

2018-20 Strategic Plan

Southern Virginia Higher Education Center [937]

Mission

The mission of the Southern Virginia Higher Education Center (SVHEC) is to advance Southern Virginia's economic potential through education, innovation, and collaboration.

Vision

By enabling the citizens of Southern Virginia to achieve "educational victories" in the form of for-credit degrees, certificates, and diplomas, and noncredit third-party industry-recognized certifications, the SVHEC is contributing to the long-term economic strength of the region.

Values

SVHEC leaders, staff, and stakeholders believe:

- in the power of education to transform the lives of individuals and the communities in which they live;
- that collaboration yields creative solutions that leverage scarce resources;
- in trying new approaches in order to meet changing educational and workforce demands;
- in harnessing technology to improve educational, workforce, and research outcomes.

Finance

Financial Overview

The Southern Virginia Higher Education Center's (SVHEC) facilities, operations, and services are supported by both general and nongeneral fund dollars. General fund appropriation supplies approximately 47 percent of the resources required to operate SVHEC facilities and to provide personnel who (a) support SVHEC degree-granting educational partners and their students, (b) deliver customized workforce services to local and regional employers, (c) deliver non-credit credential-based technical training for in-demand regional careers, (d) stimulate awareness and interest in STEM-H careers through K-12 and (e) provide applied research services to industry. In addition to the General fund appropriation, the Center receives state funds from the Higher Education Equipment Trust Fund, capital reserve funds, and the New Economy Workforce Credentials Grant program. Nongeneral funds are nonrecurring and are comprised of grants, donations, partner and tenant fees, and fee-based training and services. With the tremendous growth in programs and services being provided at the SVHEC, the demand on nongeneral funds continues to increase.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	3,543,932	3,982,992	3,718,615	4,089,450
Changes to Initial Appropriation	0	0	0	0

(Changes to Initial Appropriation will be 0 when the plan is created. They will change when the plan is updated mid-biennium.)

Customers

Anticipated Changes to Customer Base

The Southern Virginia Higher Education Center (SVHEC) serves customers in nine distinct yet related groups:

1. Higher Education Institutions - Public and private two and four-year institutions of higher learning - Located on the service area fringes of the closest community colleges and more than 75 minutes from the nearest state-supported four-year institution, the SVHEC provides vital educational access and workforce training to an under-served rural population by forging academic and industry partners. The SVHEC offers more than 100,000 square feet of technologically innovative educational facilities, equipment, and information technology (IT) assets, along with a comprehensive array of support services that enable accredited higher education partners to offer degree, diploma, and certificate programs to a historically underserved rural population. Without SVHEC-provided facilities and resources, educational partners could not afford to provide this level of educational access to the region.

Partners include two community colleges serving localities to the east and west of the SVHEC; four public universities; and two non-degree granting institutions of higher education which, with the SVHEC, form the Southside Higher Education Coalition. More information about SVHEC partners can be found in the "Partners section" of this Strategic Plan.

The SVHEC's education partners experienced enrollment declines from fiscal year (FY) 2013-FY 2019 as the economy recovered from the 2008 recession. During the decline some partners stopped offering onsite programming at the SVHEC; others modified program offerings to target

specific markets. Enrollment trends at the SVHEC reflects the national trends in higher education and are beginning to stabilize. For-credit partners will be added as demand warrants and aligns with SVHEC sustainability.

2. Higher Education Students - Partner-enrolled students - Through its collaborative relationship with public and private higher education partners, the SVHEC provides students access to for-credit higher education programs without leaving the region. The SVHEC's education partners bring students seeking credit-based higher education more than 100 degree, diploma, and certificate options and provide enrollment, advising, and financial aid services to their students choosing a program offered at the SVHEC.

In the SVHEC's early years (1986-2000), the majority of students were working adults taking classes on a part-time basis; some were returning to finish a degree and others beginning college courses for the first time. Since calendar year 2000, the proportion of traditional (18-24 year old) college students at the SVHEC has significantly increased as the campus offers an affordable and geographically accessible education option compared to residential higher education programs outside of the region.

Following the 2008 recession, degree program enrollments at the SVHEC initially rose as many individuals who lost jobs enrolled to "reskill" or switch careers. The SVHEC and its degree-granting partners are engaged in several initiatives to increase enrollments while ensuring that the "right" programs are being offered. Down to 2,500 in 2019 from a high of over 4,000 in 2011, duplicated enrollments do appear to be stabilizing.

