

The Virginia i3 Regional Resilience Project
(through Innovation, Inclusiveness, & Industry Competitiveness):

Virginia Tech Center for Economic and Community Engagement
(with Virginia State University, Consortium Partner)

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Semi-Annual Progress Report, PY 1 (October 1, 2022– March 31, 2023)

Introduction and Scope

Virginia Tech’s Center for Economic and Community Engagement (VTCECE), in partnership with Virginia State University (VSU), are working to strengthen regional resilience and innovation across eastern, western, and southern Virginia, while also helping to advance regional anchor institutions. The UC project will leverage public and private investment and resources to enhance the ability of the service regions to be globally competitive, strengthen connections between regions and resources, and advance economic diversification. We will conduct applied research, technical assistance, and dissemination activities to: support Regional Commercialization Strategies (25%) that strengthen innovation clusters; enhance Regional Talent Development (25%), advance Entrepreneurship (25%); and strengthen Regional Resilience (25%).

In each of these four programmatic arenas, our think-and-do model will support regional innovation clusters and economic ecosystem development and resilience by 1.) assisting companies to identify university resources addressing business needs and opportunities, 2.) assisting university faculty in identifying private sector demand for technologies and services, 3.) facilitating and supporting collaboration between companies, university faculty, and regional economic and local economic developers, 4.) conducting applied research and analysis projects, and 5.) designing, implementing, and/or assessing collaborative programs, initiatives, and planning between private, public, and non-profit stakeholders.

Assisting companies to identify university resources addressing business needs and opportunities.

- Virginia Tech Center for Community and Economic Engagement (VT CECE) continued to support Black BRAND (and black and minority-owned businesses across Hampton Roads) with data analytics and technical assistance on a regional data dashboard to better understand the factors that affect the economic and social progress of Black and minority businesses and residents in the area.
- VTCECE connected a private sector data analytics firm with faculty and community partners to explore proof of concept activities around new service delivery models related to public sector/local government clients.
- Virginia State University (VSU) is continuing a collaboration with Raytheon around (a) controlled environment agriculture and (b) object recognition by unmanned vehicles.
- VTCECE connected a medical devices company with business faculty to explore a business plan for a new testing/screening kit for cervical cancer.
- VTCECE helped VEDP respond to five confidential firm inquiries about university collaboration including companies in energy, agriculture, biotechnology, advanced manufacturing, and data processing.
- VSU is partnering with MITRE and MICRON on multiple cybersecurity related projects.

- VTCECE helped refer a materials firm to faculty in the College of Engineering.
- VSU collaborated with multiple regional companies to help provide interns in engineering and business-related disciplines.

Assisting university faculty in identifying private sector demand for technologies and services

- VTCECE engaged firms and support companies in aquaculture with VT faculty to explore a new TA and sector-focused program.
- VTCECE supported Virginia Tech Fralin Life Sciences Institute in leveraging their established STEM K-12 programming to connect with Hampton Roads based company Science Systems & Applications as well as local public-school systems to extend programming reach into new markets.
- VTCECE worked with faculty in Food Science and technology to explore demand for expansion of food business TA programs.
- VTCECE worked with faculty in Electrical and Computer Engineering to explore opportunities to address mismatch between locations of student production, university cleanrooms, and semiconductor production.
- VTCECE assisted VT AVP for Learning Systems Innovation experiential learning demand.
- VTCECE worked with College of Science faculty on demand for life sciences internships.

Facilitating and supporting collaboration between companies, university faculty, and regional economic and local economic developers

- VTCECE worked with the Virginia Tech Corporate Research Center to help lead a collaboration with private industry and community partners around clean energy. The group secured \$1.6 million in GO Virginia funds to develop a demonstration lab for the production of green hydrogen. Private sector firms and local governments are contributing \$5 million in investments.
- VTCECE continued to help champion and staff the Automated-Connected-Electrified (ACE) Transportation Cluster Coalition, to help establish Virginia as a global leader in next generation transportation. The coalition will focus on the regional transportation and logistics cluster to help accelerate the adoption and manufacture of electric and automated vehicles and revitalize the economy of Southern and Southwest Virginia. VTCECE helped engage and lead a coalition of over 150 regional partners and companies, and was competitively selected as one of the finalists in the Economic Development Administration's \$1 billion Build Back Better Regional Challenge Competition. While that project was not awarded, VTCECE worked with VT Engineering faculty and Coalition private sector firms and partner to secure state GO Virginia funding for private sector assistance and workforce training.
- VTCECE provided technical assistance and support for a new entrepreneur hub serving the greater Lynchburg region, and helped the LRBA refine planning for the hub, and secure state funding for hub start-up activities and direct services to high-growth entrepreneurs.
- VTCECE connected Virginia Tech faculty subject matter experts to Hampton Roads 757 Accelerate program cohort members based on industry/sector needs.

