia Kell for Virginia Tech.」

Highlights

This year, CECE enhanced Virginia Tech's impact across the state, working on regional transformation and building on the university's place as a nationally and internationally significant hub in key industries. The center also advanced the university's land-grant mission, finding economic opportunities through partnerships between faculty and communities. The center further connected faculty and students with industry for a range of experiential learning opportunities, internships, and other industry partnerships, shaping economic and workforce development programs and enhancing student success at all levels.

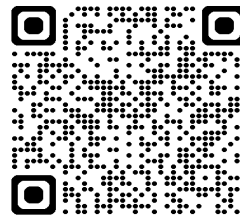


┐ Economic development specialist Dylan Andrews and director of the Southwest Center, Allison Mays, walk on the Virginia Creeper Trail in Damascus, Virginia. Photo by Julia Kell for Virginia Tech. ┘

The center's work was supported by \$563,722 in new funding. CECE also continued work on almost \$3 million in projects initiated in 2024. Significant activity was focused on several large multiyear planning projects and applying for \$35 million-\$70 million in federal and state funding for fiscal year 2026.

Where Was CECE This Year?

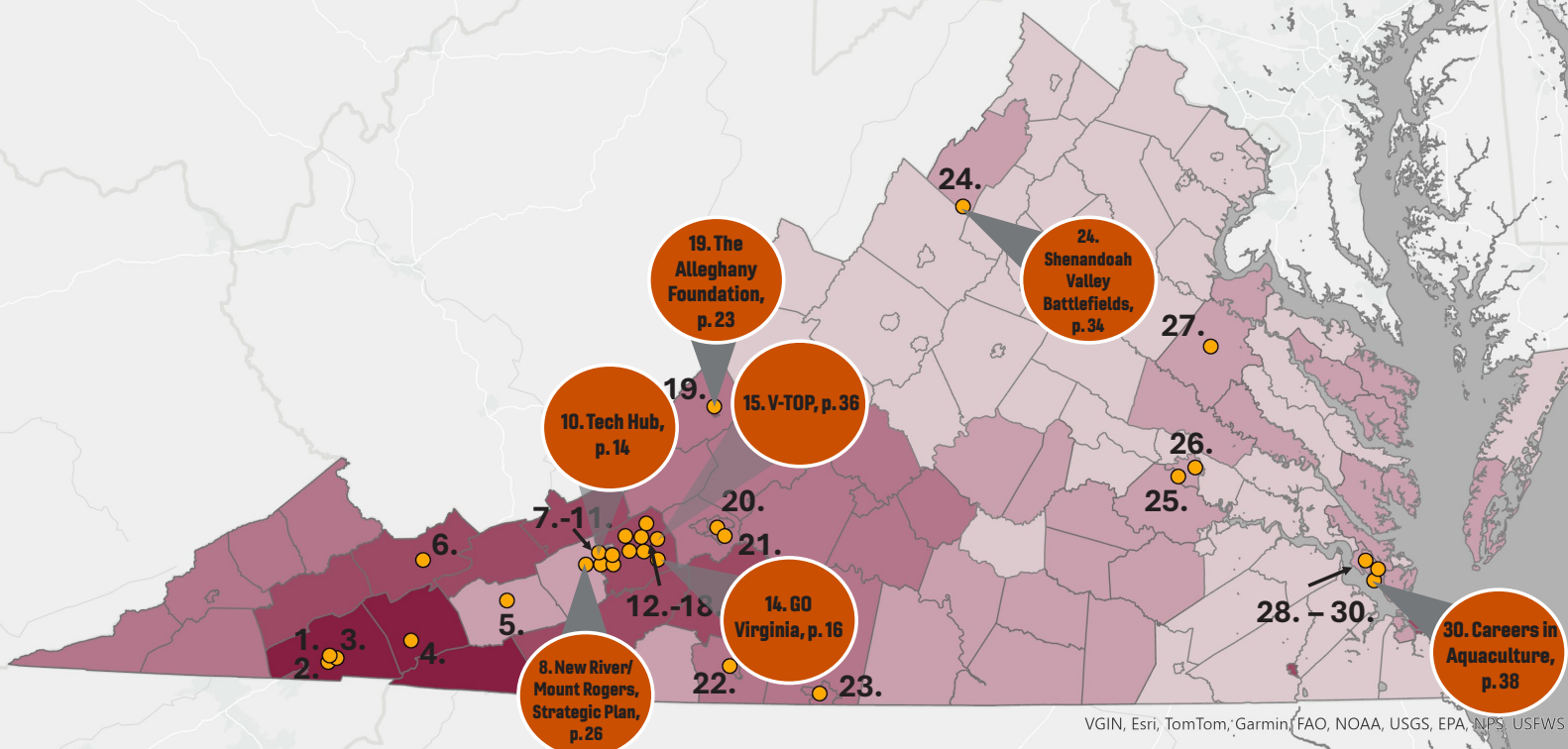
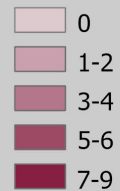
Want to learn more about our work?
Visit our project database:
cece.vt.edu/projects.html



Legend

● CECE Client Location

Number of Projects



VGIN, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS

1. Wellspring Foundation; Vibrant Virginia Strategic Work Plan for Diversifying Outdoor Tourism; Damascus, Virginia
2. Wellspring Foundation; Economic Impact Study for the Creeper Trail; Southwest Virginia
3. Wellspring Foundation; K-12 Teacher and School Needs Assessment; Southwest Virginia
4. Octagon House; Feasibility Study; Smyth County
5. Project13Three; Assessment of Recidivism & Substance Use Disorder Needs; Tazewell County
6. Mount Rogers Regional Partnership; Career and Technical Education Technology Opportunity and Action Plan
7. New River Mount Rogers Workforce Development Board; Ongoing Data Assistance
8. New River Mount Rogers Workforce Development Board; Strategic Plan Update
9. New River Mount Rogers Workforce Development Board; Southwest Virginia Childcare Workforce Development Evaluation
10. New River Valley Regional Commission, Additive Manufacturing & Advanced Materials Tech Hub
11. New River Valley Regional Commission; GO Virginia New River Valley Materials & Machinery Cluster Scale-Up
12. Virginia Tech Electrical and Computer Engineering; Major Design Experience
13. GO Virginia; Talent Pathway Initiative
14. GO Virginia Region 2; Support Organization Services
15. Virginia State Council of Higher Education, V-TOP Region 2 Internship Collaborative
16. Virginia Tech Center for Food Systems and Community Transformation; Cultivating Rural Vitality in Virginia Food Systems *
17. Virginia Cooperative Extension; Community Development Capacity Building *
18. Center for Space Science and Engineering Research Industry Relationships and Workforce Development *
19. The Alleghany Foundation; Vibrant Virginia Economic Opportunity Scan and Strategic Work Plan; Covington, Virginia
20. Outreach and International Affairs; Vibrant Virginia Housing Security & Landscape Assessment; Roanoke-Alleghany MSA
21. Roanoke Blacksburg Innovation Alliance; Strategic Services
22. Vibrant Virginia; Youth Flourishing; Martinsville, Virginia
23. Center for Early Success; Regional Childcare Feasibility

