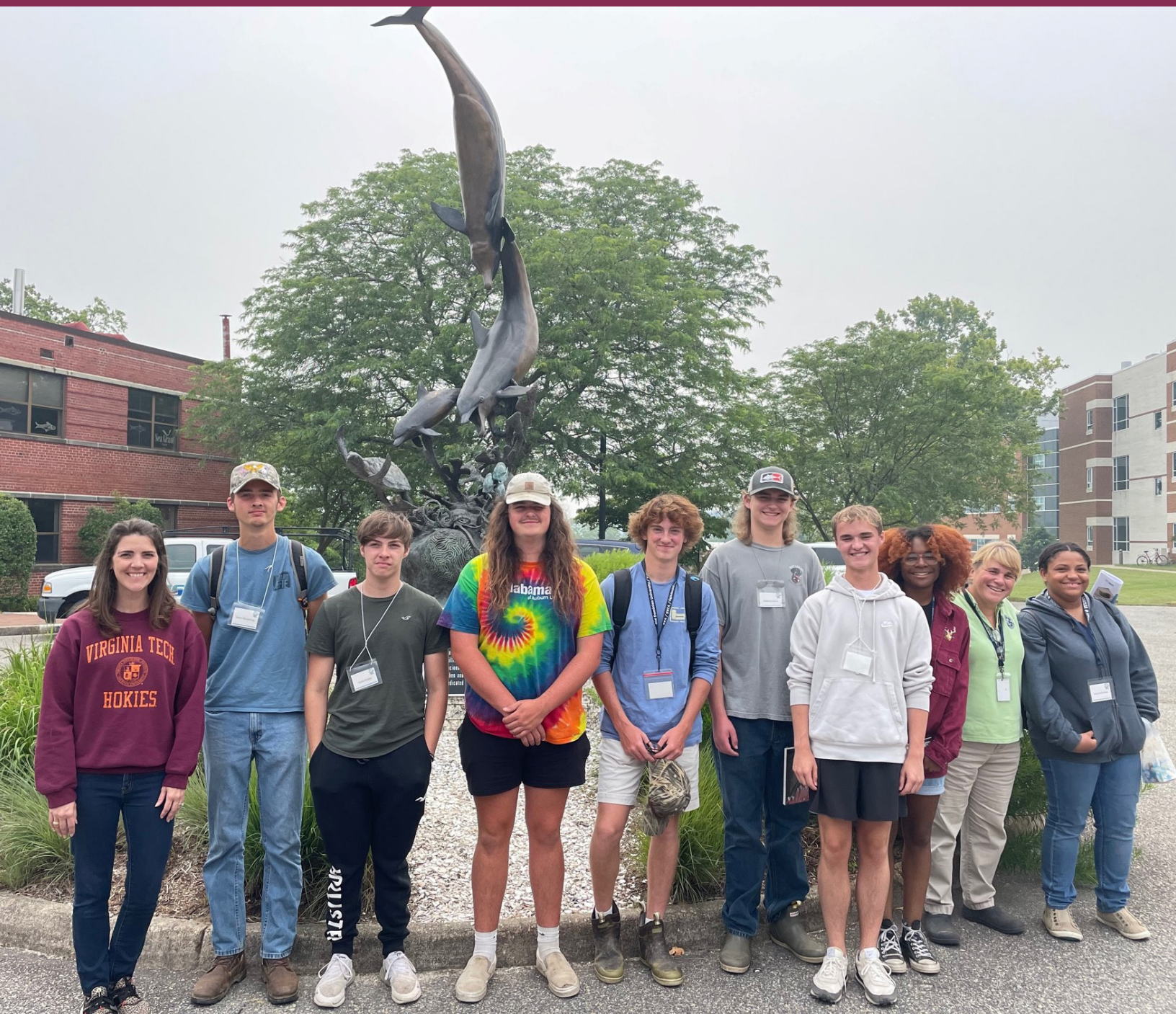


Virginia Tech Center for Economic and Community Engagement

2022-2023 Annual Report



A Note to the Reader

Part of Virginia Tech's Outreach and International Affairs, the Center for Economic and Community Engagement works to advance Virginia Tech's role as a national, state, and university-recognized champion and exemplar for economic and community engagement, applied economic and policy research, and community problem-solving.

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

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Bryan Jones • Student Researcher

Rachel Jones • GO Virginia Region 2 Program Coordinator

Julia Kell • Communications Specialist

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Altan Mitchell • Student Researcher

Afroze Mohammed • Associate Director of Strategic Alliances

Anna Nagorniuk • Economic Development Specialist

James Polhamus • Student Researcher

Ashley Posthumus • Economic Development Specialist

John Provo • Executive Director

John Register • Project Coordinator

Hye-jeong Seo • Student Researcher

Scott Tate • Associate Director for Community Innovations

Elli Travis • Economic Development Specialist

Mallory Tuttle • Associate Director of the Newport News Center

Brenna Valle • Region 2 Internship Collaborative Program Coordinator

Doris Waddell • Administrative Assistant

Quina Weber-Shirk • Program Manager for GO Virginia Region 2 and Region 2 Internship Collaborative

Contact us: (540) 231-1511

Cover photo courtesy of Mallory Tuttle.

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Photo by Ray Meese for Virginia Tech.



HIGHLIGHTS

During the 2023 fiscal year, CECE enhanced Virginia Tech's impact across the state, working with community, industry, agency, and university partners to pursue unique opportunities for growing the economy. The center advanced the university's diversity and inclusion goals through partnerships with educational and business groups around the state and further connected faculty and students with industry for a range of experiential learning internships and other industry partnerships, shaping Virginia's current and future workforce.



Hopewell Riverwalk. Photo by Julia Kell.

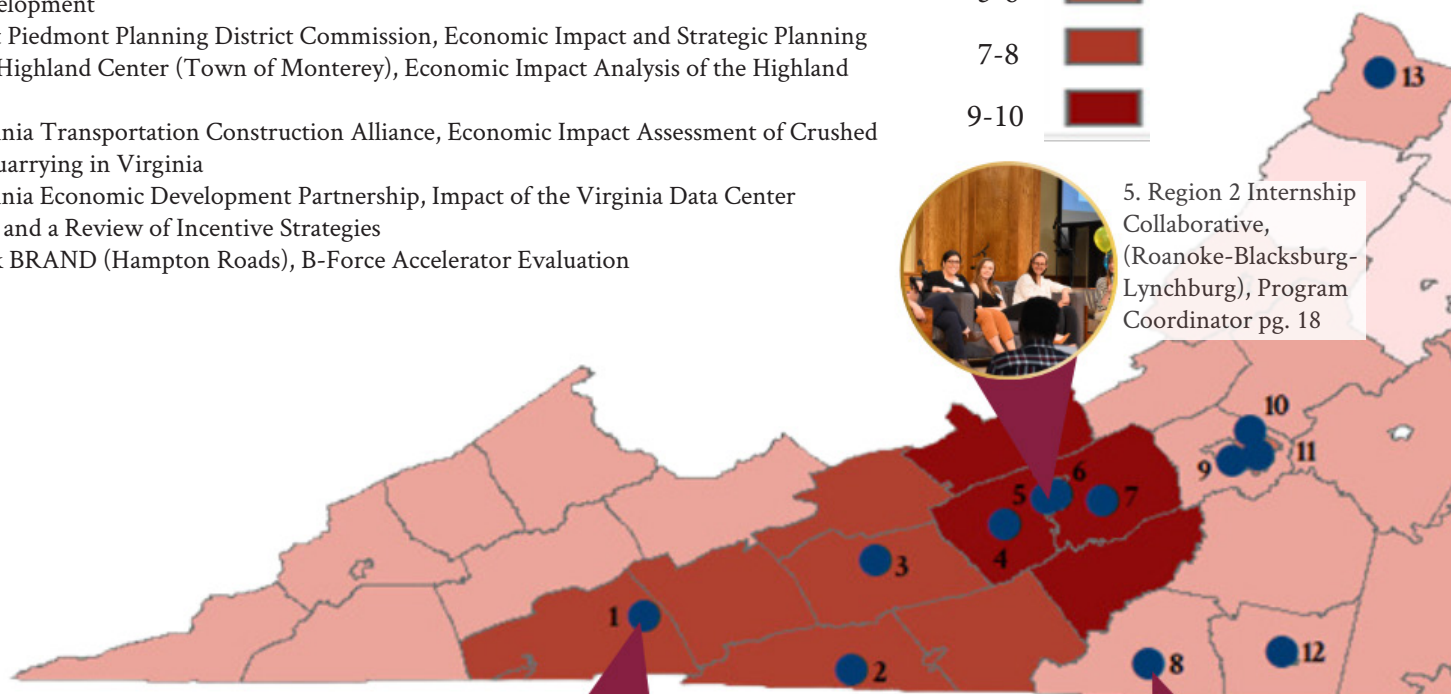
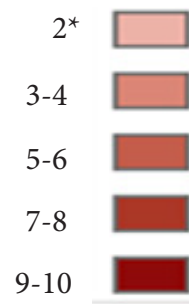
Along with several multi-year projects continued through the 2023 fiscal year, the center's work was supported by more than \$705,537 in new funding.

\$500,000 in project activity is under contract review with start dates in the first quarter of the 2024 fiscal year, and more than an additional \$1,000,000 in proposals are under review with decisions anticipated in the first quarter of the 2024 fiscal year.

WHERE WAS CECE THIS YEAR?