3. Individuals seeking workforce training program - The SVHEC serves individuals by facilitating, developing, and providing noncredit workforce training and career development services with opportunities to obtain third-party, industry-recognized credentials. SVHEC staff analyze regional workforce needs, identify existing training resources, and connect individuals with the training programs they need. Where programs does not already exist, the SVHEC Workforce Development division works collaboratively with education and industry partners to develop programming needed.

An example of this is the Welding@SVHEC program, requested by local and regional employers. Since the program was established in FY 2015 with funding from the Virginia Tobacco Region Revitalization Commission (TRRC), eleven cohorts have completed training. The TRRC later also provided funding to the SVHEC, in partnership with Southside Virginia Community College and Danville Community College, to establish the SoVA Center for Manufacturing Excellence (SoVA CME) in response to industry demand and labor market analyses pointing to a regional shortage of skilled manufacturing labor. The SoVA CME offers advanced and specialty-level training in welding, mechatronics, and precision machining to prepare individuals for employment in manufacturing. Trainees earn credentials conferred American Welding Society (AWS), National Center for Construction Education & Research (NCCER), National Institute for Metalworking Skills (NIMS), and Siemens AG.

The SVHEC IT Academy provides short-duration training programs preparing individuals for employment in IT jobs. Trainees have the opportunity to earn third-party, industry-recognized credentials requested by regional employers. Programs are designed to accommodate working adults through flexible scheduling, and evening and weekend classes. Through a co-enrollment agreement between Southside Virginia Community College (SVCC) and the SVHEC, SVCC students can also enroll in IT Academy programs on a for-credit basis; those students earn college credit and while still having the opportunity to earn industry-recognized credentials. In FY 2018, Microsoft established the Microsoft Scholars program at the SVHEC to encourage individuals who are underrepresented in the IT field to enroll in IT Academy programs.

The SVHEC is an approved Pearson VUE testing center and provides assessment services so that individuals and incumbent workers pursuing industry-recognized certifications can take assessments locally.

The SVHEC's Center of Nursing Excellence (CNE) also supports workforce development: with partners Danville Community College and Southside Virginia Community College, the CNE supports clinical and simulation learning experiences for all levels of nursing and other healthcare providers.

SVHEC workforce training programs provide individuals opportunities to pursue training and credentials without leaving the region; these programs help meet employer workforce needs. Additional programs will be developed as demand warrants and as align with SVHEC sustainability.

4. Student – Regional high school students – The SVHEC Career Tech Academy (CTA) provides career technical education for high-demand advanced manufacturing and information technology careers to high school students from three public high school systems. Students from Charlotte, Halifax, and Mecklenburg County Public Schools spend a portion of each school day with SVHEC instructors who teach community college technical curricula with industry-recognized credentials imbedded. In one academic year, Career Tech Academy students can earn Career Studies Certificates and up to five industry credentials. Upon graduation, these students have three viable options: continue into an advanced credential program at the SVHEC, transfer into a technical community college associate degree program, or enter the workforce. This collaboration between the SVHEC, the local community colleges, and public school systems allows rural public school students to access training that leads to well-paying jobs.

In FY 2019, 31 high school students completed year 1 at the CTA, earning college credit and a total of 76 industry-recognized certifications. In fall 2019, rising seniors who completed year 1 will be able to enroll in the year 2 "Work-Based Learning Experience," spending two days per week in class and three in job related to their CTA field of study. A new cohort of students will enter the CTA year programs.

5. Student - Regional Prekindergarten-twelfth (PreK-12) grade students - The SVHEC helps prepare the educational pipeline to post-secondary degree and training programs with outreach as early as elementary school. The SVHEC works with regional public school divisions, higher education partners, and foundations to provide year-round Science, Technology, Engineering, Math, and Health (STEM-H) outreach opportunities to prekindergarten-12th grade (preK-12) students to promote a culture of higher education. In fall 2019, the SVHEC will launch the Career ChoICE (ImagineConnectExplore) Expo - East, replicating the annual event serving over 5,000 middle and high school students in Pittsylvania County, to the west of the SVHEC.

6. Employer/Business Owner - Regional employers - The SVHEC provides workforce assessment, consulting, and customized training for regional employers whose sustained competitive advantage depends on a skilled workforce. SVHEC foundational and advanced skills programs prepare individuals with the skills employers need, and offer opportunities to earn assessment-based industry-recognized credentials. Where

training needs are not met through existing partner programs, the SVHEC develops and offers proprietary workforce training programs that include opportunities to earn third-party, industry-recognized credentials.