Study and Business Plan Assessment; Danville, Virginia

24. Shenandoah Valley Battlefields Foundation; Economic Impact and Regional Baseline; New Market Virginia

25. Chesterfield Economic Development; Best Practices and Benchmarking Research

26. Tobacco Region Revitalization Commission; Strategic Planning and Consultation; Southwest and Southern Virginia

27. Town of Bowling Green; Impact Analysis Services; Caroline County

28. GO Virginia; Hydrogen Tech Center; Newport News

29. Jefferson Science Associates; Economic and Community Impacts; Newport News

30. GO Virginia Region 5 and 6, Promoting Careers in Aquaculture 2.0, Hampton Roads, Middle Peninsula, Northern Neck, and the Eastern Shore

*Statewide Projects

Multistate Projects and Projects Outside of Virginia

American Farmland Trust (Washington D.C.); Advisory Services; Virginia

Appalachian Regional Commission ARISE Planning Grant, Setting Appalachia's Workforce on Track to Adapt to the Changing Construction Landscape, Kentucky, Tennessee, North Carolina, Ohio, Pennsylvania, Virginia, and West Virginia

Chimes International Limited; Cost-Benefit Analysis of AbilityOne; Greater Washington D.C.

SE Group; Evaluation of Appalachian Regional Commission Tourism and Outdoor Grants; Appalachia

Whitewater Center; Economic Impact and Contribution Study; Charlotte, North Carolina

National Science Foundation EPIIC: Evaluation Services for LIGHT UP: Leveraging Innovation to Grow High Tech and University Partnerships from SUNY Canton, Kean University, Marymount University, Bowie State, Rowan College, and Alvernia University

University Economic Development Association, U.S. Economic Development Administration, University Center Cohort Program (National)



Regional Transformation

Virginia and Virginia Tech are home to unique assets for innovation in advanced manufacturing and materials. The center, through grants from the U.S. Economic Development Administration, Appalachian Regional Commission, and the state's GO Virginia program, has built a consortium to tap that potential and advance positive regional transformation, securing opportunities for growth in industries including defense, ground transportation, energy and power systems, biomanufacturing, and smart industrialized construction.

These consortia have already supported several projects funding workforce development and technology adoption by small businesses across the Roanoke and New River Valleys, Southern Virginia, and Southwest Virginia. They are working to secure several large federal and state opportunities in the next year.



The Tech Hub consortium got the opportunity to visit the Learning Factory, directed by Matt Earnest, Virginia Tech associate professor of practice in Industrial and Systems Engineering. Photo by Julia Kell for Virginia Tech.

U.S. EDA University Center

Building capacity and enhancing alignment between higher education and the economic development community is the core mission of CECE's university center.



Christopher Williams, Virginia Tech L.S. Randolph professor of Mechanical Engineering, took Tech Hub consortium members on a tour of the Future of Manufacturing Lab. Photo by Julia Kell for Virginia Tech.

CECE, in partnership with Virginia State University (VSU), leads a U.S. Economic Development Administration (EDA) University Center program to advance regional economic resilience in Virginia.

The University Center is focused on western, southern, and eastern Virginia.

The University Center's work includes:

- linking companies to university resources;
- connecting university faculty to private sector needs;
- facilitating and supporting high-potential collaborations;
- conducting applied research and analysis projects;
- and leading new programs and initiatives.

UNIVERSITY CENTER PROJECTS

The Additive Manufacturing and Advanced Materials Tech Hub

CECE is part of an engineering consortium led by the New River Valley Regional Commission that received a strategy development grant of \$500,000 under the EDA's Tech Hubs program. The project was one of two Virginia winners among 31 tech hubs and 29 strategy development grant recipients nationwide.

Child Care Needs Assessment

Virginia's economy is feeling the pinch from a widespread lack of affordable child care options, forcing many parents to reduce their working hours, pass up promotions, or leave the

workforce entirely. The impact is particularly severe in the Danville-Pittsylvania County region, where over half of child care centers report waitlists. The Partnership for Prosperity, a civic think tank serving the Danville and Pittsylvania County Region, reached out to CECE to find ways to address child care gaps in the area.

Emily Mayo, Damascus Trail Center supervisor (at left), speaks about the impact of Hurricane Helene with Allison Mays and Dylan Andrews at the Trail Center in Damascus, Virginia. Photo by Julia Kell for Virginia Tech.



SPOTLIGHT

Hurricane Helene's damage to the Virginia Creeper Trail has impacted the livelihoods of people who live and work in the area.

In collaboration with Allison Mays, director of the Virginia Tech Southwest Center, CECE worked with the Wellspring Foundation of Southwest Virginia to understand how the damage sustained after Hurricane Helene will affect Damascus and developed ideas for diversifying their economy.

Shaping the Future of Manufacturing

By Julia Kell

Members of the Additive Manufacturing and Advanced Materials (AM²) Tech Hub gathered at IperionX in South Boston, Virginia to discuss their 10-year roadmap and annual conference.

The Tech Hub includes a consortium of leaders stretching across industry, government, and education sectors. The team is focused on developing a roadmap for additive manufacturing and advanced materials in the New River Valley and Southern Virginia.

Along with funding from the U.S. Economic Development Administration, the New River Valley Regional commission and CECE secured additional funding support for the project through the state's GO Virginia program.

Additive manufacturing uses 3-D printing to create products, including tools and equipment parts. This more sustainable way of manufacturing is expected to grow from \$16.83 billion (2022) to \$44.03 billion (2027) – an average annual growth rate of 21%.

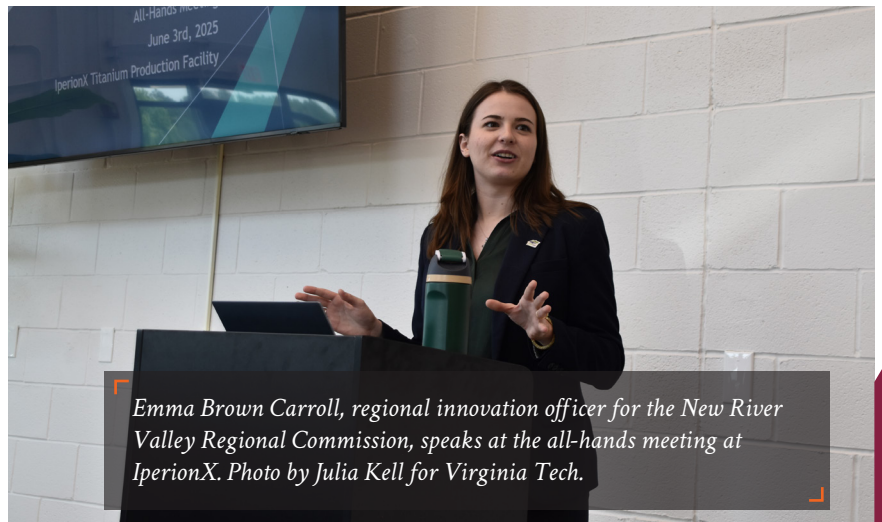
“Some of the impetus for this program and for this consortium was to tell our story,” said Sarah Lyon-Hill, director for research development at the Center for Economic and Community Engagement. “We want to talk about what’s going on in the New River Valley and Southern Virginia, getting across that we’re an amazing region for manufacturing, and we’re poised to grow.”