2. Western Grayson County Music and Craft Museum, Feasibility Assessment
3. New River/Mount Rogers Workforce Development Board, Strategic Plan and Evaluation
4. New River/Mount Rogers Workforce Development Board, Early Childhood Education Career Lattice
6. New River/Mount Rogers Workforce Development Board, Workforce Reports and Data Analysis
7. Montgomery County Chamber of Commerce, Best Places to Work Survey
9. VERGE Alliance (Roanoke-Blacksburg), Strategic Services
10. GO Virginia Region 2 (Roanoke-Blacksburg-Lynchburg), Support Organization Services
11. Virginia Community Development Financial Institutions Coalition, Board Facilitation and Development
12. West Piedmont Planning District Commission, Economic Impact and Strategic Planning
13. The Highland Center (Town of Monterey), Economic Impact Analysis of the Highland Inn
15. Virginia Transportation Construction Alliance, Economic Impact Assessment of Crushed Stone Quarrying in Virginia
16. Virginia Economic Development Partnership, Impact of the Virginia Data Center Industry and a Review of Incentive Strategies
20. Black BRAND (Hampton Roads), B-Force Accelerator Evaluation

Number of CECE Projects
impacting a city/county

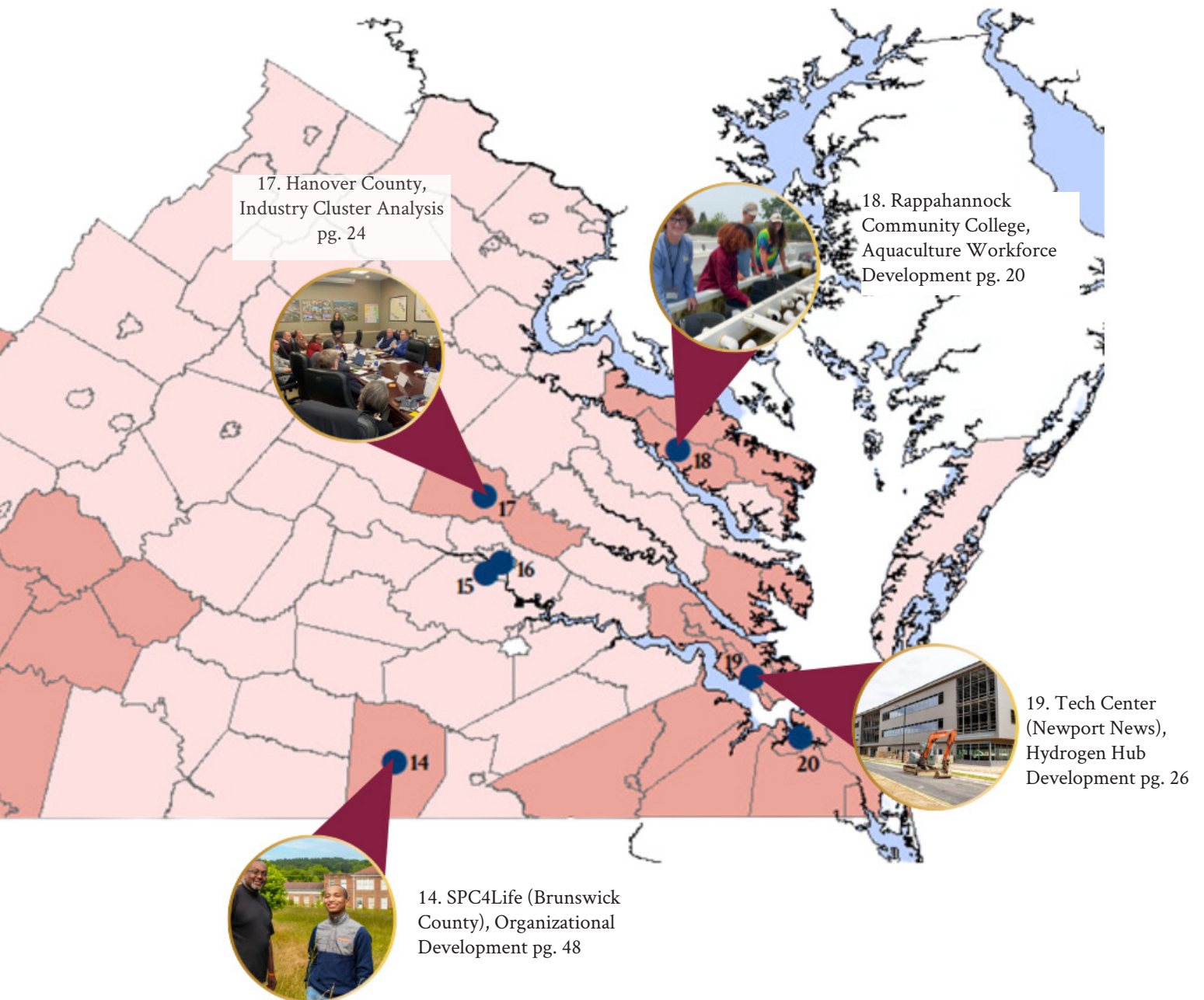
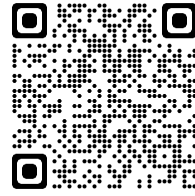


5. Region 2 Internship Collaborative, (Roanoke-Blacksburg-Lynchburg), Program Coordinator pg. 18

1. YWCA of Northeast Tennessee and Southwest Virginia, Recovery Ecosystem Assessment pg. 46

8. Town of Stuart, Star Theatre Feasibility Study pg. 36

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



Not featured on map: WMMT/Appalshop Impact and Expansion Feasibility Project, focused on studying a possible expansion of the WMMT 88.7 radio station, was headquartered in Beckley, West Virginia and Whitesburg, Kentucky but impacted Southwestern Virginia.

*Every city/county has two projects due to two statewide projects, *Economic Impact Assessment of Crushed Stone Quarrying* and *Impact of the Virginia Data Center Industry and a Review of Incentive Strategies*.

DEVELOPING OPPORTUNITIES FOR STUDENTS

The center developed and expanded partnerships with industry, agencies, and university partners, working to build better alignments between educational institutions and employers. The center expanded its collaborations with Virginia Tech's Department of Electrical and Computer Engineering and Space@VT through outreach to diverse industries and organizations that need talent in growing fields. The center worked to develop the "Promoting Careers in Aquaculture" program, a GO Virginia-funded project in collaboration with Rappahannock Community College and the Virginia Seafood Agricultural Research and Extension Center. CECE also received funding from the State Council of Higher Education for Virginia to continue its role in managing the Region 2 Internship Collaborative.



As part of the Promoting Careers in Aquaculture program, high school students visited the Acuff Center for Aquaculture at the Virginia Institute of Marine Science. Photo courtesy of Mallory Tuttle.



(From left) Samantha Livesay, director of business engagement at Onward New River Valley; Carolyn Sutphin, employer relations and event coordinator at Radford University; Nicole Ramsey, career coach at Radford University, and Quina Weber-Shirk, program manager for the Region 2 Internship Collaborative were some of the planning partners present at an event held in the New River Valley to help students connect with employers in the region. Photo by Julia Kell.



High-Speed Training

October 21, 2022

An internship with the U.S. Department of Transportation gave graduate student Jason Schwartz an inside view of how the government works to safely and efficiently move people and goods across the country — whether by plane, train, ship, or even e-bike.



*Jason Schwartz met
with Deputy Secretary
Polly Trottenberg
at a speaker series
featuring Department
of Transportation
leaders.*

*Photo courtesy of Jason
Schwartz.*

An internship with the U.S. Department of Transportation gave graduate student Jason Schwartz an inside view of how the government works to safely and efficiently move people and goods across the country — whether by plane, train, ship, or even e-bike.

Schwartz, a master's student in urban and regional planning in the College of Liberal Arts and Human Sciences and a graduate assistant at the Center for Economic and Community Engagement, even got to rub shoulders with Transportation Secretary Pete Buttigieg.

"I really enjoyed getting the opportunity to engage with leadership and learning how work is done in the federal government. I got to see how policies are developed and implemented from the high-level visions of senior political appointees to the nitty-gritty details refined by technical experts. It surprised me how much engagement there is between the different career levels," Schwartz said.

His internship was provided through the Summer Transportation Internship Program for Diverse Groups, which allows undergraduate and graduate students to get hands-on experience in public service while learning more about transportation challenges and advancements in the U.S.

Schwartz learned about the state of transportation in the country through field trips to the Port of Baltimore to explore the MV Cape Washington cargo vessel and to Washington's Union Station to ride the Virginia Railway Express. He also attended a speaker series where he met with Buttigieg and other Transportation Department leaders, including Deputy Secretary Polly Trottenberg and Amit Bose and Jennifer Mitchell of the Federal Railroad Administration.

At a fair at the department's Navy Yard campus featuring bike shops and other local vendors, he got the chance to test-ride five different electric bikes. "A big focus of the event was that e-bikes can be used not only for recreation, but also for commuting or hauling cargo."

During his 10 weeks at the Federal Railroad Administration's Office of Railroad Policy and Development, Schwartz had to come up with a project idea and develop it from start to finish. He worked on a cost analysis of service development plans to support the Corridor Identification and Development Program, a framework to guide the future

development of intercity passenger rail throughout the country.

Schwartz analyzed the costs of previous service development plans and studied multiple variables, including the route length, service frequency, and number of stations, to see how they would affect the cost.

He said his previous work with the Center for Economic and Community Engagement prepared him well for this type of work. "CECE really allows graduate students to get our hands dirty with real-world projects. We work with the center's faculty to create a project's scope and make sure we're not trying to tackle too many things at once. My internship — and my work at the center — have shown me the answers to complex problems are not always clear-cut, and you have to be adaptable when challenges come up."

At CECE, Schwartz recently analyzed data on the arts and craft center industry to help determine the feasibility of a proposed mixed-use arts and cultural center in North Carolina, collecting information on restaurants in the Southeast region and writing case studies on comparable art centers.

He also worked on a project that developed career pathway visuals for job seekers. Schwartz created career lattices in the health care, information technology, manufacturing, and construction fields, using economic data and interviews with industry experts in the New River Valley.

He is currently working on a graduate assistant-led project to help the town of Stuart, Virginia, understand the challenges and benefits of purchasing the historic Star Theatre to host concerts and other events. Schwartz is collecting demographic data around the Stuart area and analyzing the lodging and restaurants nearby to understand how they will be affected by the theater's reopening.

"We hire graduate assistants to provide valuable support on these sorts of projects, such as conducting interviews, analyzing data, and writing reports. By collaborating with a team and interfacing with clients, students are able to get an idea of what their future career will be like," said Sarah Lyon-Hill, associate director for research development at the center, which is part of Outreach and International Affairs.

Executive Director John Provo said this experiential learning is an important part of building the workforce in Virginia.

“Having these types of hands-on learning experiences is impressive to employers and helps prepare students for what’s next after graduation,” he said.

Schwartz graduated from Virginia Tech in 2015 with a bachelor’s degree in mechanical engineering. He expects to earn his master’s degree in 2023. After that, he hopes to continue working to improve the way people interact in the urban environment.

“I continue to be interested in improving the flow and operation of cities. I want to use the advances around transportation to enable sustainable development and create human-centered places. My internship left me with a positive impression of public service, and the federal government’s mission of working on behalf of the American people really spoke to me,” he said.

Written by Julia Kell

“I want to use the advances around transportation to enable sustainable development and create human-centered places. My internship left me with a positive impression of public service, and the federal government’s mission of working on behalf of the American people really spoke to me.”



Schwartz and Secretary Pete Buttigieg. Photo courtesy of Jason Schwartz.

Careers in Space

February 27, 2023

The Aerospace Corporation, a nonprofit focused on the space enterprise, is working with Virginia Tech students and faculty to address complex challenges in space.

The Center for Economic and Community Engagement and the Center for Space Science and Engineering Research (Space@VT) have been collaborating closely with the Aerospace Corp. since 2018 to bring new opportunities to faculty and students.

“The Aerospace Corp. has created tremendous experiential learning opportunities for students in several majors,” said Afroze Mohammed, associate director of strategic alliances for the Center for Economic and Community Engagement, part of Outreach and International Affairs.