SVHEC's Workforce Development division supports the manufacturing industry with foundational training programs in welding, mechatronics (Siemens Level 1), heating, ventilation, and air conditioning (HVAC), and Work Ready Foundations. Advanced skills training in these areas, including Siemens Levels 2 and 3 and HVAC Levels 2 and 3 training, is provided within the SoVA Center of Manufacturing Excellence (SoVA CME) at the SVHEC. The SoVA CME is a collaborative training model operated by the SVHEC, Danville Community College, and Southside Virginia Community College with support from the Virginia Tobacco Revitalization Commission, the Commonwealth Center for Advanced Manufacturing (C-CAM), and industry partners.

In FY 2015, the SVHEC responded to the regional shortage of skilled Information Technology (IT) workers by establishing the Information Technology Academy (IT Academy) with input and support from employers and the TRRC. The SVHEC's IT Academy provides foundational and advanced IT training to support information technology businesses and other businesses that depend on skilled IT workers. The IT Academy offers programs including CompTIA A+, Server+, Network+, Security+, IT Fundamentals+, Linux+, PenTest+, and Cloud+. Industry partners provide input on specific skills needs and participate in IT Academy job fairs. Employer interest in the IT Academy training programs is increasing and additional third-party, industry-recognized credential-based programs are being added to meet demand.

The SVHEC Workforce Development team works with regional industry to tailor training to the employer's specific needs. Since completing a multi-year pilot "customized" training program meet the needs of one of Halifax County's largest manufacturers (over 400 employees were trained), the SVHEC has developed relationships with additional industry partners seeking customized training. Over 85 percent of SVHEC workforce training program completers are employed within six months of completing an SVHEC workforce training program, a success rate that reflects industry confidence in the SVHEC programs. Programs will be added as need warrants and as they align with the SVHEC's mission.

7. Manufacturing - Regional industry - The SVHEC serves business and industry through applied research and technological innovation. The SVHEC's Research & Development Center for Advanced Manufacturing & Energy Efficiency (R&D CAMEE) works to advance regional industry's knowledge and competitive capabilities transfer of technology. R&D CAMEE staff work with industry and university researchers to develop innovative product design, materials, and advanced manufacturing techniques, and to subsequently move them into the hands of regional industry.

An example is prototyping and fabrication for a locally-based but nationally-known high performance automotive engineering and manufacturing company, TMI Autotech, Incorporated (South Boston, VA). R&D CAMEE leverages staff expertise, fluency in Computer-Aided Design/Computer Assisted Manufacturing (CAD/CAM) software, and advanced technology machining equipment, including three- and five-axis routers and a Computer Numeric Controlled (CNC) water jet, to quickly and efficiently produce parts to specification for TMI's high performance vehicles. Ability to acquire these parts quickly and in a cost-effective manner allows TMI to minimize the time to commercialization for its products. Another example is the design and engineering of an innovative wood barrel for use in the wine, spirits, and brew industries. With support from the USDA Forest Service Wood Innovation program, materials engineering and design features allow the barrel to be handled, transported, put into use, and prepared for re-use with more ease, more flexibility, and potentially more cost-effectiveness.

In FY 2019, R&D CAMEE increased its service level to four major clients and simultaneously relocated from the SVHEC's Innovation Center to the newly renovated Imperial Lofts. This move required a significant amount of time on the part of the R&D CAMEE staff, time that would have otherwise been spent developing business and industry relationships. It is anticipated that the number of business and industry clients served will increase in the next biennium now that the relocation has been completed and with additional staff coming on board.

8. Organization - Regional organizations - Regional organizations, including businesses, localities, educators, community-based organizations, and professional groups utilize the SVHEC's facilities for educational, civic, and community-building events. The SVHEC provides a reservation-based system and spectrum of services and equipment are available.

With support from the Virginia Tourism Corporation the SVHEC partners with The Prizery (Halifax County's Community Arts Center), and the Halifax County Department of Tourism to provide coordinated meeting space and services. This initiative is known as the "Bruce Street Conference Facilities," named for the street where the SVHEC and The Prizery are located (see <http://www.brucestreet.org/>). The number of regional organizations using the SVHEC facilities is expected to increase in the new biennium.

9. Consumer - Attendees at regional organization events

Over 1,200 individuals annually attend events held by businesses, community-based organizations, and professional organizations at the SVHEC. This number is expected to increase as the Bruce Street Conference Facilities partners leverage resources and efforts (see section above). Numbers in the Current Customer List Table (below) reflects the proportion of the Bruce Street Conference Facilities initiative outcomes that are attributable to the SVHEC alone. The number of consumes using the SVHEC facilities is expected to increase in the new biennium.