The June meeting included a tour of IperionX, a titanium metal and critical materials company. Titanium is essential for advanced U.S. industries including space, aerospace, defense, consumer electronics, hydrogen, electric vehicles, and additive

manufacturing. The titanium supply chain is currently high cost and unsustainable, but IperionX creates high-performance titanium products from titanium minerals or scrap titanium, offering a solution that is cheaper, takes less energy, and produces fewer carbon emissions.

The meeting also included planning for the AM² Tech Hub’s first annual conference. The first day of the conference will focus on AM² technologies. On the second day, a defense industrial base manufacturing workforce workshop will take place. On the final day, participants will have the opportunity to tour Virginia Tech research labs.

“The goals of the conference are to showcase regional manufacturing strengths and opportunities and to connect manufacturers with resources for adopting additive manufacturing and advanced materials technologies,” said Emma Carroll, regional innovation officer for the New River Valley Regional Commission. “Our aim is to keep manufacturers in mind, focusing on real-world experience, practical insights, and topics that matter across AM² industries and supply chains.”



Emma Brown Carroll, regional innovation officer for the New River Valley Regional Commission, speaks at the all-hands meeting at IperionX. Photo by Julia Kell for Virginia Tech.



We want to tell our story.
We're an amazing region for
manufacturing, and we're poised
to grow.

Sarah Lyon-Hill,
Director for Research Development

Members of the AM² Tech Hub consortium pose for a picture in front of IperionX in South Boston, Virginia. Photo by Julia Kell for Virginia Tech.



GO Virginia

GO Virginia is a statewide program focused on encouraging economic growth through the creation of high-wage jobs. CECE serves as the regional support organization.



(From left) Marc Nelson, director of economic development for the City of Roanoke; Erin Burcham, CEO of the Roanoke Blacksburg Innovation Alliance; Raymond Smoot, GO Virginia Region 2 council member and founding chair; and William E. Amos, chair of the Region 2 Council, at the Region 2 Celebrate Success Event at Virginia Western Community College in Roanoke. Photo by Julia Kell for Virginia Tech.

GO Virginia Region 2 (New River Valley-Lynchburg-Roanoke/Alleghany)

In early 2025, GO Virginia Region 2 staff released the final report for the Talent Pathways Initiative, which provides a deeper dive into two of Region 2's largest and fastest-growing industry clusters: Life Sciences & Biotechnology and Transportation & Autonomous Manufacturing. The report's information on talent needs in these two clusters shaped the region's 2025 Growth and Diversification plan update.

"These key industries are ripe for sustained transformational growth, provided the region can meet its evolving talent development, retention, and attraction needs," said Emmalee Wagner, who served as project coordinator for the Talent Pathways Initiative.

Over the course of the one-year project, the team completed three goals:

- Collaborate with existing industry-led coalitions, the Blue Ridge Partnership for Health Science Careers and the Additive Manufacturing and Advanced Materials Tech Hub
- Gather actionable regional data for high-demand careers
- Create a prioritized plan for implementation projects for talent pathways

The report has already guided applicants for GO Virginia talent-based grants and provided valuable insights to the Region 2 Council into workforce challenges and opportunities in the region.

**Read the
report:**



Emmalee Wagner presents findings from the Talent Pathways Initiative to the GO Virginia Region 2 Council. Photo by Julia Kell for Virginia Tech.

55

**total projects funded by GO Virginia
Region 2 Council (41 projects completed)**

\$17.5 million

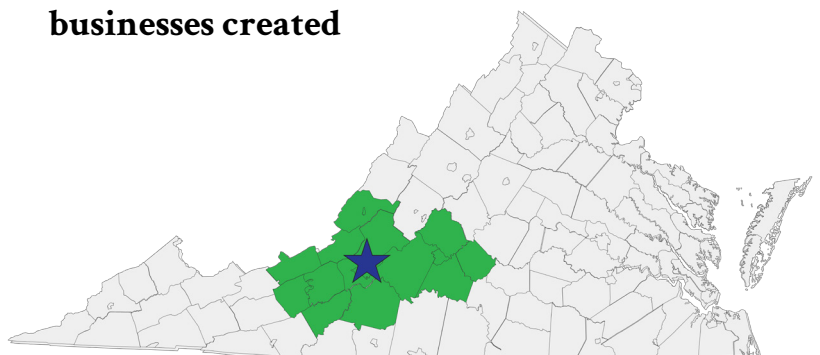
total funds allocated

892

jobs created to date

54

businesses created





(From left) Tony Seupaul, executive vice president and chief physician executive of Carilion Clinic; Michael Friedlander, executive director of the Fralin Biomedical Research Institute at VTC and Virginia Tech vice president for health sciences and technology; Erin Burcham, CEO of the Roanoke Blacksburg Innovation Alliance; and Sarah Parker, chair of health systems and implementation science of the Virginia Tech Carilion School of Medicine and senior advisor of human factors and simulation at Carilion Clinic. Photo by Clayton Metz for Virginia Tech.

Creating a Hub for Biotech Innovation

By Diane Deffenbaugh

Virginia Tech will play a central role in an ambitious statewide initiative to leverage strengths and partnerships across three regions in order to accelerate biotechnology innovation and advance the commonwealth's position as a life sciences leader.

GO Virginia has approved \$14.3 million to support Project VITAL: Virginia Innovations and Technology Advancements in Life Sciences, which will establish new research cores, expand workforce development programs, and create a collaborative network connecting Virginia Tech and other academic institutions with industry partners across the commonwealth's biotechnology corridor.

This initiative builds upon Gov. Glenn Youngkin's broader \$90 million investment in biotechnology advancement, which included \$27 million for the Fralin Biomedical Research Institute at VTC to expand clinical research.

The Roanoke Blacksburg Innovation Alliance (RBIA), an organization focused on growing the region's technology and biotechnology sectors, will collaborate with Virginia Tech and Carilion Clinic to lead the Region 2 effort. Project VITAL will direct \$4.9 million to strengthen the region's position at the forefront of fields such as medical devices, oncology therapeutic research, and neurotechnology.

The funding will lend crucial enhancements to strengthen the innovation corridor in Southwest Virginia, including through a proof-of-concept program and support for innovation fellowships facilitated through LAUNCH: Center for New Ventures at Virginia Tech, both of which are specifically designed to encourage biomedical startups out of the university.

“At Virginia Tech, enterprising faculty and students are making discoveries and developing technology that offer foundations for the nation’s next great companies,” said Brandy Salmon, associate vice president for innovation and partnerships. “This program offers what is needed to ensure that the innovations in the university’s labs are moved into the commercial sector for human and economic impact.”

Virginia Western Community College, the Roanoke Blacksburg Technology Council, and the Blue Ridge Partnership Health Science Careers will work to boost the biotechnology talent pipeline in the region. GO Virginia Region 2 includes the cities of Covington, Lynchburg, Radford, Roanoke, and Salem and the counties of Alleghany, Amherst, Appomattox, Bedford, Botetourt, Campbell, Craig, Floyd, Franklin, Giles, Montgomery, Pulaski, and Roanoke.

Virginia Commonwealth University and Activation Capital will lead similar efforts in Region 4 around Richmond/Petersburg, and the University of Virginia and CvilleBioHub will lead Region 9 in Charlottesville.

Project VITAL aims to create 1,315 jobs over five years and lead to a total economic impact of \$40.8 million.