The Aerospace Corp. has sponsored senior design projects in aerospace and ocean engineering, electrical and computer engineering, mechanical engineering, and computational modeling and data analytics thus far, with plans to expand to other disciplines.

A key part of the Center for Economic and Community’s mission is to engage with communities across the commonwealth, working to increase economic prosperity and bolster the workforce through research projects and partnerships with organizations such as the Aerospace Corp.

“Partnerships between the university and industry allow students to gain skills through internships and experiential learning opportunities that better prepare them for the workforce. Our faculty also gain direct insights about the knowledge and skills most valued by industry in their future workforce,” Mohammed said.

According to Scott Bailey, professor of electrical engineering and director of Space@VT, NASA’s planned return to the moon and the government and industry’s interest in expanding the utilization of space that lies between the earth and the moon, or cislunar space, requires technology

development in nearly all fields of engineering and a need for workers to fill emerging roles.

Mohammed, Bailey, and Jonathan Black, co-director of Space@VT and professor in the Kevin T. Crofton Department of Aerospace and Ocean Engineering, have jointly organized workshops with the Aerospace Corp. on the cislunar enterprise, facilitating and participating in panels on workforce and technology development.

A workshop in July 2022, “Building Confidence through In-Space Testbeds and Proving Grounds,” brought together leaders from government and industry to discuss the role of in-space servicing, assembling and manufacturing in sustaining cislunar ecosystems.

The Aerospace Corp. and Virginia Tech continue to collaborate on technology, policy, and economic development issues related to cislunar space.

“Virginia Tech is encouraging an interest and excitement about space, creating students who are fluent in space science and eager to start careers in the field, which is a boost for the industry as well as the economy as a whole,” said Jim Fishenden, general manager at the Aerospace Corp. and executive lead for the Virginia Tech partnership.

“It’s been great to see the students gradually produce more polished products as they evolve over the course of their experience with the Aerospace Corp.,” said John Janeski, director of the digital communication implementation department at the Aerospace Corp., and mentor for major design experience projects in the Bradley Department of Electrical and Computer Engineering. “This experience gives them a glimpse into what the rest of their career will be like. It takes them out of the classroom environment and is often their first exposure to an open-ended problem.”

This year’s major design experience project began in January 2023 and built on the efforts of the previous project.

Through his participation in the major design experience, a two-semester team-based capstone project, Murphy Smith '21 worked with the Aerospace Corp. to develop an alternative to GPS for a satellite. He said the experience helped prepare him for his current role as an optical engineer at Northrop Grumman.

"The experience provided a great introduction to customer meetings, which I do now on a weekly, if not daily basis. The design reviews the professors had us work through are used in real life and are really important in the field," Smith said, who earned a bachelor's degree in electrical engineering from the College of Engineering.

The Mechanical Engineering senior design team, under the guidance of mechanical engineering faculty Erik Komendera and Robin Ott, had the opportunity to visit the Aerospace Corp.'s labs during their spring break in 2022 to put their CubeSat prototype through environmental testing, a stress test that involved subjecting the prototype to a vacuum, vibration, and heat.

"Being able to see their design undergo testing similar to what would be seen in space was an invaluable experience for these young engineers getting ready to begin their industry careers," Ott said. During the 2023 spring semester, Mechanical Engineering senior design students worked with the Aerospace Corp. to address the challenge of packaging and deploying a large antenna in a cubesat and tested their prototype at the Aerospace Corp.'s labs.

"The beauty of space is I can think of no more daunting or challenging environment to test the resilience, survivability, and quality of the engineering solutions and products that we produce," said Scot Ransbottom, professor in electrical and computer engineering and director of the major design experience. "These topics provide a basis for useful, great engineering projects to grow the next generation. Exposing young engineers to these realistic environments is a game changer that's going to help them make a direct contribution more quickly to the various industries they work in."

Written by Julia Kell



Photo by NASA/Unsplash.

Students and Local Companies Connect

April 18, 2023

The Region 2 Internship Collaborative held two events in Lynchburg and the New River Valley focused on connecting students with employers and providing students with an idea of what it's like to live and work in the region. The events included representation from local employers, young professionals, as well as students from colleges in the area.

The Region 2 Internship Collaborative is an initiative of the Virginia Talent + Opportunity Partnership (V-TOP). In Region 2, the collaborative is staffed by the Virginia Tech Center for Economic and Community Engagement.

"These events were really about connecting with others, asking questions, and being curious about what opportunities

place at Vector Space, a makerspace and community workshop. Students from Randolph College, Sweet Briar College, and University of Lynchburg attended the event and were able to see the brand-new Vector Space location for the first time. The Lynchburg Regional Business Alliance pulled together young professional volunteers and local employers to engage with students during the event.

Christine Kennedy, chief operating officer of the Lynchburg Regional Business Alliance kicked off the Lynchburg event by welcoming attendees. Planning partners included the Lynchburg Regional Business Alliance, Randolph College Career Development Center, Sweet Briar Career Services, the University of Lynchburg Career and Professionalism Center, Vector Space, and the Virginia Tech Center for Economic and Community Engagement.

Many local Lynchburg employers were present, including Bedford County, Belvac, Bower Center for the Arts, Center for Pediatric Therapies, CENTRA, Fellowship Church of Christ Community Center, First Bank & Trust Company, First National Bank, Foster Fuels, Inc., Framatome, HumanKind, Lynchburg Redevelopment & Housing Authority, Mariners Landing Hospitality, N.B. Handy Co., Patrick Henry Family Services, Inc., Shibuya-Hopmann, Southern Air,

Inc., Three Roads Brewing, U.S. Pipe, Wooldridge Heating Air & Electrical, YMCA of Central VA, and YWCA Central Virginia.

The New River Valley event was held at the Cross Pointe Conference Center in Christiansburg, Virginia and had



Quina Weber-Shirk. Photo by Diane Deffenbaugh for Virginia Tech.

are out there," said Quina Weber-Shirk, the program manager for the Region 2 Internship Collaborative. "We wanted these events to be a platform for students to learn about different industries and gain insights into what their future careers could be like."

The Lynchburg event, called 'LYH Intern Connect,' took

students from New River Community College, Radford University, and Virginia Tech attend.

The students at the event networked with employers in the New River Valley region, which included Brown Edwards, Camp Dickerson, Carilion Clinic, Carter Machinery Company, Delta Dental, P1 Technologies, and VIPC.

Samantha Livesay, director of business engagement at Onward New River Valley; Carolyn Sutphin, employer relations and event coordinator at Radford University; Nicole Ramsey, career coach at Radford University, and Quina Weber-Shirk were some of the planning partners present at the New River Valley event. Other planning partners included the Blacksburg Young Professionals, Pulaski County's Empower and Engage, Roanoke-Blacksburg Technology Council, Virginia Tech Career and Professional Development, Virginia Tech Student Success Center, and Virginia's New River Valley.

A panel of young professionals shared their career journeys and internship experiences in the New River Valley, as well as what they liked most about living in the area, and invited students to ask questions.

Written by Julia Kell

The young professional panel was moderated by Region 2 Internship Collaborative program assistant Emma Brown (at right) and was comprised of the following individuals from the Blacksburg Young Professionals and Pulaski County's Empower and Engage program (from left): Ashley Briggs, infection preventionist at Carilion Clinic; Angie Marcolini, executive assistant and social media coordinator for CMG Leasing; Lydia Gilmer, director of small business solutions for Pulaski County; and Grace Burden, academic advisor at Virginia Tech's College of Science. Photo by Julia Kell.



High Schoolers Explore Aquaculture

September 7, 2023

Every day, the high schoolers fed algae to baby oysters and watched as the young spat grow. Peering through microscopes, they learned about oyster biology, marveling at the tiny heartbeats they saw.

The 13 students were part of the Promoting Careers in Aquaculture program, a partnership between Virginia Tech and Rappahannock Community College, funded by GO Virginia Region 6.

Coming from across eight local school systems in the Northern Neck and Middle Peninsula regions, the students started with a short online course about the science and practices of shellfish aquaculture. A hands-on course in June at the Rappahannock Community College campus allowed them to experience aquaculture in lab and field settings, growing oysters in the classroom and then touring oyster farms to learn from people in the industry.

Shannon Kennedy, president of Rappahannock Community College, said the aquaculture industry has always been a huge part of the economy in the region, where major rivers and bodies of water include the Potomac and Rappahannock rivers and the Chesapeake Bay. It has been difficult, though, to get young people interested in the field.

“Through this project, we hope to better serve our industry partners by meeting their workforce training needs,” Kennedy said.

The Virginia Tech Center for Economic and Community Engagement (CECE), with the help of the Virginia Seafood Agricultural Research and Extension Center (AREC), built a coalition of industry partners to share their expertise and provide hands-on, real-world lessons for students.

Mallory Tuttle, associate director of the Newport News Center who also works with CECE to promote regional partnerships and collaboration throughout the Hampton Roads region, led the aquaculture project, and Afroze

Mohammed, associate director of strategic alliances for the Center for Economic and Community Engagement, developed the industry training curriculum for industry partners. Anna Nagorniuk, economic development specialist for the center, completed evaluation work for the project. CECE and the Newport News Center are both part of Outreach and International Affairs.

“The program has given me an opportunity to engage and connect partners that all have a common goal of enhancing the aquaculture industry in the region,” Tuttle said. “This project is a great example of how Virginia Tech’s Center for Economic and Community Engagement can connect the university’s resources and world-class research to engage with a community and tackle a regional industry need.”

CECE also connected with educators such as Sara Beam, a marine science and environmental science teacher at the Chesapeake Bay Governor’s School, to help build course content.

“We have an amazing partnership that has helped us build a groundbreaking program that is the first of its kind in Virginia,” said Beam, who developed and delivered the program curriculum.

After completing the online and hands-on classroom components of the program, the students were paired with an industry partner for a 60- to 80-hour summer internship over four weeks.

Bob Lane is a retired Virginia Cooperative Extension specialist and seafood engineer at the Virginia Seafood Agricultural Research and Extension Center who is still serving as an affiliated faculty member. He helped leverage industry relationships for the program. “We were able to bring together a team of experts to address an actual issue experienced by industry — the need for a larger workforce. We created a program that educates and informs local students about aquaculture as a career pathway so that legacy operations can continue and new generations of

aquaculturists and entrepreneurs can thrive,” he said.

Sarah Matheson-Harris, owner of Matheson Oyster Co. in Gloucester County, had two interns assisting her. They learned how to sort and grade harvested oysters by size and shape to help get them ready for market, as well as how to seed and harvest them.