Current Customer List

Predefined Group	User Defined Group	Number Served Annually	Potential Number of Annual Customers	Projected Customer Trend
Higher Education Institutions	Public and private two- and four-year colleges and universities, and higher education centers	8	12	Increase
Higher Education Students	Students enrolled in for-credit higher education programs at the Southern Virginia Higher Education Center through the Center's accredited partners	1,200	1,450	Increase

Adult Workforce / GED Student	Individuals in SVHEC workforce training programs, Center of Nursing Excellence clinical and simulation training, Volunteer Literacy Program, and SVCC GED program	550	700	Increase
Student	High School juniors and seniors attending the Career Tech Academy from Charlotte, Halifax, and Mecklenburg County Schools	30	60	Increase
Student	Prekindergarten-12th grade students to whom the SVHEC provides STEM-H outreach services to encourage pursuit of higher education	6,100	7,000	Increase
Employer/ Business Owner	Business and industry entities whose labor force receives training at the Southern Virginia Higher Education Center	5	15	Increase
Manufacturing	Industry organizations receiving applied research services through the Research & Development Center for Advanced Manufacturing & Energy Efficiency	19	50	Increase
Organization	External organizations using the Southern Virginia Higher Education Center facilities for conferences, meetings, and events	26	50	Increase
Consumer	Individuals attending conferences, meetings and events at the Southern Virginia Higher Education Center	1,200	2,000	Increase

Partners

Name	Description
Commonwealth Graduate Engineering Program (CGEP)	The Commonwealth Graduate Engineering Program is a consortium of five Virginia public universities (George Mason University, Old Dominion University, University of Virginia, Virginia Commonwealth University, and Virginia Tech.) offering master's degrees in engineering via distance learning. There are 19 graduate engineering programs in 15 different disciplines available through the CGEP. SVHEC is a distance learning site for the CGEP, providing access to the program in the Southern Virginia region.
Danville Community College (DCC)	Danville Community College offers a number of courses aligned with career studies certificates and diplomas, as well as Associate's degrees in Arts & Science and in Applied Arts & Science. A variety of program majors are available.
Institute for Advanced Learning and Research (IALR) via the Southside Higher Education Coalition	The Institute for Advanced Learning & Research in Danville is a non-degree granting higher education center and is a member, along with the Southern Virginia Higher Education Center (SVHEC) and New College Institute, in the Southside Higher Education Coalition. Each coalition member focuses on a different post-secondary emphasis and has agreed to cross-deliver programs where possible to avoid regional programmatic duplication and to make efficient use of resources. IALR supports 1) research, including Virginia Tech agricultural research programs; public-private partnerships in polymer, biopolymer, and sustainable energy research; 2) Kindergarten-12 grade education, serving as one of two Piedmont Governors School sites; and 3) post-secondary education and workforce outreach through workshops, summits, and field trips.
Longwood University (LU)	Longwood University offers master's degrees in Educational Leadership and Community & College Counseling through onsite instruction. Additionally, Longwood offers courses towards teacher licensure, elementary education, special education, and literacy and culture either online or onsite at the SVHEC, as demand warrants.
New College Institute (NCI) via the Southside Higher Education Coalition	New College Institute in Martinsville is a non-degree granting higher education center and is a member, along with the SVHEC and NCI, in the Southside Higher Education Coalition. Each coalition member focuses on a different post-secondary emphasis and has agreed to cross-deliver programs where possible to avoid regional programmatic duplication and to make efficient use of resources. NCI supports post-secondary education through partnerships with for-credit institutions and workforce training through the SoVA Center for Manufacturing partnership with the SVHEC, DCC, and SVCC.
Old Dominion University (ODU)	Old Dominion University offers web-based programs bachelor, master, and doctoral degrees. ODU maintains an office onsite at the SVHEC with staff to assist students.
Southside Virginia Community College (SVCC)	Southside Virginia Community College offers a number of courses aligned with career studies certificates and diplomas, as well as Associate's degrees in Arts & Science and in Applied Arts & Science. A variety of program majors are available.
University of Virginia (UVA)	University of Virginia is both a post-secondary program provider for and research partner of the SVHEC. The SVHEC also participates in the UVA Engineers PRODUCED program through the community colleges. Engineers PRODUCED is an outreach initiative to bring undergraduate engineering education to communities throughout Virginia. The SVHEC's Research & Development Center for Advanced Manufacturing and Energy Efficiency (R&D CAMEE) has partnered with UVA's Schools of Architecture and Engineering and Applied Sciences on applied research projects to produce energy efficient building materials.