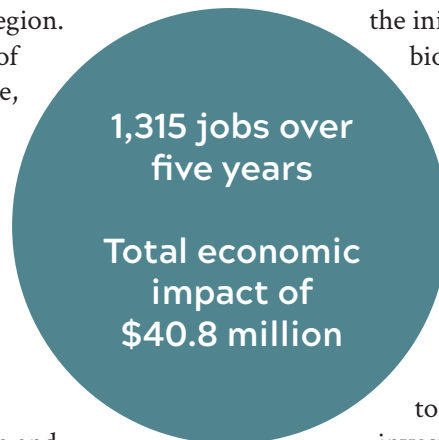
“The collaboration between the regions exemplifies the power of partnership in driving job creation and fostering innovation,” said William E. Amos, chairman of GO Virginia Region 2. “This award is a testament to public-private partnerships’ impact on our communities, the region, and the Commonwealth of Virginia.”

Erin Burcham, CEO of the Roanoke Blacksburg Innovation Alliance, said the region is hyperfocused on building out the foundation for biotech to flourish. “This investment represents a pivotal moment for Virginia’s biotechnology ecosystem,” she said. “Project VITAL will provide emerging companies in this region with access to advanced laboratory

facilities, shared equipment, and specialized programming designed to support their growth and success. Funds will support talent recruitment, capital attraction, new startup programming, branding for the sector, and operations to maximize Virginia’s economic potential in biosciences.”

Carilion Clinic Innovation Director Aileen Helsel said Carilion’s innovation and human factors teams are excited to be partners in broadening the region’s biotech sector. “Carilion will transform GO Virginia’s support into building resources that guide medical device startups as they navigate federal regulations with the help of streamlined documentation and risk management and device testing and validation, making it possible to move the devices closer to helping us care for our patients,” Helsel said.

Michael Friedlander, vice president for health sciences and technology at Virginia Tech and executive director of the Fralin Biomedical Research Institute at VTC, emphasized the initiative’s significance for advancing biomedical innovation.



“It has been very gratifying to see the substantial growth and cooperation between diverse organizations that have occurred in GO Virginia Region 2 over the last decade in the life and health sciences innovation and commercialization sectors,” Friedlander said. “The region has come a long way, and is now well positioned to become a true destination for talent and investment with all the necessary elements in

place. From a globally recognized scientific-discovery base to a thriving health care enterprise and a committed innovation and business network, working together with local and state government and organizations such as RBIA to convene the stakeholders, Project VITAL will leverage all the elements of the biotechnology ecosystem to make the whole so much greater than the sum of its parts.”

“Project VITAL exemplifies our mission of connecting university expertise with community needs,” John Provo, executive director of the Center for Economic and Community Engagement said. “By bridging the gap between Virginia Tech’s research capabilities and regional economic development, we’re creating pathways for innovation that generate high-wage jobs while addressing critical health care challenges. This initiative demonstrates how strategic partnerships can transform scientific discoveries into tangible economic opportunities for Virginia.”

Community Engagement

Virginia Tech is guided by its land-grant mission to address local, national, and global needs. The center follows this mission and the university motto, *Ut Prosim* (That I May Serve), in its collaboration with communities.

This year, CECE had international visitors from Italy who learned how the center provides university resources to people across Virginia.

The center also extended several existing partnerships and started new engagements with organizations focused on expanding economic opportunity, including helping a nonprofit in Tazewell County connect assets for recovery and reentry into the workforce.

The center also completed several projects with the Wellspring Foundation, including work with schools in Grayson, Russell, Smyth, and Washington counties on the recruitment and retaining of K-12 teachers.

Through the Vibrant Virginia partnership between Outreach and International Affairs and Virginia Cooperative Extension and its small grant program, faculty from the Colleges of Engineering, Liberal Arts and Human Sciences, and Architecture, Arts, and Design committed to community projects around Virginia.

Center faculty worked to see them through successful completion and assist in developing opportunities for follow-on funding.



(From left) Principal Allyson Willis speaks with economic development specialist Ashley Posthumus, graduate assistant Makenzie Mann, and director of the Southwest Center Allison Mays during their visit to Watauga Elementary School in Abingdon. Photo by Julia Kell for Virginia Tech.

Vibrant Virginia

Virginia Tech is committed to helping bridge divides and advance broad prosperity across Virginia. To champion and guide this work, the university established the Council on Vibrant Virginia.



CECE hosted a community input session with The Alleghany Foundation to gather feedback for a strategic plan. (From left: Scott Tate, Mary Fant Donnan, and Dylan Andrews.) Photo by Julia Kell for Virginia Tech.

OUR VISION

Vibrant Virginia's vision is to encourage vibrant and flourishing places in every part of the commonwealth.

The program's activities are distinguished by three key characteristics:

Generative or additive

Rather than duplicating or seeking to replace existing work, the program encourages new activities or helps emerging activities to grow.

Place-specific, pilot-scaled, and possibility-oriented

The program prioritizes community-focused work that pilots or explores a new approach or idea and is solutions-centered and strengths-focused.

Building capacity or knowledge

The program seeks to build knowledge and capacity for communities, researchers, students, and practitioners around community-engaged work that supports more vibrant and thriving communities.



Alleghany County community convening. Photo by Julia Kell for Virginia Tech.

Over the past year, the Vibrant Virginia team worked with The Alleghany Foundation and a regional advisory group on identifying asset-aligned economic opportunities.

Results include sustained collaboration around a strategic road map with prioritized actions to grow local capacity, reduce economic disparity, and strengthen the regional economy.



Route 76, Montgomery-Roanoke county line. Photo by Tom Ewing.

In 2025, the team helped over a dozen faculty explore Vibrant Virginia project ideas and identified four projects for \$10,000 seed funding awards:

- Identifying and reducing barriers to rural Emergency Medical Service (EMS) care delivery in Virginia;
- Facilitating community visioning and planning with Amonate, an unincorporated former coal-company town in Tazewell County;
- Providing STEM kits and decision science instruction through neighborhood outreach to underserved communities in Northern Virginia;
- Supporting the creation of community-focused exhibits and events along Route 76 in Virginia, to promote recreation tourism along a historic cycling route.

Ut Prosim in Action

By Melody Warnick

In the three hours before the official start of the Better Together: Rockin' Food Truck Rodeo in downtown Christiansburg, Elli Travis never stopped moving.

Striding the half-mile stretch of West Main Street along which 21 food trucks were parked, she asked one food truck owner to relocate a noisy generator. She wheeled the trash and recycling bins out of the flow of traffic. She trained beer tent volunteers. And right as the clock struck 3 p.m. and the rodeo opened, Travis got the recalcitrant payment machines at the drinks ticket booth to work.

As the volunteer board president of Downtown Christiansburg Inc. (DCI), Travis and her team had been planning this signature event for a year. Now, on a sunny Saturday in September, it was finally go time.

Since 2013, the food truck rodeo has brought in up to 10,000 attendees a year to nosh on food truck deliciousness — think wood-fired pizza, fresh-squeezed lemonade, mini donuts — and listen to live music and hang out on Christiansburg's Main Street. The event is part of DCI's effort to revitalize the vibrancy and economic health of Christiansburg's downtown core.