- VTCECE assisted a group that included local government, economic developers, workforce providers, and private sector firms to refine plans for a training and workforce center focused on metals, materials, and machining. VTCECE provided TA for successful grant application.
- VTCECE provided Black BRAND B-Force Accelerator cohort members connections to Virginia Tech faculty based on specific requests and needs of the cohort.
- VTCECE is working with faculty and community partners to explore Tech Hubs opportunities in southwest Virginia.
- VTCECE continued to conduct and organize regional familiarization meetings in Hampton Roads with local economic development departments, chambers of commerce, entrepreneurial non-profit support organizations, accelerator programs and angel networks to assist in connecting them with Virginia Tech faculty to support their needs.
- VSU is collaborating with UVA and the Port of Virginia for transportation research.
- VSU is a partner in the successful Virginia Commonwealth University-led bio-technology focused project funded by the 2022 Build Back Better Regional Challenge competition.
- VTCECE Director continued service on Onward NRV Board & Goodwill Industries of the Valley Board, serving as a VT point of contact for multiple resource and project inquiries.
- VTCECE continued service with NRV CEDS committee.
- VTCECE worked with VERGE Technology Alliance (Roanoke-Blacksburg) by providing grant-writing and organizational development assistance.
- VTCECE continued to assist and advise faculty in Computer Science in a new assistance program for pre-launch entrepreneurs in CS technologies such as AI, machine learning, and software development.

Conducting applied research and analysis projects

- VTCECE continued a study to help local and regional economic developers better understand the CEA industry and enhance CEA-related activity per company attraction and expansion, support clusters, and start-ups. The study is on behalf of GO Virginia Region 3, and in partnership with the Institute for Advanced Learning and Research in Danville.
- VTCECE is conducting a feasibility study for the YWCA and Emory & Henry College, of a workforce and wellness center focused on Substance-Use Disorder Recovery population in southwest Virginia.
- VTCECE completed an industry needs survey for Onward NRV.
- VTCECE continued an Agritourism and Agribusiness Regional Economic Impact Study and Marketing Plan for the region served by the West Piedmont Planning District Commission.
- VTCECE continued a target industry analysis for Hanover County.
- VTCECE is completing a feasibility study for an export log steam treatment facility, to help advance less new technologies and sustainable practices in timber industry.
- VTCECE is conducting a multi-year analysis and evaluation of the existing programs and new activities for the Virginia Seafood AREC in Hampton, VA.
- VSU is helping the Petersburg Healthy Options Partnerships on a health equity dashboard.
- VSU is working with GENEDGE on a project to build a business calculator.
- VTCECE is continuing work providing labor market information, quarterly data snapshot reports, and on-call data requests on workforce and industry for LWDA I and II in Virginia.

Designing, implementing, and/or assessing collaborative programs, initiatives, and planning between private, public, and non-profit stakeholders

- VSU continues to work with a VSU faculty/student team to develop and implement an iPhone app to serve the Virginia Farmer’s Marker Associate, a statewide advocacy organization for Farmer’s Markets and vendors.
- With the support of the Division of Research and Economic Development, VSU faculty have explored multiple partnership opportunities with the Commonwealth Center for Advanced Manufacturing (CCAM) around the development of technology for controlled environment agriculture and training programs based around the technology.
- VTCECE continued to provide support to a new collaboration of community development financial institutions (CDFIs) in the creation of a Virginia CDFI Network, in part to help remedy CDFI “deserts” or service gaps in the state’s under-served and under-resourced communities.
- VTCECE continued work with a non-profit, St. Paul’s College 4 Life – transitioning into the St. Paul’s Leadership Institute. The group was formed after the closing of St. Paul’s College, an HBCU in Brunswick County Virginia. VTCECE is leading a group of VT faculty in the Institute for Policy and Governance and in the Pamplin College of Business to perform a competitive analysis, a strategy road map, a community listening or story-sharing project, and a business and financial plan to serve as a guide for the organization’s long-term sustainability. Undergirding this work is a concern for community healing around the wounds related to longstanding racial and economic divides, including the closing of St. Paul’s College.
- VTCECE continues to provide staff support to the Region 2 GO Virginia Council advancing regional economic development in the Lynchburg, Roanoke, and New River Valley regions, and helping administer this state-funded initiative in this part of the state.
- VTCECE also helps lead a Regional Internship Collaborative, in the Region 2 footprint (Lynchburg, Roanoke, and New River Valley areas), a project supported by the State Council of Higher Education in Virginia to better align and enhance internship opportunities between higher education and the private sector.

Progress and Barriers

During the period, we made substantial progress on this project. We continue to strengthen our partnership with Virginia State University, including in-person visits and exchanges. We have also been very involved with convening or assisting collaborative teams to explore and pursue funding for new industry opportunities. Notable “wins” this period include new state funding for faculty and workforce partners related to autonomy and transportation as well as the clean energy funding secured in Newport News. Our project-based work is also very active with new projects beginning across the state, including Alleghany, northwest Roanoke, Grayson County, and elsewhere.

At this time, we face no significant barriers to our progress.