Virginia Polytechnic Institute & State University (VT)	Virginia Polytechnic Institute & State University (VT) offers courses in water quality management at the SVHEC through its Civil Engineering program. The SVHEC's R&D CAMEE works with Department of Sustainable Biomaterials in the College of Natural Resources to develop energy-efficient, affordable housing construction techniques and materials. Projects include cross-laminated timber panels made from Southern Yellow Pine and select hardwood species.
Virginia Technical Institute (VTI)	Virginia Technical Institute (VTI) provides National Center for Construction Education & Research (NCCER) sponsorship for the SVHEC Welding program. VTI continues to be a valuable training partner and resource for the SVHEC Workforce Development team.

Agency Goals

- **Provide accessible, affordable, and relevant post-secondary education and training to all citizens of the Southern Virginia region.**

Summary and Alignment

The Southern Virginia Higher Education Center (SVHEC) was established in 1986 as the "Continuing Education Center" to offer post-secondary educational opportunities in Halifax County where there were none. In 2005 the General Assembly addressed long-standing barriers to post-secondary education and workforce training across the Southern Virginia region, passing legislation to create the SVHEC as an institution of higher education and a state agency. Today's SVHEC operates through a partnership affiliation structure that includes both for-credit degree-granting institutions and organizations conferring noncredit third-party, industry-recognized credentials. Through these relationships and the breadth of programs and services offered at the Center, the SVHEC is able to provide accessible, affordable, and relevant post-secondary education and training to citizens of the Southern Virginia region. The SVHEC's community college partners offer students an affordable entrée into higher education and the four-year partners offer bachelors, masters, and doctoral programs students can complete while living and working locally. Financial aid services are available onsite to all for-credit students through Danville Community College's federal TRIO grant, and scholarship assistance is available through the SVHEC's partner and benefactor, the Southern Virginia Higher Education Foundation (SVHEF). The SVHEC continuously seeks to find or develop funding support for individuals in noncredit workforce training programs. This is a critical initiative, as many citizens in the region lack financial resources for post-secondary education and training, and most conventional forms of financial aid do not extend to noncredit programs. In the last three years, the SVHEC has opened doors to financial assistance for its noncredit workforce training program participants through: the SVHEC's Opportunity Funds; the SVHEF Scholarship fund; Workforce Innovation and Opportunity Act funds (WIOA) through the Southcentral and West Piedmont Workforce Investment Boards (WIB); the Virginia Department of Rehabilitative Services (DARS); and since July 1, 2017, the Commonwealth of Virginia's New Economy Workforce Credential Grant Program. The SVHEC also actively engages the private sector to support noncredit workforce training with tuition assistance for students demonstrating need. The SVHEC and its partners use data-driven analyses to determine programming needs, ensuring that program offerings remain relevant. The SVHEC uses current and projected labor market data and regularly elicits input from regional industry and the Chambers of Commerce. The SVHEC Workforce Development division conducts in-depth interviews with key industry representatives to facilitate the exchange of information among industry, educators, and economic development staff. Where programs do not exist to meet identified industry need, the SVHEC works with industry to develop and offer programs. Were it not for the existence of the SVHEC in the heart of the Southern Virginia region, many individuals here would be unable to surmount financial and logistical barriers to higher education and workforce training. This goal aligns with both the SVHEC's mission and the Commonwealth's Education Enterprise Strategic Priority of promoting greater post-secondary education and training access and affordability for all Virginians. The SVHEC will continue to work collaboratively with public and private education and industry partners across the region to expand access to affordable and relevant post-secondary opportunities as a means to a better economic future for Southern Virginia citizens.

Associated State Goal

Education: Elevate the levels of educational preparedness and attainment of our citizens.

Associated Societal Indicator

Educational Attainment

Objectives

- » **Increase the number of students enrolled in and completing associate's, bachelor's, master's, doctoral degrees, diploma, certificate, career studies certificate, and other for-credit programs through collaboration with current and potential education partners.**

Description

Because the level of educational attainment within Halifax County and the region is significantly below state averages, the Southern Virginia Higher Education Center will take a regional approach to develop a college-going culture that will translate into increased numbers of people seeking and obtaining higher levels of education.

Objective Strategies

- The Southern Virginia Higher Education Center (SVHEC) has formed "Partnership 2.0" Project Team comprised of members from the SVHEC and founding partners Danville Community College, Southside Virginia Community College and Longwood University. The Project Team is charged with (1) assessing current educational access provided by partners at the SVHEC (2) conducting a gap analysis to identify and compare regional educational needs with the programs currently offered, (3) suggesting the most effective and efficient strategies for filling these gaps by leveraging the resources across the four institutions, and (4) maximizing the use of technology to increase access.