"The food truck rodeo brings visibility to downtown, so people know there is potential to invest or locate businesses here," said Travis. "It can be really powerful when there's a positive story about a place, when people say, 'Oh my gosh, this was such a fun event. Let's check out what else is happening downtown.'"

The motto *Ut Prosim* (That I May Serve) was new to Travis when she came to Virginia Tech as a master's degree student, in 2013. But the principle of service was instilled in her as a child in Washington, D.C., where she volunteered with the Girl Scouts and other community organizations.

Volunteering as a grad student became a way for Travis to

meet like-minded friends. She also wanted to apply what she was learning in her day job as the associate director for impact and evaluation for Virginia Tech's Center for Economic and Community Engagement in her own town. "I had this dissonance that I was working in other communities to help improve their social and economic situation, and I wasn't working in my own to help improve mine," she said.

Leading DCI as board president has, in turn, made Travis better at her work. With more hands-on experience with the challenges of revitalizing a place, she's better at suggesting implementable recommendations for other communities.

This year's food truck rodeo was the culmination of six months of collaboration with the Town of Christiansburg, which partnered with DCI on the food truck rodeo, merging it with a popular town concert series called Rockin' Main. "This is something I learned through my Virginia Tech work evaluating partnerships: The best way for two organizations to build trust is to do something successful together, and preferably fun."

By the time the actual event rolled around — DCI's biggest and busiest day of the year — Travis seemed shockingly calm. That's because she'd implemented the kind of capacity-building, distributed leadership model that she'd learned about while studying for her Ph.D. in agricultural, leadership, and community education in the College of Agriculture and Life Sciences. Travis received her Ph.D. in April 2025.

"Last year I was a lot more frantic and stressed at the food truck rodeo because I felt like I had to be the taskmaster and tell everyone what to do," she said. This year, Travis trusted nine DCI board members and 80 volunteers to take ownership of the six-hour event, allowing her to enjoy the bands blasting country songs and rock covers near Franklin Street.

She even got to eat some food truck favorites: vegetarian

tacos from Rock n Roll Diner, empanadas from Empanada Nirvana, and a buffalo chicken pizza cone from The Konez Factory.

Managing a grassroots organization like DCI isn't easy. Residents complain. Change happens slowly. It's comforting for Travis to admire the grant-funded pocket park the organization built outside Great Road Hall on West Main Street, a rare sign of visible progress. On the Saturday of the rodeo, it was blooming with native plants, including hostas from

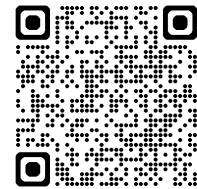
Travis's own garden.

Also comforting: the food truck rodeo itself. "You see all these smiling people," she said. "People are like, 'This is my favorite event of the year.' We have a food truck rodeo couple that met here and got married, and they come every year. So when you hear those stories, that really makes it worth it."



Elli Travis (at left) and Nelson Pantoja share a high-five. Photo by Christina Franusich for Virginia Tech.

To volunteer with Downtown Christiansburg Inc. or learn more about its events, visit www.downtownchristiansburg.org or scan the QR code.



A few hours before the start of the Food Truck Rodeo, Elli Travis surveys the scene. Photo by Christina Franusich for Virginia Tech.



Graduate assistant Makenzie Mann (at left) and economic development specialist Ashley Posthumus (at center) facilitated a strategic planning session for the New River/Mount Rogers Workforce Development Board, led by Marty Holliday (at right). Photo by Julia Kell for Virginia Tech.

Addressing Rural Workforce Challenges

By Julia Kell

When Bryan Jones '23 first sat down to analyze workforce data as a graduate assistant at Virginia Tech's Center for Economic and Community Engagement (CECE), he joined a partnership dating to 2008.

"Working with the New River/Mount Rogers Workforce Development Board really helped my skills in talking to professionals, gathering data, and bringing that all together for a purpose," said Jones, who graduated from the School of Public and International Affairs' 4+1 Master of Urban and Regional Planning accelerated program and served as an economic development specialist at CECE.

This transformation of both students and communities lies at the heart of the center's 16-year-long partnership with the New River/Mount Rogers Workforce Development Board. The board coordinates workforce initiatives to

enable economic growth and ensure residents acquire skills for meaningful employment, competitive wages, and career advancement. In the past year alone, the board administered 14 programs with an annual budget exceeding \$4.3 million.

The partnership, initiated during the 2008 housing recession, has evolved into a dynamic collaboration addressing workforce challenges. CECE's support has taken multiple forms: providing data analysis for the board's successful Appalachian Regional Commission POWER initiative grant, delivering quarterly workforce reports that track industry trends, and offering insights that help the board make informed decisions about workforce development programs.

The significance of the collaboration is clear to Marty Holliday, the board's executive director.

“Our relationship with Virginia Tech is really important. This kind of analysis of what’s going on around us, in our labor market, and in our communities — we make decisions based on some of that information. It’s also not information that we just keep for ourselves; we post it on our website and we share with our funders and partners at the regional and state level.”

She said she’s had many economic development partners and business partners tell her how important that data is for them. “And we couldn’t provide it without this partnership,” she said.

Holliday brings valuable industry perspective, having served as regional operations manager for ceramic tile manufacturer Florida Tile in Lakeland, Florida, for nearly a decade. After relocating to Floyd, Virginia, in 2000, she joined the workforce board as a program specialist, leveraging her human resources background to address rural workforce challenges, including transportation barriers.

Her collaboration with CECE began after meeting John Provo, the center’s executive director, leading to expanded university partnerships.

New perspectives

The partnership’s first major initiative, launched in 2010, exemplifies CECE’s innovative approach. CREATES (Construction, Retrofitting and Energy-Efficiency Assessment Training and Employment Systems) equipped construction workers with renewable energy sector skills, positioning the region for green energy transformation. More recently, CECE helped the board evaluate its Ready SWVA child care program.

But it’s the quarterly workforce reports, initiated in 2016, that are the cornerstone of this collaboration, providing detailed analysis of government, manufacturing, retail trade, and health care sectors. These reports deliver actionable intelligence about regional employment trends while also training graduate students.

Jones said one of the reports focused on work-based learning helped provide a foundation for the work he would later do as an economic development specialist. “We pulled economic data and talked to relevant parties, combining both quantitative and qualitative research to create a fuller picture for the client,” he said.

Economic development specialist Ashley Posthumus said one of the great things about Holliday is that she loves to work with students. “She’s always open to new and innovative ideas, which is great to have in a client and a partner.”

Over the years, work with the board is routinely one of the first projects graduate assistants take on.

“The graduate students bring something to the table that I think is unique. Since they’re not in the industry, they frequently look at things slightly differently. It’s interesting for me when I get to see their thoughts because it shows someone else’s perspective of the information that might not have been my own,” Holliday said.

A flexible future

Now, CECE is taking one step further, working on developing an online dashboard that will allow data to be shared widely.

“I value the center’s willingness to take almost any idea we’ve pushed their way and find a way to make it work,” Holliday said. “There aren’t many opportunities that you have where you can partner with an organization that can do a variety of tasks in a variety of ways and allows us to choose the information we want to provide to our area. I think that flexibility is incredible in this partnership.”

The center is also working with the board on a strategic plan to guide it without Holliday at the helm — she plans to retire in early 2025.