“I learned about oysters in my marine science class at the Chesapeake Bay Governor’s School, so I knew how crucial they are to ecosystems and to the bay,” said Ailin Harpole, who interned with Matheson Oyster Co. “However, I did not know that a booming operation was just down the road from where I have lived my whole life. Every day at my internship, I felt needed and like I was doing something that could make a difference.”

Working waterfronts, where oysters can be grown and harvested, are disappearing due to climate change, and it is incredibly difficult to create new ones due to the high expense of building near the water, Matheson-Harris said. Many businesses in the industry also are family-owned and go back generations, and there is a risk that the family may not want to continue with the business.

“It is important that we get young people interested in the industry to keep businesses with existing working waterfronts going,” she said.

She was also thrilled to see many young women taking interest in an industry that is largely composed of men. “Our interns, both young women, learned quickly and worked hard, making the integration into our company seamless,” Matheson-Harris said.

Industry partners included:

- KCB Oyster Holdings.
- Little Wicomico Oyster Co.

- Matheson Oyster Co.
- Oyster Seed Holdings.
- Rappahannock Oyster Co.
- Sapidus Farms.
- Shores & Ruark Seafood.
- Steamboat Wharf Oyster Co.
- Virginia Institute of Marine Science.
- Ward Oyster Co.



Photo courtesy of Mallory Tuttle.

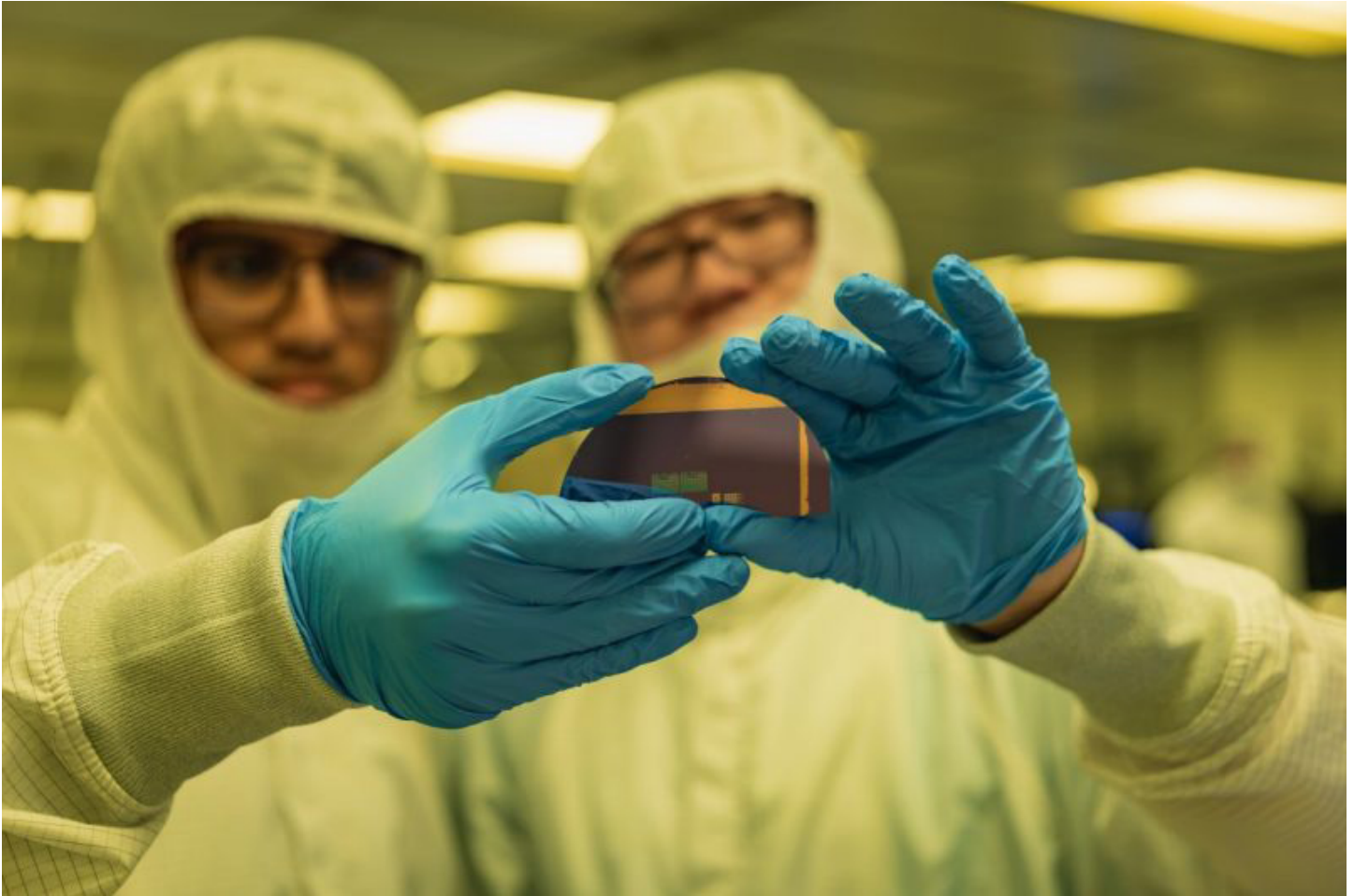
Virginia Tech, Chesapeake Bay Governor’s School, and Rappahannock Community College next plan to apply for an implementation grant from GO Virginia to expand the program to more localities, students, and industry partners.

“Our staff and regional council hope to put the full weight of GO Virginia behind the aquaculture industry in our region,” said Ian Ginger, GO Virginia Region 6 program director. “We applaud the partners on this project for their efforts in establishing aquaculture as a viable pathway for K-12 students. It’s great to see young folks in the area being exposed to an exciting and rewarding career in their backyard.”

Written by Julia Kell

GROWING THE NEW ECONOMY

The center was a major contributor for a submission to the NSF Regional Engines program and was a semi-finalist for a \$160 million award. The submission builds on the CECE-led 2022 semi-finalist proposal to the U.S. Economic Development Administration (EDA) Build Back Better Regional Challenge grant competition. The center is also leading the university's coordinated response to the U.S. EDA Tech Hubs \$75 million grant competition. In partnership with ConnectedDMV, the center contributed to a \$1 billion competitive proposal from the U.S. Department of Energy that is focused on creating a Mid-Atlantic Hydrogen Hub. To support this proposal, CECE worked with the Virginia Tech Foundation to secure a \$1.5 million grant from GO Virginia that will go to contract in 2024. The center also worked with university partners to secure a \$3.3 million grant from GO Virginia to create the Virginia Alliance for Semiconductor Technology (VAST). Led by Virginia Tech and headquartered at the Innovation Campus, VAST will link assets and opportunities across the state to grow this nationally significant industry.



Students in the College of Engineering fabricate semiconductors in a clean lab. The lab uses a special yellow UV light and enhanced air filtration systems. Photo by Luke Hayes for Virginia Tech.

Hanover County Looks to the Future

March 21, 2023



Photo courtesy of Anna Nagorniuk.

Hanover County, a suburban and rural community located just north of Richmond, has seen a lot of change over the years. The county historically had a strong agricultural economy, but its industry mix has changed noticeably over time. For instance, Hanover County has witnessed significant growth in the transportation, logistics, and warehousing sector and increasing development of the medical, healthcare, and biotech sectors, as well as a greater focus on research and development. In efforts to better understand changing economic conditions and industry dynamics in the county as compared to the greater Richmond region, the Hanover County Department of Economic Development contracted the Virginia Tech Center for Economic and Community Engagement (CECE) to produce an industry cluster analysis.

As part of this process, Hanover County's Economic Development team—consisting of then-Director Linwood Thomas, Deputy Director Brandon Turner, and Existing Business & Project Manager Ann Glave—worked with CECE to organize a series of focus groups to learn more about current industry conditions, challenges, and opportunities for existing and up-and-coming sectors. Participants included a

variety of industry experts, business owners, local leaders, regional organization representatives, and other community stakeholders, with sessions being divided into four key areas: tourism and hospitality; manufacturing and logistics; biotechnology and medical industries; and regional community partners.

CECE faculty member Anna Nagorniuk and graduate assistant Allison Ulaky traveled to Hanover to facilitate the four sessions on February 1st. Each session focused on participants sharing and discussing trends they witnessed in their respective fields, challenges their organizations faced, potential opportunities, and steps Hanover County could take to better support its industries.

“The level of engagement was phenomenal to see—participants were so open with their experiences and insights, and we were able to get a lot of valuable input, including actionable ideas for how Hanover County can better support its businesses across different sectors,” said Nagorniuk.

“Witnessing the participants collaborate in each of the four sessions was motivating, as it showed the high levels of interest in finding ways to improve the local economy and workforce and discussing how that can be done in Hanover County,” Ulaky said.

Overall, there was a great sense of community pride across the four focus groups, with many participants praising the county's quality of life, excellent school system, and strategic location to the Greater Richmond region.

Local industries did express their challenges with workforce availability and incoming waves of retirement-age employees preparing to leave the labor force—a challenge that is felt across many American communities. Additionally, affordability and availability of housing was a frequently-cited challenge—companies who originally located to the

county for the population base now express that many of their workers cannot afford to live where they work. In fact, approximately 75% of people who work in Hanover County commute from outside the county.

To help mitigate challenges and strengthen and better support the workforce, multiple participants identified the need for greater shared awareness and collaboration between the county's industry partners, regional organizations, and government to better take advantage of existing assets, such as the Hanover Center for Trades and Technology, a public career and technical education center that provides workforce training for high school students in fields including HVAC, automotive technology, and culinary arts. Many participants expressed a desire for regular convenings and greater communication across the county to stay up to date with each other and better support regional development efforts.

"Hanover County Economic Development was absolutely humbled and thrilled by the support our local business and community leaders provided during the focus group sessions," states Brandon Turner. "The valuable feedback we received will be critical towards shaping our economic development strategies and plans over the next 18 months." The input gathered from focus groups participants helped CECE to contextualize local and regional employment and industry data collected during the study. The focus groups also served to generate preliminary recommendations and action steps that the county might take to help grow industries and support existing ones. For example, several participants suggested the creation of a "technology zone" as a

way to encourage more tech-oriented businesses to grow the county's identity as a destination for tech. Once completed, the industry cluster analysis will be presented to the County's Board of Supervisors and integrated into the foundation for Hanover County's upcoming Economic Development strategic planning process, which will commence later in 2023.

"CECE conducted several exercises with the focus groups to nurture candid conversations with the various industries. It's an important step as we move towards a strategic plan," said Ann Glave. "We value CECE for their leadership and facilitation of the focus groups."

Written by Anna Nagorniuk

"Hanover County Economic Development was absolutely humbled and thrilled by the support our local business and community leaders provided during the focus group sessions. The valuable feedback we received will be critical towards shaping our economic development strategies and plans over the next 18 months."