Measures

- ◆ Number of students enrolled in for-credit courses offered in Southern Virginia Higher Education Center-based post-secondary educational programs, including associate, bachelor, master, and doctoral level programs and career studies certificate programs.

• Elevate the levels of educational and skills preparedness of the workforce in order to enhance economic development in the Southern Virginia region.

Summary and Alignment

Programming offered at the Southern Virginia Higher Education Center (SVHEC) focuses not only on elevating today's regional education and workforce preparedness levels but also on preparing to meet industry's future workforce needs. Working from a new perspective on what "workforce readiness" means in today's economy, the SVHEC collaborates with strong public and private academic and industry partners to advance the region's economic development through its human capital. These programs are supported with technologically advanced equipment and experiential learning opportunities reflecting actual workplace settings and experiences. The SVHEC also works to find or make available financial assistance support for participants in its workforce training programs; this is a critical initiative as many individuals in the region lack financial resources for post-secondary education and training, and conventional forms of financial aid do not currently extend to noncredit programs of study. By serving as an innovator and collaborator, the SVHEC has emerged as a "change agent" contributing to the development of a skilled and ready workforce, strengthening local economies, and enabling the region as a whole to prosper. The strategic efforts of the SVHEC and its partners will ultimately transform Southern Virginia into a region where current industries thrive, new industries seek to locate, and individuals want to live and work. This goal is aligned with both the SVHEC's mission and the Commonwealth's Workforce Enterprise Strategic Priorities of: 1) aligning Virginia's workforce with career pathways and training solutions for dislocated, underemployed, and future workers to meet current and anticipated employer demands; 2) establishing goals and identifying ways to increase statewide third-party, industry-recognized credentials that align with employer current and future needs; and 3) facilitating in-demand skills sets for Virginia's new economy, while fostering private sector innovation and entrepreneurship.

Associated State Goal

Education: Elevate the levels of educational preparedness and attainment of our citizens.

Associated Societal Indicator

Educational Attainment

Objectives

- » **Increase the number of workers with workplace skills that the Commonwealth's businesses and industry require to remain competitive by increasing the number of industry-recognized credentials conferred through workforce development programs offered by the SVHEC.**

Description

The Southern Virginia Higher Education Center (SVHEC) provides programming, services, and resources to align Virginia's workforce to meet current and anticipated employer demands. The SVHEC Workforce Development division assists the unemployed, underemployed, and incumbent workers with identifying career pathways and accessing training solutions that prepare them for the jobs of today and tomorrow.

Objective Strategies

- The Southern Virginia Higher Education Center's Workforce Development division works collaboratively with higher education and industry partners to identify skills needed and to offer education and training programs to meet those needs.
- Where programming is not available to meet the identified needs, the Southern Virginia Higher Education Center's Workforce Development division develops programming to address the need.
- The Southern Virginia Higher Education Center's (SVHEC) Workforce Advancement division works to find funding assistance solutions for students pursuing non-credit workforce training, for which traditional sources of financial aid are not usually available. The SVHEC encourages industry to participate in collaborative partnerships to find workforce training funding assistance solutions.

Measures

- ◆ Number of credentials conferred through workforce development programs offered by Southern Virginia Higher Education Center (SVHEC).
- ◆ Ratio of Instructional Costs to Credentials-Based Noncredit Workforce Training Program Completions During the Fiscal Year

• Strengthen pathways from Prekindergarten-12th grade (PreK-12) education and workforce training, especially in the areas of science, technology, engineering, math, and healthcare (STEM-H).

Summary and Alignment

For decades many of Southern Virginia's citizens worked in agriculture, especially tobacco production, and in traditional manufacturing. Most of these jobs required little or no post-secondary preparation, so generations of the region's citizens grew up unaccustomed to planning for education past high school. This expectation began to change in the 1990's as tobacco production and traditional manufacturing became casualties of permanent structural changes in the region's economy. The regional workforce was not ready for employment in sectors that began to replace those former economic "pillars." Jobs in emerging sectors, including advanced manufacturing, information technology,