“Getting that outside look from a third party is important, especially for a strategic plan. By having Virginia Tech lead some of these discussions and share information with us, it provides credibility,” Holliday said.

Makenzie Mann, a master’s student in urban and regional planning, said participating in the planning session gave her invaluable exposure to real-world consulting and strategic thinking.

“Seeing how academic research can directly inform organizational decision-making was a transformative experience that has shaped my understanding of economic development work,” she said.

Building a Rural Renaissance

By Julia Kell

The Center for Economic and Community Engagement (CECE) hosted Assistant Professor Alice Barreca and Associate Professor Diana Rolando from the Department of Architecture and Design at the University Politecnico di Torino and Professor John Accordino from the Department of Urban and Regional Planning at Virginia Commonwealth University.

Accordino taught summer classes at the University Politecnico di Torino that centered on similarities between economic development programs in Virginia and Italy. He and CECE served as co-sponsors of Barreca and Rolando's trip.

Barreca and Rolando presented about their research on the Italian National Strategy for Inner Areas (SNAI) to CECE as well as the wider Virginia Tech campus.

SNAI seeks to revitalize marginalized rural areas – called inner areas – in Italy. Nearly a quarter of the population lives in these rural places, which comprise 60% of Italy's land area.

"Inner areas suffer from weak infrastructure and are characterized by their distance from central services, such as hospitals, schools, and railway stations," Rolando said.

She said the areas also have issues related to losing their legacy and memories, making it important to develop

(From left) Assistant professor Alice Barreca, professor John Accordino, and associate professor Diana Rolando pose for a picture. Photo by Julia Kell for Virginia Tech.



projects to preserve their architecture and natural environment. In addition to their pastoral beauty and historical and architectural heritage, these areas are also rich in traditional craftsmanship and local cultural traditions.

Southwest Virginia faces some similar problems to Italy, such as youth leaving rural areas for bigger cities and transportation challenges that make it difficult to access essential services.

“SNAI envisions a future where territorial fragility becomes a driver of innovation – where marginality is addressed not as a deficit, but as a resource to be activated through place-sensitive, data-driven, and community-anchored development,” Barreca said.

From CECE faculty, Barreca and Rolando learned about the GO Virginia program, a statewide initiative to increase the number of high-wage jobs; outdoor recreation projects; and the Additive Manufacturing and Advanced Materials Tech Hub.

One of the similarities between rural Italy and Southwest Virginia, Barreca said, was a need for more specialized manufacturing workforce in their territory. However, individuals lack skills needed for manufacturing jobs and young people do not always know what opportunities exist in their region due to a lack of communication.

“We are talking about how universities can facilitate the connection between companies that are offering jobs and

individuals who may not want to go to college and want to go straight into the workforce,” she said.

“Globally significant work is being done here in Southwest Virginia, and the international visitors we have had over the years are evidence of that,” Executive Director of CECE John Provo said.

Accordino, Barreca, and Rolando also visited other towns in Southwest Virginia, including Floyd to meet with Floyd County community and economic development director Lydeana Martin; Christiansburg where they learned more about Elli Travis’s volunteer work as president of Downtown Christiansburg Inc.; the Southwest Center in Abingdon, Virginia; and the University of Virginia’s College at Wise Oxbow Center.



“Globally significant work is being done here in Southwest Virginia, and the international visitors we have had over the years are evidence of that.”

John Provo,
Executive Director

Internships and Work-Based Learning

This year, CECE developed and expanded partnerships with industry, agencies, and university partners, working to build better alignments between educational institutions and employers.

CECE provides experiential learning opportunities for students in various ways.

CECE received a new, expanded funding commitment for collaboration on experiential learning with Space@VT and Virginia Tech's Department of Electrical and Computer Engineering.

CECE faculty also extended their GO Virginia-funded aquaculture education with the Virginia Seafood Agricultural Research and Extension Center to reach teachers across Hampton Roads and Coastal Virginia.

CECE received continued funding from the State Council on Higher Education for Virginia to continue their role in managing the V-TOP Region 2 Internship Collaborative, where they support development of a cooperative regional ecosystem between employers and educational institutions to facilitate the growth of high-quality internships.

CECE and Virginia Tech Career and Professional Development are currently working with the Virginia Economic Development Partnership to dive deeper into opportunities for Virginia Tech students.

Major Design Experience

The center catalyzes new relationships and projects for the Major Design Experience (MDE) program, the capstone experience for undergraduate students in the Bradley Department of Electrical and Computer Engineering at Virginia Tech. Students design and build real projects for companies and non-profits, working in teams and with input from industry customers, learning valuable skills in collaboration, communication, and project management. Sponsors come from diverse industries and regions. The Virginia Spaceport Authority in Norfolk, Virginia had a student team successfully develop a unified approach to control and data systems used with their launch pads. Annapolis Aquaculture asked students to improve the remote function of aquaculture equipment near their operations in Hampton, Virginia. According to company sponsors, students provide unique perspectives on technical solutions. Students appreciate the challenge of designing real solutions for external customers; they also benefit by exploring career paths and learning how to manage team conflicts.



The Major Design Experience brings organizations with tangible problems together with students in their final year of undergraduate engineering studies, igniting powerful solutions and great learning opportunities for students and sponsors alike.

Afroze Mohammed, Associate Director of Strategic Alliances



Afroze Mohammed speaks with students at the Major Design Experience Expo. Photo by Julia Kell for Virginia Tech.

Work-Based Learning Across Virginia

Afroze Mohammed was the featured speaker at Rappahannock Community College's (RCC) Partnering for Progress Employer Breakfasts sponsored by their Career Services. RCC recently invited employers from diverse industries to their campuses in Glenss and Warsaw, Virginia, to learn about how work-based learning can benefit students and employers alike. Mohammed discussed her expertise in capstone and senior-design courses at Virginia Tech as well as developing programs for high schoolers. Both students and employers often have transformative experiences through participating in mentorships, internships, and course projects sponsored by industry. Students benefit from experiencing directly what it's like in the workplace. Employers enjoy the mentoring experience, training their future workforce, and auditioning employees. Mohammed invited Ben Lewis, greenhouse manager at Healthy Harvest Food Bank in Warsaw, Virginia to speak about his life-changing experience being mentored, having internships and jobs during college, and a career he loves.



Rappahannock Community College. Photo by RCC.



Attendees of an employer breakfast listen to a presentation. Photo by RCC.



Students in the Northern Neck learn about careers in aquaculture. Photo by Mallory Tuttle.

The Virginia Alliance for Semiconductor Technology (GO Virginia Region 7, Northern Virginia)

The Virginia Alliance for Semiconductor Technology (VAST) is a collaborative network of semiconductor, microelectronics, and nanotechnology industries and Virginia colleges and universities that provide access to state-of-the-art research facilities to increase workforce development and technology development. VAST promotes industry access to facilities and advocates for the growth of semiconductors, an essential component in most electronics across Virginia.

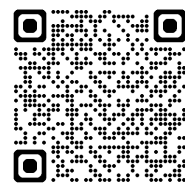
During this past year, Afroze Mohammed has developed relationships with veterans' organizations, Virginia Career Works, regional economic development organizations, and workforce development boards to promote VAST across the commonwealth and also secure funding eligibility for training programs under the Workforce Innovation and Opportunity Act. CECE's statewide presence has catalyzed new connections and networks for VAST.