Green Hydrogen in Hampton Roads

April 12, 2023





The Corporate Research Center oversees Tech Center Research Park in Newport News where \$1.6 million in GO Virginia funds will be used to develop a 5,000- to 10,000-square-foot demonstration lab for the production of green hydrogen.

Photo courtesy of W.M. Jordan Co.

Virginia Tech is advancing the energy sector through a landmark effort to shape the emerging hydrogen economy. Through the Virginia Tech Corporate Research Center, the university has joined a coalition of more than 60 partners across Virginia, Maryland, and Washington, D.C.

The Mid-Atlantic Hydrogen Hub project addresses demand for production of green hydrogen as a fuel while organizing a U.S. regional hub. The purpose is to meet market demand, accelerate delivery scale, drive down costs, and spur innovation in processing and deployment.

After submitting a concept paper in late 2022, the hub was one of 33 groups across the country encouraged by the U.S. Department of Energy (DOE) to submit a full application to its \$8 billion Regional Clean Hydrogen Hubs program. Six to 10 regional hubs across the country will be awarded for up to \$1.25 billion each. The program is set to be a central driver in helping communities across the country benefit from clean energy investments, good-paying jobs, and improved energy security.

The mid-Atlantic hub comprises a variety of organizations, including the Corporate Research Center (CRC); Connect Airlines; Connected DMV; Dominion Energy; Exelon Corp.; Montgomery (Maryland) County Government; Universal Hydrogen Co.; and WGL Holdings Inc. It is supported by more than 150 other public and private organizations across the region.

The project is expected to create approximately 8,000 jobs by 2030.

The university is engaged with the hub through the CRC; the Center for Economic and Community Engagement (CECE) and the Virginia Tech Newport News Center, both part of Outreach and International Affairs; and the College of Engineering.

“The Virginia Tech Corporate Research Center serves as an avenue to commercializing the research of the university’s

faculty,” said Elizabeth A. McClanahan, CEO of Virginia Tech Foundation Inc., of which the CRC is a subsidiary. “In this capacity, the CRC plays several roles — test bed; advancer of science-based discovery; market strategist; and creator of partnerships between academia, the private sector, and government. The Mid-Atlantic Hydrogen Hub can help to advance the Commonwealth of Virginia as a leader of energy innovation across the nation.”

As part of the wide-ranging proposal, an electrolyzer would be built at the CRC’s Tech Center Research Park in Newport News to provide clean energy for the region, including the

neighboring Thomas Jefferson National Accelerator Facility Lab. An electrolyzer uses electricity to split water molecules into their constituent oxygen and hydrogen atoms. According to the White House, the clean hydrogen produced by this method is essential for reducing emissions and creating jobs in manufacturing and industrial sectors. It also plays a critical role in clean energy

“Hydrogen creates a new opportunity for the Hampton Roads region, and CECE can work with heavy energy users in the maritime, defense, and aviation industries to make a successful transition to hydrogen fuel.”

supply chains that until now have largely been produced overseas.

In April, Tech Center was part of a coalition that received a GO Virginia grant to build a demonstration lab for the production of green hydrogen. The Mid-Atlantic Hydrogen Hub will expand upon this project.

“Tech Center will serve as the focal point in Hampton Roads for hydrogen energy innovation and economic benefit for the region,” said Brett Malone, president and CEO of the Corporate Research Center. “This collaboration is a great example of the Virginia Tech community’s ability to develop effective multidisciplinary teams to contribute solutions toward large-scale, global challenges.”

CECE’s mission includes bringing opportunities to Virginia Tech faculty by engaging with diverse organizations across

the commonwealth and the greater Washington, D.C., metro area.

Afroze Mohammed, CECE's associate director for strategic alliances who is based in Arlington, serves on the steering committee of the National Capital Hydrogen Center, a major initiative of Connected DMV. She also served on the bid leadership committee for the DOE proposal.

"CECE was part of early discussions about the DOE opportunity, addressing topics such as the geographic scope of the bid and management issues. We introduced relevant groups at Virginia Tech, including the CRC and faculty in the College of Engineering, to the Connected DMV team leading the proposal," Mohammed said.

CECE and the Newport News Center will continue to connect Virginia Tech faculty to the project and identify opportunities for applied research.

"We will convene community conversations across the region and develop curriculum and training opportunities for the general public, industry, and the workforce," said Mallory Tuttle, associate director of the Newport News Center.

College of Engineering faculty members Jim Egenrieder of the Center for the Enhancement of Engineering Diversity and Rohit Pandey of the Department of Mining and Minerals Engineering will help guide the curriculum and deliver training.

Pandey said initial efforts will focus on providing an overview of current or planned technologies being developed to establish a hydrogen ecosystem.

"As new technologies evolve, it is critical for engineers and scientists to be armed with the skills to accurately evaluate technical, financial, and social parameters to assess project feasibility," he said. "The planned facility at Tech Center will also provide an excellent experiential learning environment for students and professionals."

Egenrieder is developing a framework to help guide the development of a skilled workforce locally.

"We'll be able to develop job and career pathways with regional schools with hydrogen curriculum modules that can be implemented in not only the eight new Virginia high school energy courses, but also in elementary science, middle

school physical science, and high school chemistry, physics, environmental science and sustainability, economics, and technology and engineering courses," Egenrieder said.

"Recognizing that today's elementary students will likely be working full time well into the 2080s and possibly live well into the next century," he added, "our curricula will also promote themes of innovation and the importance of technical skills and communication in how the Hampton Roads communities and their leaders adapt to change."

Written by Diane Deffenbaugh

CREATING VIBRANT COMMUNITIES

The center serves as a trusted source of economic and community research, providing strategic planning, economic impact and market analysis, and feasibility studies for community and university partners. Over the course of the year, the center engaged with communities across the commonwealth, including the Mount Rogers region, Hampton Roads, the Town of Stuart, and the Town of Lawrenceville.



Lawrenceville, Virginia. Photo by Diane Deffenbaugh for Virginia Tech.

Boosting Tourism in Mount Rogers

February 23, 2023

The Center for Economic and Community Engagement collaborated with a community tourism nonprofit and two planning firms to guide tourism directors, planners, and economic developers in growing outdoor tourism in Southwest Virginia.

The Mount Rogers region — which includes Bland, Carroll, Grayson, Smyth, Washington, and Wythe counties as well as the cities of Bristol and Galax — has several well-known attractions, such as Grayson Highlands State Park, the Blue Ridge Parkway, and Hungry Mother State Park. The area, however, is also home to many hidden gems.

The region built a strong foundation by developing hundreds of attractions. The trick was developing a plan that helped communities collaborate to increase awareness and ultimately produce a broader economic impact, according to Elli Travis and Ashley Posthumus, Virginia Tech economic development specialists who led the project.

“When people think of Mount Rogers, they think of hiking to the highest point in Virginia or seeing the wild ponies at Grayson Highlands State Park,” Travis said. “They’re not going to the smaller, lesser-known towns, such as Troutdale or Independence. We wanted to find a way that all the communities in the Mount Rogers region benefited from tourism.”

Entrepreneur Karen Hester has three stores in the region as well as homes she rents out to tourists. She said the plan will make it easier to develop travel itineraries for her customers. “Tourism is an economic driver for the region, so plans like these are important to help the area grow,” she said.

John Provo, executive director of the Center for Economic and Community Engagement, part of Outreach and International Affairs, said the project is a great example of the ways the center works with communities across the commonwealth to improve their quality of life through the resources of the university. “By building partnerships with

community organizations such as Friends of Southwest Virginia and planning firms like Hill Studio in Roanoke, we’re able to provide a comprehensive action plan that not only helps identify the region’s strengths but also provides recommendations on business development, strategic partnerships, and marketing strategies,” he said.

Ross Hammes, who earned a bachelor’s degree in geography and a master’s degree in urban and regional planning from Virginia Tech in 2017, worked on the project for Hill Studio. A former graduate assistant for the center, Hammes proposed several projects aimed at sparking growth for the region, including turning a former brickyard near Exit 54 along Interstate 81 into an adventure park with activities such as paintball and all-terrain vehicle training.

Other suggested projects included zip lines, additional trails, and accessible parking lots and observation decks. And although a timeline for implementation will vary for each locality, some projects are already gaining traction. The Virginia Department of Transportation and Smyth County, for example, have applied for funding to develop the brickyard project.

“We wanted to come up with some unique, exciting activities for the area,” Hammes said. “When you think of outdoor recreation, you typically think of activities like mountain biking, horseback riding, kayaking, or hiking. But being out in the woods playing paintball, riding a four-wheeler, or zip-lining across a ravine are as outdoors-oriented as anything. They’re just a little different.”

The region also will receive new branding and marketing plans from Arnett Muldrow & Associates, a South Carolina firm that helps communities with planning strategies. “These communities are the gel that holds this entire region together,” partner Aaron Arnett said. “Our goal is to help these individual communities tell their story in context with the entire Mount Rogers experience.”

Idalina Walker, director of partnership and outreach with

Friends of Southwest Virginia, said the support comes at the perfect time. “Next steps will include asset inventory training and outreach, signage support, and continued support of the development projects.”

Written by Julia Kell



Cyclists bike on the Virginia Creeper Trail, a 34-mile multipurpose trail that runs from Abingdon to Whitetop, Virginia. Photo courtesy of Arnett Muldrow & Associates.

The Secrets of Main Street Success

April 7, 2023

As Joanie Willett walks along State Street in Bristol, Virginia, she sees a city that has changed a lot in just a few years.

“When I first visited five years ago, the street was lined with empty storefronts. But today, the main street is bustling with restaurants, art galleries, museums, and antique stores,” Willett said.

A senior lecturer in politics at the University of Exeter in England and co-director of the Institute of Cornish Studies, Willett recently received a Fulbright U.K. Scholar Award to conduct research on main streets with the Virginia Tech Center for Economic and Community Engagement (CECE).

“I wanted to rejuvenate rural places and connect people to opportunities they have right in their hometowns,” Willett said. “It’s not right that people feel they need to leave

their hometowns in order to make something of their lives. I also believe that more attention needs to be paid to rural issues — particularly economic ones.”

CECE, part of Outreach and International Affairs, has long been involved in building vibrancy along Virginia’s main streets. In 2018, the center conducted an analysis of downtown Christiansburg and provided recommendations for revitalizing the area. This semester, the center’s economic development studio class is working with Main Street America to help localities attract more residents and remote workers.

It was that kind of work that sparked Willett to reach out to Executive Director John Provo while looking for a case study outside of her home country. Eventually, she applied for the Fulbright scholarship with plans to work at CECE.

“The center is one of the most welcoming research organizations I’ve been able to work with,” she said. “There is a very different policy landscape in the U.S. that I have needed help to understand. The faculty have been generous with their time in helping me to learn more about the political and economic environment of the region.”