healthcare, and education, require very different skills sets and knowledge compared to traditional manufacturing and tobacco production jobs. Planning for and accessing post-secondary education and training is imperative now for all students. The SVHEC targets efforts to facilitate this planning are targeted at students as young as elementary school-age. The Southern Virginia Higher Education Center (SVHEC) works with Prekindergarten-12th grade education systems, post-secondary academic and training partners, and industry to engage students in education and career readiness planning. The SVHEC Student and Partner Advancement division develops and implements outreach and enrichment programs throughout the academic year for regional PreK-12 students. During the academic year, elementary, middle and high school students are invited to the SVHEC for tours and demonstrations. The Center's Southern Virginia Area Health Education Center (AHEC) Outreach Coordinator travels across to middle and high schools across the region to promote educational pathways to healthcare careers. Through the Dan River Year AmeriCorps program, the SVHEC hosts AmeriCorps Members who works with elementary school students to improve their reading and math skills. Each fall the SVHEC participates in the SOVA Regional Career Choice (Imagine, Connect, Explore) Expo, a collaborative event organized by the Dan River Region Collaborative. Over 5,000 regional high school students attend this event. Each spring the SVHEC co-hosts the STEM-H Summit at the Institute for Advanced Learning and Research (IALR) in Danville providing presentations and hands-on workshops for regional high school students. During the summer, the SVHEC hosts summer STEM-H camps for middle and high school students in partnership with industry, educational partners, and community-based organizations. These initiatives focus on ensuring that students learn about and plan for post-secondary education and training opportunities, especially in high-demand career areas of science, technology, engineering, math, and healthcare (STEM-H). Other SVHEC divisions and programs support these initiatives and join the Student Services and Partner Relations division to offer "hands-on" learning opportunities. The SVHEC is committed to engaging PreK-12 students early to keep them in the "education and career readiness" pipeline, especially in STEM-H areas. This goal reflects the Commonwealth's Enterprise Strategic Priority of the same name. In fall 2018, the SVHEC further expanded public school outreach through the Career Tech Academy which extends access to high demand technical career pathways to students in three public school divisions. The Career Tech Academy leverages the SVHEC's existing workforce training resources, programs, and relationships to provide high school students in three rural public school systems – Charlotte, Halifax, and Mecklenburg Counties – with access to technical training that leads to well-paying, in-demand jobs in the region. Career Tech Academy students will spend part of each public school instructional day at the SVHEC in training programs that lead to assessment-based, industry-recognized credentials, hands-on skills, and work readiness.

Associated State Goal

Education: Elevate the levels of educational preparedness and attainment of our citizens.

Associated Societal Indicator

Educational Attainment

Objectives

- » **Increase new science, technology, engineering, math, and healthcare (STEM-H) educational program initiatives for prekindergarten-twelfth (PreK-12) grade students to meet the specific needs and address current areas of deficiency of the region.**

Description

Because of the "lack of a college going culture" in the region, especially among the former and existing blue collar and agricultural working families as found by the State Council of Higher Education for Virginia and reflected in its 2006 report, and as further evidenced by the lower than state average academic achievement and aspirations of its residents, we believe expanded, quality educational opportunities is the key to Southern Virginia's future economic growth and viability. The linchpin in the success of this endeavor is an effort to bring about systemic changes in the region that will begin to inculcate a "college going culture" while enhancing academic preparation, especially in the science, technology, engineering, math, and healthcare (STEM)-H subject areas. In addition to developing and providing STEM-H programming at the SVHEC, the SVHEC fosters partnerships between the public and private sectors to bring STEM-H opportunities to PreK-12 students and encourage them to enter the pathway to higher education. The Center also works with the school divisions in the region to inspire a "culture of education" that reaches out to the region's public schools, students, teachers, and administrators.

Objective Strategies

- The Southern Virginia Higher Education Center (SVHEC) develops and provides educational opportunities in science, technology, engineering, math, and healthcare (STEM-H) at the SVHEC for Prekindergarten-12th grade students.
- The SVHEC fosters partnerships between the public and private sectors to bring STEM-H opportunities to PreK-12 students and encourage them to enter the pathway to higher education.

Measures

- ♦ Number of Prekindergarten-12th grade (PreK-12) students participating in science, technology, engineering, math, and healthcare (STEM-H) enrichment opportunities offered by or in conjunction with the Southern Virginia Higher Education Center (SVHEC).