The Fast Track to Semiconductor Careers program currently offers certificate programs in chip fabrication and semiconductor packaging.



Ph.D. students in electrical and computer engineering work to fabricate semiconductors in Virginia Tech's clean lab. Photo by Luke Hayes for Virginia Tech.

**Learn more
about VAST:**



Studying the Impact of Battlefield Tourism

By Julia Kell

Graduate student Katie Lee never expected her first day of fieldwork with the Center for Economic and Community Engagement (CECE) to involve chatting with Parisians in a Shenandoah Valley military museum. Yet here she was, discovering that the region's Civil War history draws visitors from around the world.

For Lee, an urban and regional planning master's degree student, this unexpected encounter captured why she was there. Along with her center colleagues — Associate Director for Impact and Evaluation Elli Travis and graduate assistant Sadhana Manthapuri — Lee was investigating what made New Market's battlefield such a powerful magnet for visitors.

The team's findings will help guide the Shenandoah Valley Battlefields Foundation, which preserves Civil War battlefields across eight counties, in making future investment decisions for New Market's historic sites.

The center provides research and university connections to organizations and communities, helping them to think strategically and find a pathway to economic prosperity. It also provides a wide variety of experiential learning opportunities in communities across the commonwealth to graduate students.

"When our graduate students get into the field, they're not just learning — they're contributing real value to our projects and partners," Executive Director John Provo said. "These hands-on experiences help them develop professional skills you can't get in a classroom, while bringing fresh perspectives and energy to our research."

Provo said the New Market project exemplifies this synergy, as understanding economic development requires both analytical skills and direct community engagement.

Lee wasn't sure what to expect during her first trip into the

field. "I had a lot of fun meeting the clients and getting to know the project on the ground," she said. "Being able to see all the sites and visit the museums helped put everything in perspective. Learning about community engagement in a classroom is important, but having the opportunity to go out and use those lessons has been invaluable."

That field experience allowed Manthapuri, who is pursuing her Ph.D. in planning, governance, and globalization, to hone her interview skills, better analyze data, and put it in a format that is easily understood.

"I've gotten a lot of experience managing timelines, tasks, and roles," Manthapuri said. "I've also learned a lot about interviewing people and processing and presenting interview data. In urban planning, how you interact with the public matters a lot. Working in CECE has allowed me to bridge a gap in my knowledge."

Virginia Tech students Miles Abernethy '23, who is seeking a graduate degree in history, and Jillian Sasso '24, who has bachelor's degrees in history and political science, helped CECE distribute surveys for the project, a process which allowed them to develop public history skills and to engage in Civil War history in a modern and proactive way. Both students interned with the Shenandoah National Battlefields Foundation through a partnership the foundation has with the Virginia Center for Civil War Studies, which is part of the Virginia Tech Department of History.

Along with collecting surveys, the researchers examined how the battlefields and history museums in New Market affect the small town's economy and compared it with other communities that also have heritage or battlefield tourism.

"Working with Virginia Tech has been phenomenal, and we couldn't be more pleased with the students and staff," said Keven Walker, CEO of the Shenandoah Valley Battlefields Foundation. "Tourism is a major driver of Virginia's



(From left) Graduate assistant Katie Lee, associate director for impact and evaluation Elli Travis, and graduate assistant Sadhana Manthapuri pose for a picture. Photo by Julia Kell for Virginia Tech.



economy, and this project will help us get to know our battlefield visitors and enable us to design battlefield experiences that draw even more visitors to the region in the future.”

Travis said the project’s focus is to provide recommendations that will help New Market grow while also conserving open spaces. She said the impact of battlefield tourism will also have positive effects on businesses in the region and other attractions such as Shenandoah National Park and Luray Caverns.

“The work that the Shenandoah National Battlefields Foundation is doing to highlight New Market specifically helps shine a light on how historic downtowns serve as a vital center for all types of tourism,” Travis said.



Sadhana Manthapuri and Katie Lee conduct intercept surveys with visitors to the battlefields. Photo by Julia Kell for Virginia Tech.



Learning about community engagement in a classroom is important, but having the opportunity to go out and use those lessons has been invaluable.

Katie Lee, Graduate Assistant

Retaining Talent in the Region

By Julia Kell

The Virginia Talent + Opportunity Partnership (V-TOP) Region 2 Internship Collaborative held “LYH Intern Connect,” an event designed to help local businesses find emerging talent and for college students to discover internships and work-based learning opportunities. 50+ students from Central Virginia Community College, Liberty University, Randolph College, Sweet Briar College, and the University of Lynchburg connected with 26 companies in the Lynchburg region. Students also got the chance to improve their professional skills, including interviewing and resume writing, through speaking with career mentors at the “Pitch Pit.”

It was a full circle moment for Julie Hubbard. She had connected with the software company CloudFit in 2024 at the previous LYH Intern Connect event when she was a student at Central Virginia Community College. Now, she was serving as a representative at the 2025 event.

Hubbard interned with CloudFit for ten weeks during the summer of 2024 and was offered a full-time role as a site reliability engineer three weeks into the internship.

“It was fun being on the other side of the table this year and seeing my progress. I liked talking to people, and it was nice to tell them that I was in the same position at the last event,” she said.

During Hubbard’s internship, she learned skills in Azure, a cloud computing platform, and worked on three projects for internal stakeholders focused on automating the reporting process within the company. This experience helped prepare her for her current role and helped her understand what the dynamic of the company was like.

“I love the work culture and the people that I work with,” she said.



Principal program manager Justin Hensley (at left) and site reliability engineer Julie Hubbard represent CloudFit. Photo by Christine Kennedy.

During her internship, interns got the opportunity to leave the office and volunteer in the community.

Interns participated in events with the Boys & Girls club, the Jubilee Center, and local food bank Lynchburg Daily Bread.

Full-time employees receive PTO used to give back to the community through programs JobFit and KidFit.

LYH Intern Connect took place at the Lynchburg Regional Business Alliance (LRBA).

“The Lynchburg Regional Business Alliance is a proud host and partner for LYH Intern Connect,” said Christine Kennedy, chief operating officer and executive vice president of LRBA. “Connecting students to potential internships and the many organizations we have in our region providing great career opportunities is integral to our program of work. Julie’s story is one of many that have come out of this event in the past three years. We consider it an obligation to come alongside these students and support their journey to their first professional role as these students

become our future business leaders.”

The Virginia Tech Center for Economic and Community Engagement, LRBA, Lynchburg Beacon of Hope, Central Virginia Community College, Liberty University, Randolph College, Sweet Briar College, University of Lynchburg, and Virginia Career Works Central Region worked together to plan the event.

“Internships are really important because you get firsthand experience, that not only helps you with your resume and furthering your career, but also helps you learn what you like and what you don’t like,” Hubbard said. “They’re a good way to test out a job before fully committing, especially if you’re still in school or you’re unsure.”

The Virginia Talent + Opportunity Partnership Region 2 Internship Collaborative is staffed by the Virginia Tech Center for Economic and Community Engagement. The LYH Intern Connect event was part of V-TOP’s work to increase the opportunity and visibility of high-quality internships, facilitate pathways to professions, and encourage graduates to live and work in Virginia by creating more high-quality opportunities.