Willett set her sights on Appalachia after reading Barbara Kingsolver’s book “Flight Behavior,” a novel set in rural Tennessee that focuses on intergenerational poverty and the impact it has on people’s lives.

“I took a train trip a few months later from New York City to San Francisco. We went through West Virginia, and that was my first time seeing that kind of mountainous and

forested landscape. I spoke with a schoolteacher from West Virginia on the train and I thought, ‘This place has so many stories to tell that I want to hear,’” Willett said.

“I wanted to rejuvenate rural places and connect people to opportunities they have right in their hometowns.”

Coming to work in Southwest Virginia has allowed her to see firsthand how towns such as Bristol are revitalizing their economies after the decline of the coal mining industry. She found many similarities with her own hometown of St. Austell in Cornwall, England. The town of 20,000 was historically focused on china-clay mining, until the industry collapsed in the 1990s. While mining still exists in the town, not as many people are needed to perform the work.

Bristol followed the approach of Main Street America, a program that works to revitalize historic commercial districts and centers around four transformational strategies — economic vitality, design, promotion, and organization. Willett believes she can apply that same approach to revitalize town centers in U.K. communities.

“People will come to the town center, see something they



Joanie Willett. Photo by Julia Kell.

like, but then go home and buy it cheaper online,” Willett said. “Something I learned from those involved in Bristol’s main street program is shopping should be an experience, which is something I can take back home.”

Along with attending CECE’s studio class, she is working with senior economic development specialist Elli Travis to learn more about Christiansburg’s efforts to promote its downtown. Willett will also accompany other researchers to learn more about the projects taking place in Virginia communities.

“The U.S. and the U.K. can learn a lot from each other in regards to what kind of policy works for successful main street initiatives and what doesn’t,” Provo said. “Joanie is passionate about finding solutions to problems that both of our countries face, such as lack of affordable housing and the need to diversify our economies.”

After she returns home this summer, Willett will share information with the National Association of Local Councils as well as Cornwall policymakers. She is planning an event

focused on town centers in the fall.

The U.S.-U.K. Fulbright Commission works to promote peace and cultural understanding through educational exchange and provides scholarships to academics and professionals to lecture or conduct research in the U.S. or U.K.

For advice and resources on the Fulbright application process, contact Virginia Tech’s Fulbright liaison, Nicole Sanderlin, director of global engagement in the College of Engineering. The Provost’s Office assists department, college, or division leadership in facilitating leave for Fulbright fellowships. The Global Education Office, part of Outreach and International Affairs, provides support and resources for incoming Fulbright scholars and the departments that host them.

Written by Julia Kell

How Historic Theater Could Spark Growth

May 15, 2023





“The great thing about this project is that it’s grad student led, it’s grad student managed, and it’s grad student operated,” said William Ferris, a doctoral candidate through the Department of Agricultural and Applied Economics in the College of Agriculture and Life Sciences. “CECE gives us a great chance to spread our wings.”

Photo by Diane Deffenbaugh for Virginia Tech.

The streets of Stuart, Virginia, are quiet, even on a Friday night. If you want to listen to live music, watch a play, or see a movie, your options are limited in the Patrick County town of about 1,400.

Many residents travel an hour or more for a night out, heading to Floyd or Rocky Mount for entertainment. But alumnus Bryce Simmons wants to change that.

“There’s no attraction here,” said Simmons, who earned a bachelor’s degree in civil engineering in 2007 and now serves his hometown as town manager. “We have gorgeous views you can’t purchase, but we lack an anchor institution to bring people into town, walk the streets, spend money, and get something to eat. I think every town needs that to be sustainable.”

What Stuart does have is a 1940s theater — renovated more than 15 years ago. Could investment in the old theater be the economic spark the town needs? Simmons turned to Virginia Tech to help answer that question.

He didn’t, however, have to travel all the way to Blacksburg. Instead, he turned to the nearby Reynolds Homestead, which for more than 50 years has served as the university’s engagement center in the region.

“They are without a doubt the one organization that is able to connect our region to the university’s resources,” Simmons said. “A lot of times, it’s difficult for a manager of a small town to approach a large institution like Virginia Tech and know where to go and who to talk to. The Reynolds Homestead makes it much easier to wade through that system and find the experts you need.”

Reynolds Homestead Director Julie Walters Steele connected Simmons to Sarah Lyon-Hill of the Center for Economic and Community Engagement (CECE) to discuss the town’s revitalization plans, including the theater.

“Historic theaters can have a significant impact on small towns, providing a focal point for community activity, driving economic growth, preserving local history, and creating jobs,” said Lyon-Hill, CECE’s associate director for research development. “But a study that examines the market and the likelihood of success can provide more clarity on the effect a historic theater might have on a particular town.”

Graduate students take lead

Lyon-Hill knew she had the perfect team for the job — CECE’s five graduate assistants, all of whom have been working with the center for a year and are nearing graduation.

“The great thing about this project is that it’s grad student led, it’s grad student managed, and it’s grad student operated,” said William Ferris, a doctoral candidate through the Department of Agricultural and Applied Economics in the College of Agriculture and Life Sciences. “CECE gives us a great chance to spread our wings. It’s very rewarding that CECE trusts us to operate on our own and apply our expertise to achieve tangible results.”

Along with Ferris, the team also included School of Public and International Affairs students Allison Ulaky, Kit Friedman, and Jason Schwartz — all master’s candidates in urban and regional planning — and Hye-Jeong Seo, a doctoral candidate in planning, governance, and globalization and a fellow in the Interfaces of Global Change Program.

Ferris and Friedman toured the old theater and talked to local business owners. Ulaky, meanwhile, developed and managed surveys and other engagement remotely while Schwartz and Seo researched and crunched the data.

“There is a real sense of community in Stuart. The people in that area really seem to care about what’s going on in their backyards and were very vocal about what they’d like to see and how the theater would impact their lives,” Ulaky said.

Simmons said a survey that CECE created and distributed was incredibly effective. “The data they found verified the information I thought I already knew,” he said. “It’s one thing for the town manager to go in front of council and say, ‘These are the numbers and this is the information I believe to be true.’ But then to be able to have a third party come in and evaluate the situation and say, ‘Yes, you’re right. These numbers match up’ — that gives me a podium to stand on to say that we are moving in the right direction.”

For Schwartz, having that kind of impact on the outcome of a project makes the work meaningful. “It’s more than academic work. It’s the real world, so nothing is black-and-white,” he said. “That’s the greatest benefit. No one is grading us, but our work is going to have impact.”

And the work also has an impact on what they do next.

Friedman had already spent time working in state parks and other recreational organizations before coming to CECE. “With an undergraduate degree in natural resources and conservation, I have had a lot of random community engagement kinds of experiences. But working for CECE has really helped me pull everything together and pursue a job with a planning commission that combines environmental and economic development skills.”

Creative economy grows

If Simmons’ plan gets the town council’s approval, the Star Theatre would add one more venue to the newly designated downtown historic district — an area that sits removed at the bottom of the hill from the courthouse and other businesses. But it wouldn’t be the first arts-centered business to make a home there.

A Reynolds Homestead program that brings creative and business-minded entrepreneurs together has shepherded the establishment of two other businesses just steps from the old theater — the Rise and Shine Market and Calliope: A Circus of the Arts.

Both businesses promote local artists. The market provides a place for emerging artists to sell their work, while Calliope also provides retail space as well as room for arts studios and classes for all ages.

The Reynolds Homestead’s Julie Walters Steele is hopeful the economic growth will continue. “A creative economy can help retain a talented and diverse workforce, promote entrepreneurship and innovation, and create unique cultural experiences that draw in visitors and residents alike,” she said.

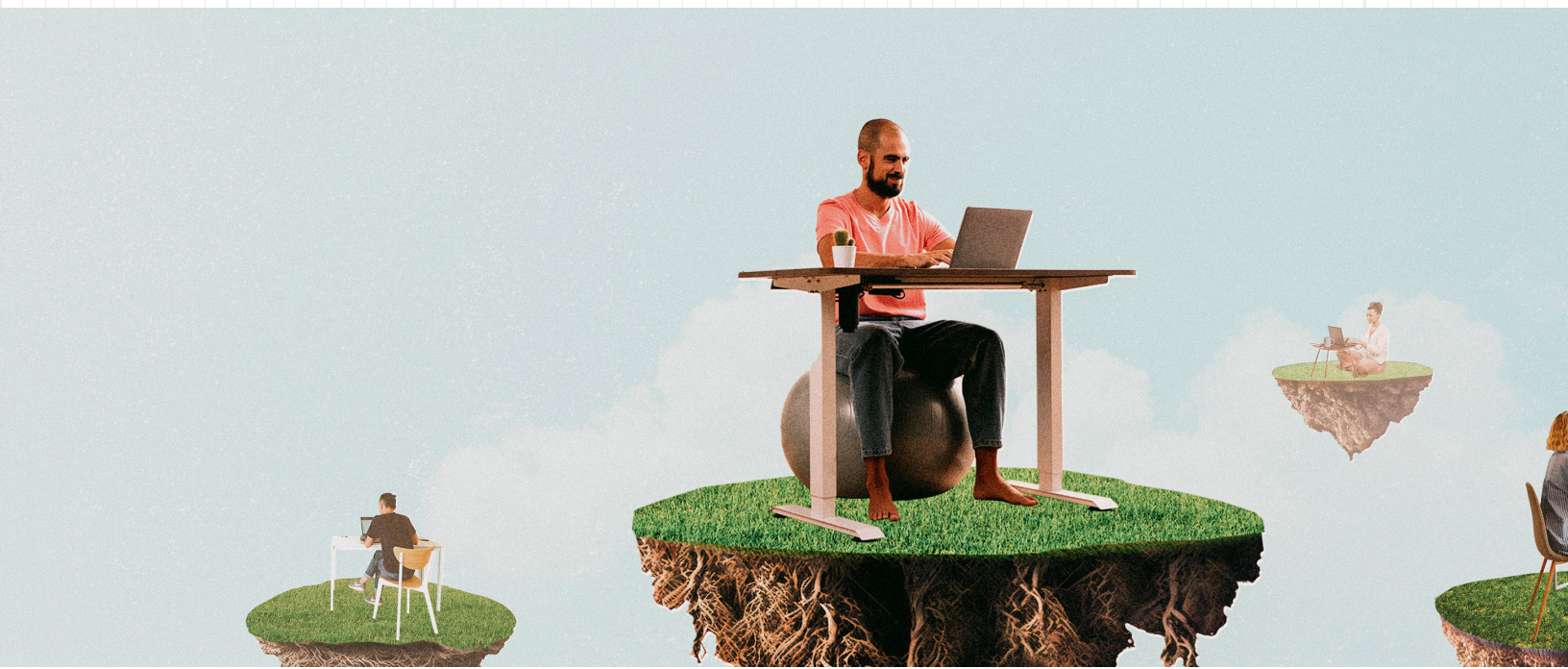
Simmons said he’d love to see the area become Stuart’s arts district. “To do your regular business you go uptown. But then when you’re ready to have a little bit of fun, you go downtown,” he said.