On October 8, 2024, the Region 2 Internship Collaborative also hosted a ‘Marketing and Communication Intern Industry Night’ where students got the opportunity to network with employers in their field.



“We want to partner with regional businesses to expand high-quality work-based learning opportunities, with the ultimate goal of increasing the number of young professionals who choose to live and work in the region after graduation.

Jemma Sabokrouh,
V-TOP Region 2 Internship Collaborative Program
Manager

Diving Into Aquaculture

By Rich Mathieson

With boots in the mud and oysters in hand, high school juniors and seniors from across coastal Virginia are getting a firsthand look at the region's thriving aquaculture industry — and discovering how they might be part of its future.

They're participating in Promoting Careers in Aquaculture, a summer program led by Virginia Tech in partnership with GO Virginia Regions 5 and 6, the Chesapeake Bay Governor's School, and a network of industry, education, and workforce partners. Now in its third year, the program has engaged about 60 students and 30 teachers while building a homegrown talent pipeline to support Virginia's shellfish aquaculture sector — a sustainable, growing, and economically vital industry for the commonwealth.

"This is about community engagement with a purpose," said project lead Mallory Tuttle, associate director of the Virginia Tech Newport News Center and the Center for Economic and Community Engagement. "We're working across sectors and regions to prepare students for real careers that are needed now — and will be needed even more in the future."

Why this matters

Virginia is a national leader in oyster production, an industry generating over \$60 million annually. For it to thrive, businesses need a skilled workforce ready for hands-on careers along the state's working waterfronts.

The program helps build that workforce. Students begin with online modules, then visit farms, hatcheries, and research facilities before completing paid internships with local businesses such as Matheson Oyster Co., Oyster Seed Holdings, and Healthy Harvest Fresh.

Helping students and employers thrive

Afroze Mohammed, the Center for Economic and Community Engagement's associate director for strategic

alliances, worked with aquaculture businesses to ensure those internships succeed. Many companies, she said, had never hosted high school interns before.

"It's not just about placing students — it's about creating meaningful, safe, and educational experiences," Mohammed said.

"The training we gave to industry partners provided best practices for hosting interns and drew upon insights from companies. For example, an employee shared his life-changing experience of learning about aquaculture, being mentored, having an internship, and now having a career in the same company."

Teachers benefit too

The program provides hands-on learning and curriculum support to help teachers bring aquaculture into their classrooms.

"Teachers need opportunities to fill their own cups," said Sara Beam, lead instructor for the Chesapeake Bay Governor's School and an original program partner. "This



Mallory Tuttle, associate director of the Virginia Tech Newport News Center and the Center for Economic and Community Engagement.



Students and teachers from the Northern Neck learn about the use of upwellers in the oyster hatchery process from Gretchen Smith, assistant manager and seed and nursery manager at Oyster Seed Holdings. Photo by Mallory Tuttle.

gives us time to learn alongside industry experts and bring fresh insights back to our students. It's professional development with real impact."

The Virginia Seafood Agricultural Research and Extension Center is a key collaborator, contributing technical expertise, industry research, and decades of experience supporting Virginia's seafood and aquaculture industries. "By helping students and educators understand the science and opportunities within aquaculture, we're investing in a skilled workforce that will sustain this vital sector for generations," Director Michael Schwarz said.

Land-grant mission in action

Tuttle said this is a great example of how Virginia Tech's role as a land-grant university comes to life. "By working with schools, businesses, and neighbors, we're helping students discover career options in aquaculture and giving teachers the tools to keep that interest alive," she said. "Together, we're growing the skilled workforce that Virginia's shellfish industry will rely on for years to come."

The program is coordinated through the Center for Economic and Community Engagement. It was funded in part by GO Virginia, a state initiative administered by the Virginia Department of Housing and Community Development that strengthens and diversifies Virginia's economy and fosters the creation of higher wage jobs in strategic industries.

This year's program serves students and teachers from the Middle Peninsula, Northern Neck, Hampton Roads, and the Eastern Shore. It concludes this month with students receiving digital badges and stipends and teachers submitting their final classroom-ready lesson plans.

"We're seeing students connect their interests to real career paths they didn't know existed," Tuttle said. "And we're seeing industry partners excited to mentor the next generation. That kind of engagement is what this work is all about — helping communities and economies grow together."

Help Us Make a Difference in Communities!

Your investment in the Virginia Tech Center for Economic and Community Engagement means more access to resources for underserved communities across the commonwealth.

CECE provides expertise, resources, and project support to catalyze action that benefits local communities and economies, specifically in community development, talent, entrepreneurship, and technology. CECE's evidence-based research and university connections help to address needs identified at the local level through strategic partnerships and direct services.

Every dollar you donate allows CECE faculty to bring their knowledge and experience to communities from Abingdon to Arlington, Covington to Chincoteague, Damascus to Danville, Melfa to Martinsville, New Market to Newport News, and Radford to Richmond, ensuring that every region in Virginia can thrive.

Together, we can build stronger communities and brighter futures across the commonwealth.

Donate: cece.vt.edu/about/give.html



CECE evaluates Appalachian Regional Commission projects



Museum director Rene Rodgers speaks with economic development specialist Dylan Andrews about the museum's impact. Photo by Julia Kell for Virginia Tech.

The CECE team recently visited the Birthplace of Country Music Museum in Bristol, Virginia as part of a project funded by the Appalachian Regional Commission (ARC) focused on evaluating ARC tourism and outdoor recreation grants.

CECE faculty Dylan Andrews and Elli Travis met with the museum's director, Rene Rodgers, and other community leaders to learn more about the museum's impact and the ARC funding it received.



Dylan Andrews and Elli Travis meet with community leaders. Photo by Diane Deffenbaugh for Virginia Tech.

“
Virginia Tech's evaluation study will help us make informed decisions going forward. Our community is very supportive of the museum and knowing how it actually impacts our community, the region, and Appalachia as a whole will be a huge benefit.

Jake Holmes,
Vice Mayor of Bristol, Virginia



(From left) Ashley Posthumus and Makenzie Mann speak with the assistant principal of Watauga Elementary School, Laura Nunley. Photo by Julia Kell for Virginia Tech.



GO Virginia Region 2 program coordinator Emmalee Wagner speaks with participants at the Alleghany County community convening. Photo by Julia Kell for Virginia Tech.



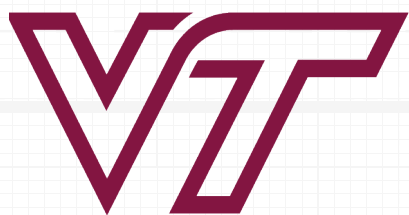
Elli Travis speaks with George Whitley, board president of the William King Museum of Art as part of the Appalachian Regional Commission grant evaluation project. Photo by Julia Kell for Virginia Tech.



Allison Mays and Dylan Andrews visited Damascus to help the town diversify their economy after Hurricane Helene damaged the Virginia Creeper Trail. Photo by Julia Kell for Virginia Tech.



Members from the Center for Economic and Community Engagement traveled to Giles County to assist with cleanup efforts following the devastation of Hurricane Helene. (From left: Will Heltzel, John Register, Kim Gray, Jemma Sabokrouh, Julia Kell, and Makenzie Mann.) Photo by John Provo.



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