CECE and the Reynolds Homestead are both part of Outreach and International Affairs.

Written by Diane Deffenbaugh



Downtown Stuart, VA. Photo by Kit Friedman.



Home Sweet Home For Remote Workers



May 30, 2023



Remote workers can live anywhere — and many community leaders want to attract them. Students in an economic development studio class, part of the master's degree in urban and regional planning, researched how they could.



“It’s beyond just turning a paper in to your professor,” Sarah Lyon-Hill, CECE’s associate director for research development said. “At the end, students are turning in something that could be very valuable to a community.”

Illustration by Christina Franusich for Virginia Tech.

John Provo refers to the tattoo peeking out from under his shirt sleeve as his midlife crisis. Really, it's more of a love letter to his vocation.

The parade of tools inked up his forearm — simple line drawings of a woodman's ax, a hunter's bow, a shepherd's crook, and so on — represents an economic development theory known as the Valley Section, first sketched by Scottish naturalist Patrick Geddes in the 1920s. For Provo, executive director of the Center for Economic and Community Engagement (CECE), part of Outreach and International Affairs, the tattoo is a daily reminder of economic development at its most elemental.

"It's about people, it's about places, and it's about how work functions," he said.

The tattoo, of course, doesn't feature a laptop, the tool of choice for remote workers everywhere.

Yet the rise of location-independent workers, whose ranks have grown by an estimated 44 percent in the past five years, has become an urgent issue for communities across the commonwealth. Some rural leaders pin their hopes on remote workers to stem population loss. Others are grappling with an influx of new arrivals. "I think remote work is going to be a feature of everything we do with communities in the future," Provo said. "This is where the talent discussion is headed."

What makes remote workers flock to some communities

John Provo. Photo by Christina Franusich for Virginia Tech



Sarah Lyon-Hill. Photo by Christina Franusich for Virginia Tech



and cold-shoulder others? How can towns deal with both the opportunities and the challenges they present? This spring, graduate students in an economic development studio class co-taught by Provo and Sarah Lyon-Hill, CECE's associate director for research development, set out to answer those questions with a research project whose findings have real-world application for communities around Virginia. "It's beyond just turning a paper in to your professor," Lyon-Hill said. "At the end, students are turning in something that could be very valuable to a community."

Impacting real communities

The remote work project rose out of a pilot study of Virginia communities done by Matt Wagner, chief program officer for Main Street America and a remote-working transplant to Virginia, and Courtney Mailey, state coordinator of the Virginia Main Street Program. Provo heard them speak at a conference and instantly proposed involving students in his economic development studio class, a capstone course for students earning a master's degree in urban and regional planning from the School of Public and International Affairs in the College of Liberal Arts and Human Sciences.

Some of the communities in Wagner and Mailey's study, such as Buena Vista, were hoping to attract remote workers to grow the local economy and stem brain drain. Marion wanted more remote jobs for its residents. Meanwhile, Luray was awash in remote workers who were starting to clash with locals. "There's definitely a wealth gap

between Come Heres and From Heres,” Mailey said, “and different expectations about amenities.”

Luckily, Wagner and Mailey embraced the idea of collaborating with Virginia Tech to extend their remotability study. “This relationship with Virginia Tech brings additional credibility to the importance of the work,” said Wagner, adding that for students, it’s “a chance to be connected to something bigger than the university, to be embedded in programming work that could impact communities.”

Four kinds of remote workers

No one had to convince the 10 students in the studio class that remote work mattered. They were scattered between Northern and Southwest Virginia, meeting via Zoom to accommodate their geographic diversity. Several students held hybrid or remote jobs themselves.

So they dove into the research with a mixed-methods approach that included online surveys, one-on-one interviews, and analyses of data gathered from sources like census population studies and traffic data. “We’re really learning what assets exist in the communities that can be promoted to increase remote work as well as what challenges should be addressed in order to make remote work more feasible in the future, like broadband availability and public transportation,” said Allison Ulaky, an Arlington-based graduate assistant who worked remotely for CECE. “Housing is a huge issue for remote workers as well.”

From their research, students found that remote workers are disproportionately urban but that a “donut effect” is in play. Of remote workers who moved, 60 percent stayed within the same metro area — they just shifted from the urban core to the suburban periphery.

Students also divvied remote workers into four typologies based on their driving motivations when it comes to locations:

- Urbanists crave urban amenities like social diversity, entertainment, economic dynamism, and infrastructure.
- Salary Stretchers search out communities with a lower cost of living, especially for housing, to maximize their disposable income and quality of life through geoarbitrage.

- Nature Lovers value outdoor recreation and seek out natural amenities and scenic landscapes when they relocate.

- Boomerangs move to maximize their emotional ties with people and places and often move to get closer to their families, hometowns, or places they’ve lived in the past.

Not every community is primed to attract every kind of remote worker. But whether a place is urban, suburban/exurban, or rural, most communities appeal to someone.

After looking at nine case-study communities — Marion, Vinton, Clarksville, Hopewell, Isle of Wight, Gloucester, Leesburg, Harrisonburg, and Charlottesville — the students also made recommendations for how locations can attract remote workers: for instance, building public-private partnerships with co-working spaces, expanding access to public space Wi-Fi, rezoning to allow more diverse and affordable housing options, working with local land management agencies to protect natural amenities from degradation, and adaptively reusing or demolishing vacant or blighted structures.

A game-changer class

For Virginia’s smaller and rural communities, learning how to capitalize on the remote worker boom could be a game-changer — just as the experiential learning-based studio class has been a game-changer for students. “It’s an opportunity to get out there and really work with communities,” said Lyon-Hill. “It gives the hands-on experience to say, ‘This is how I can take the tools that I’ve learned as a student and really apply them in a way that is effective and actually helps to create change.’”

For Ulaky, the proof is in the pudding. By midway through the last semester of her master’s program in urban and regional planning, she’d already lined up an economic development research job. The position is based at a nonprofit in Arlington, where Ulaky lives. But as with every other job she’s held in the past few years, she’ll be working remotely at least some of the time.

Written by Melody Warnick

ADVANCING ECONOMIC OPPORTUNITY FOR EVERYONE

The center has extended several existing partnerships and developed new engagements with organizations focused on expanding economic opportunity and quality of life for Black entrepreneurs, students of color, and individuals with barriers to employment.

This includes:

- working with the Virginia Tech Office of Inclusion and Diversity to develop industry support for their Historically Black Colleges and Universities/Minority Serving Institutions research summit;
- continuing the placement of interns for Urban Alliance;
- developing an evaluation program for BLACK Brand and their B Force Accelerator program;
- assisting alumni of St. Paul's College — a private HBCU that closed a decade ago — to develop a community development mission for nonprofit SPC4Life;
- providing the YWCA of Bristol with an assessment of the recovery ecosystem in Southwest Virginia;
- and collaborating with the Virginia Tech Center for Food Systems and Center for the Humanities to promote improved conditions for farmworkers.



SPC4Life's Tiquan Goode and Chris Stephenson (foreground) listen as Pamplin College of Business students Sean Walsh (from right), Bailey Wright, and Fatimata Diagana talk about their work in Professor Dirk Buengel's class, which focused on developing recommendations for whether and how St. Paul's College could re-enter the higher education market. Photo by Diane Deffenbaugh for Virginia Tech.

A Wellness Center in Glade Spring

May 31, 2023

Two Virginia Tech departments, the Center for Economic and Community Engagement (CECE) and the Institute for Policy and Governance (IPG) are working with the YWCA of Northeast Tennessee and Southwest Virginia to help inform programming for a wellness center in Glade Spring, Virginia. The wellness center will provide recovery resources and workforce training to people with substance use disorders. The center will also focus on family resiliency programs and general health and wellness.

“Along with examining the value a wellness center could bring to the area, the Virginia Tech study is intended as a stepping stone for collaboration and networking across the region, with the goal of creating a recovery community

in Glade Spring,” said Ashley Posthumus, economic development specialist for CECE.

Glade Spring, a small town in Southwest Virginia, straddles the county line between Washington and Smyth counties and is just a few minutes’ drive from three other towns: Marion, Saltville, and Abingdon.

The YWCA is working with a wide variety of partners on the development of the wellness center, including Appalachian Substance Abuse Coalition, Appalachian Sustainable Development, Ballard Health, Emory & Henry College, Project Glade, Virginia Highlands Small Business Development Center, and Washington County Public Library.



Ashley Posthumus, economic development specialist for CECE (at left) and Lara Nagle, community-based learning projects manager with the Virginia Tech Institute for Policy and Governance, presented their work to partners at the YWCA symposium at Emory & Henry College. Photo by Julia Kell.

“Support from local partners is very strong, and there’s a lot of interest in working together to make the center a success,” said Scott Tate, associate director for community innovations for CECE. “There’s a space for the center that the organizing team has identified, and they’re doing the work needed in order to get grant funding for buying and renovating the structure.”

On May 4, the YWCA held a symposium at Emory & Henry College where CECE and IPG presented their research and received feedback from partners. The symposium was also a chance for people to connect and learn about the many resources organizations in the region offer for those struggling with substance use disorder.

The project team conducted interviews and surveys with people in the community and gathered information about the kinds of programming residents want to see from the wellness center. Respondents were interested in programs for women covering the following topics: family and child planning, vaccinations and healthcare, and domestic violence protection and recovery.

They were also interested in programs for previously incarcerated individuals focused on opioid overdose prevention training, assistance with housing and transportation, and connecting prospective employees with local employers who hire people with a criminal history.

The team spoke with Appalachian Plastics, an employer in Glade Spring, VA that is leading the way in developing recovery-ready workplaces. The wellness center will seek to teach local employers about how they can become recovery-ready as well. Recovery-ready workplaces adopt policies that ensure people with substance use disorders have access to services, including treatment and recovery support, and educate all levels of the organization on substance use disorder and recovery, in order to reduce stigma and misunderstanding.

“Someone’s employer can be a big part of what motivates them to stay in recovery,” said Lara Nagle, community-based learning projects manager with the

Virginia Tech Institute for Policy and Governance.

“A lot of individuals with substance use disorders have plenty of credentials,” said Marty Holliday, executive director for the New River/Mount Rogers Workforce Development Board and guest speaker at the symposium. “They just need help getting the job. They need help writing that resume to explain those gaps in employment.”

The New River/Mount Rogers Workforce Development Board received funding to offer training opportunities for people in recovery, including certifications to become peer recovery specialists, individuals who are in successful and ongoing recovery from substance use disorder and use their experience to help others.

Leslie Peterson, the senior manager of public relations and engagement for the YWCA, said the proposed wellness center could be a pilot for similar centers in other communities.

“This community wellness and resource center would be a place of togetherness and a community hub where people come together to engage with others and better their lives, their families, and their communities,” she said.

“Glade Spring can be a community devoted to recovery. If we can make it happen in Glade Spring, we can make it happen anywhere,” said Dirk Moore, executive director of The McGlothlin Center for the Arts at Emory & Henry and founder and past president of Project Glade.

Written by Julia Kell

Reimagining St. Paul's College

July 20, 2023





Chris Stephenson (at left) and Tiquan Goode, both of the nonprofit SPC4Life, stand along Academic Square on the former campus of St. Paul's College in Lawrenceville, Virginia, a historically Black college about an hour southwest of Richmond.

Photo by Diane Deffenbaugh for Virginia Tech.

There's no one to greet visitors at St. Paul's College — just the wind rustling through chest-high grass.

Under fading “no parking” signs, a few security vehicles dot College Drive, their tires flat and rotting away. Stately red brick buildings, many at least a century old, still stand proudly around Academic Square, but vines scramble up their walls and through broken window frames as nature takes back the 184-acre campus.

Chris Stephenson wades through the weeds and peers across the fields to the Brunswick County community of Lawrenceville that grew up around the college. He graduated from St. Paul's in 1988, along with his wife, and raised a family in the area. Where most see decay and dilapidation, he pictures a new beginning.

For more than 125 years, this site was a seat of great learning and expectation. In 1888, James Solomon Russell, a former slave turned educator and Episcopal minister, founded St. Paul's to train Black teachers. Over more than a century, the institution grew into a liberal arts college known for, among other things, producing top-notch educators. It also offered many adult-education programs and a one-of-a-kind residential program for single parents. But, following a string of financial and accreditation struggles, the college closed in 2013, and the rural town's stores, suddenly without customers, followed suit. Jobs became scarce. People left.

“St. Paul's represented hope for the Black community, many of whom were living in poverty,” Stephenson said. “Through the college, they saw people who were transitioning from poverty to opportunity. When it closed, that hope was taken away with it.”

Stephenson leads SPC4Life, a nonprofit group of alumni and

community members who aren't ready to let St. Paul's go. With dreams to buy back the campus, currently owned by a Chinese investment group, they are reimagining ways to keep the traditions of the sacred space alive.

“If it wasn't for St. Paul's College, I wouldn't be the person I am now. The other alumni and I want to bring some of those same educational and community-building opportunities that we were given back to Brunswick County,” Stephenson said.

Some of those efforts will target and fill gaps in the

area's educational opportunities, especially for young people who are not completing school or are ill-equipped to go on to employment or postsecondary education. SPC4Life recently took a first step, offering a five-day series to teach leadership skills to 14- to 18-year-olds.

*Virginia Tech's
transdisciplinary impact*

But the group needed experts who could help guide the next steps.

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That search brought them to Scott Tate, associate director for community innovations with the Virginia Tech Center for Economic and Community Engagement (CECE), part of Outreach and International Affairs.

“They had so much passion and enthusiasm to bring to revitalizing St. Paul's College, but there is a lot of work to be done,” Tate said. “They had worked with several of our partners, but those partners were uncertain about how to help. So I started thinking creatively about how a transdisciplinary team of university experts could help this community figure out what's next. Together, we could accomplish so much more than we could possibly do alone.”

As a CECE research team examined demographics, historical trends, top occupations, and other contexts that underlie the economic conditions in the Brunswick County area, Tate also contacted others from around the university so that Virginia

Tech could have an even greater impact in the community.

“This sort of engagement is who we are at Virginia Tech. In the true spirit of *Ut Prosim*, we are committed to fostering collaboration between Virginia Tech and communities across the commonwealth, building connections between urban and rural, and creating a Virginia full of economic vitality,” Tate said. “Chris and his team really wanted to see the ideals and the principles of the college continue in some way to support the community. The more I learned about the incredible history of St. Paul’s, the more I felt that we really need to help them keep that alive in some way.”

Tate said the ensuing collaboration is a prime example of the kind of work CECE supports, including with its Vibrant Virginia initiative, a university-level program started in 2017 to help higher education be a better partner around the commonwealth and promote scholarship across its urban-rural spectrum. The initiative supports faculty members in conducting projects with community partners in both urban and rural regions and strengthens relationships between the university and regional stakeholders.

Pamplin students provide new perspective

As the center’s initial work wrapped up, Tate turned to Dirk Buengel, associate professor of practice in the Pamplin College of Business, to dig deeper. Three seniors in Buengel’s management consulting and analytics capstone course dove into the data, developing recommendations for whether and how St. Paul’s could re-enter the higher education market.

Sean Walsh, Bailey Wright, and Fatimata Diagana presented recommendations both broad and specific, but what really stood out for Stephenson was the students’ advice to double down on what makes the community unique. “We have to embrace where we are and not try to be everything for everybody,” he said.

Buengel said a real-world project such as St. Paul’s College unlocks experiential learning opportunities for his students, like building a relationship with a client while also applying lessons from the classroom.

“Here it’s not just one course that they apply. Finance, strategic management, accounting, sales management — whatever it is. They must connect the dots of everything they have learned, and for the first time they see the holistic, big picture,” he said.

A ‘brain trust’ for the community

Max Stephenson — no relation to Chris — also heeded Tate’s call. As director of the College of Liberal Arts and Human Sciences’ Institute for Policy and Governance (IPG), he put the Community Change Collaborative into action.

The collaborative’s team of scholars works to support communities exploring and addressing social, economic, and environmental problems.

Max Stephenson said he and his colleagues — including Brad Stephens, a doctoral student in planning, governance, and globalization in the School of Public and International Affairs; Bob Leonard, professor in the School of Performing Arts; and Andy Morikawa, IPG senior fellow — met repeatedly with SPC4Life both remotely and at the group’s headquarters on Lawrenceville’s Main Street. They sought to help guide decisions about its organizational structure, values, and mission, as well as facilitating community sessions to build trust, provide information, and get feedback.

Maybe most important, Max Stephenson said, they got the group members thinking deeply about their vision and how they wanted to serve the community. “St. Paul’s represented the last redoubt for a group of citizens who would not be assisted in any other way. It has been fascinating and a real privilege to see and work with this passionate community.”

He said his team will continue to work with the alumni to help craft a board of trustees development plan and will also partner with them and historically Black colleges and universities in Virginia this fall to offer a two-day symposium focused on reimagining Black educational spaces such as former grade schools.

“We have been something of a ‘brain trust’ for Chris, serving as a sounding board for him and his colleagues,” Max Stephenson said. “Meanwhile, we continue to learn a great deal about the enduring social and political consequences of Virginia’s massive resistance to desegregation and the profound significance of historically Black institutions for both their students and the communities where they are located.”

Diverse viewpoints from across the university

As the Community Change Collaborative’s work in Lawrenceville continues, more opportunities for

partnerships across Virginia Tech are being revealed.

“We have already enlisted a number of our partners from across Virginia Tech to provide guidance and expertise in areas as diverse as agricultural education, visual storytelling, and vocational training,” Brad Stephens said.

For example, Rachel Weaver, a filmmaker and associate professor in the School of Visual Arts, is helping SPC4Life think about how media production can support its goals. Through multiple short films, her work will tell the story of St. Paul’s College and how its closing has impacted the region.

“Reaching the community demands that you be able to tell a story that people find compelling, that they find revealing, that they see is sensitive to their lived experience,” Max Stephenson said. “Then you can begin the conversation about how we can work together to provide the community an opportunity they don’t now have.”

Meanwhile, Claire Cahen, assistant professor in urban affairs and planning, is leading a team of five researchers on a study funded by a grant from the Center for Rural Education, part of the Institute for Society, Culture, and Environment, to understand how the Lawrenceville Correctional Center affects public education in the region.

The medium-security facility — the only for-profit, contract prison in Virginia — sits a half-mile away from Brunswick High School and has been plagued by scandals of poor conditions, drug overdoses, and noncompliance issues. But it’s also one of the region’s top employers. Cahen said Brunswick County schools start preparing students early for a career in criminal justice.

“People tend to study the school-to-prison pipeline. But this is the other end of that. Who are the populations that get targeted to be corrections officers? How does it happen? How do teachers feel to be educating people to be guards?” Cahen said.

This summer, CECE plans to help Chris Stephenson and his group sort through the diverse viewpoints provided by the university and help implement recommendations and provide some assistance in their effort to get educational programs off the ground.

“They are really starting from scratch, so it’s a big

undertaking to try to develop a new educational and workforce development entity that has not existed before,” Tate said.

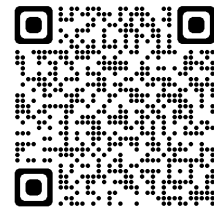
Chris Stephenson said working with Virginia Tech has brought a lot of credibility to his group’s effort and has helped them rebuild bridges and trust with the community.

“It’s been tremendous to have a coach with experience that resonates throughout Southside Virginia,” Chris Stephenson said. “Because, you know, this is Virginia Tech country. When we come in the room with Virginia Tech, it’s understood that we’re coming in there with some experience and a solid plan.”

Written by Diane Deffenbaugh

Watch a video on St. Paul’s:

https://news.vt.edu/videos/k/2023/07/1_bzuo4z19.html





A sign marks St. Paul's College as one of more than 50 sites in Southside Virginia that tell the region's poignant history of civil rights in education. Photo by Diane Deffenbaugh for Virginia Tech.

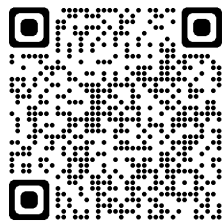
“This sort of engagement is who we are at Virginia Tech. In the true spirit of *Ut Prosim*, we are committed to fostering collaboration between Virginia Tech and communities across the commonwealth, building connections between urban and rural, and creating a Virginia full of economic vitality.”

Help Us Build the Next Generation of Community Leaders!

The center works to train the next generation of economic development professionals through its work with Virginia Tech students. There are multiple ways students can gain experience in economic development through working with our center. Students gather real-world skills through participation in our economic studio class each Spring semester. And during the school year (September-April), CECE graduate assistants collectively or individually lead projects with center faculty guidance.

Here's your chance to help us support student work. Your donation will fund future student projects, helping students make a difference in their communities.

Donate:



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(From left) Allison Ulaky, Kit Friedman, and Jason Schwartz attended the American Planning Association conference in April 2023. Photo courtesy of Kit Friedman.



Graduate assistants Will Ferris and Kit Friedman conduct an interview at Primitive Coffee in Meadows of Dan, VA as part of a project focused on agribusiness in the West Piedmont region. Photo by Sarah Lyon-Hill.



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