- **Advance the knowledge and competitive capabilities of industry through transfer of technology in the form of applied research results and innovative manufacturing techniques.**

Summary and Alignment

The mission of the SVHEC's Research & Development Center for Advanced Manufacturing & Energy Efficiency's (R&D CAMEE) is to transform the region's manufacturing sector, attract new manufacturing businesses and their supply chains, and return this sector to a nationally and globally competitive position through innovation and technology. To reach this goal, R&D CAMEE engages in the full spectrum of applied research in advanced manufacturing and energy efficiency, from study design in collaboration with industry and university

research partners, to transfer of new knowledge and advanced methods and materials back to industry. R&D CAMEE works in collaboration with and serves research universities, national labs, regional industries and entrepreneurs, and national CAD-CAM and equipment distributors (Siemens). In addition to conducting applied research projects, and providing design, fabrication, and training services to industry, R&D CAMEE hosts meetings, conferences, and workshops for industry, educational, and community organizations. R&D CAMEE has demonstrated commitment to its role as: • A partner to industry and a catalyst for innovation in identifying and applying techniques, technologies and processes of advanced manufacturing and energy efficiency; • A provider of advanced manufacturing practices and education; • A leader in using non-traditional and experiential learning methods to shorten the skill gap between manufacturing industry needs and competency levels of current and future employees; and • A collaborator with other educators, industry leaders, economic development organizations and entrepreneurs sharing the goal of supporting manufacturing and creating jobs in Southern Virginia. R&D CAMEE's purpose and work via transfer of technology align with the Commonwealth's Enterprise Strategic Priority of "advancing the knowledge and competitive capabilities of industry." While the SVHEC's for-credit and noncredit programs strengthen the region's workforce through education and training, R&D CAMEE also strengthens regional industry and its workforce through advancement of applied advanced manufacturing and energy efficiency research knowledge.

Associated State Goal

Economy: Be a national leader in the preservation and enhancement of our economy.

Associated Societal Indicator

Employment Growth

Objectives

- » **Increase the number of businesses assisted by the Southern Virginia Higher Education Center's Research & Development Center for Advanced Manufacturing & Energy Efficiency through transfer of technology in the form of design, prototyping, production, and training services, and sharing of applied research results.**

Description

The Southern Virginia Higher Education Center's (SVHEC) Research & Development Center for Advanced Manufacturing & Energy Efficiency (R&D CAMEE) contributes to economic development and strengthens the competitive business advantage of regional and state manufacturing entities. R&D CAMEE service to industry is primarily conferred through transfer of technology, taking applied research results and putting them in the hands of manufacturers in the form of new manufacturing technologies, techniques, and materials. In this role, R&D CAMEE serves to advance Virginia's competitive business climate and enable the Commonwealth to maintain the designation as the best state for business.

Objective Strategies

- 1. R&D CAMEE pursues applied research funding for projects that benefit the state's advanced manufacturing industry, engaging industry as partners within the research projects and seeking to effect transfer of technology to industry in the form of research results.
- 2. R&D CAMEE provides design, prototyping, fabrication, and consulting services to the state's manufacturing industry to bridge gaps in resources and knowledge, and to leverage existing knowledge and assets.

Measures

- ◆ Number of businesses assisted by Southern Virginia Higher Education Center's (SVHEC) Research & Development Center for Advanced Manufacturing & Energy Efficiency (R&D CAMEE) through transfer of technology in the form of design, prototyping, production, and training services, and sharing of applied research results.

- **Practice sound fiscal management to ensure long-term sustainability of the Southern Virginia Higher Education Center.**

Summary and Alignment

Since its inception in 1986, the Southern Virginia Higher Education Center (SVHEC) has grown to become a vital economic driver, delivering educational and workforce benefits that reach beyond Southern Virginia to the entire Commonwealth. The Center's ability to maintain and expand these benefits is dependent on adequate funding and good fiscal stewardship. Since becoming a state agency in 2005, SVHEC leadership has steadily improved the Center's financial position and pursued a sustainable business model. While employing fiscally conservative spending practices, the SVHEC leaders have also succeeded in: 1) having the Center's state appropriation better aligned with the resources the Center requires to meet its mission; 2) developing a fee-based partner-affiliation model to ensure that the costs of services and technology provided are shared more equitably by the Center's academic partners; 3) impressing upon the localities the educational and economic impacts of the Center, so that they are investing resources to ensure those impacts continue; 4) attracting more grant and contract awards, allowing the Center to leverage resources and engage in projects to meet its mission; and 5) developing and offering fee-based training programs to meet the workforce needs of regional industry. While the SVHEC's current leadership has improved the Center's funding model and financial position, achieving a long-term sustainable business model will require continued diligence, innovative thinking, and continual adjustment, especially in response to rapid and unforeseen changes to the business and economic environment. The SVHEC is committed to excellence in fiscal stewardship and fostering a long-term sustainable business model.

Associated State Goal

Education: Elevate the levels of educational preparedness and attainment of our citizens.

Associated Societal Indicator

Educational Attainment

Objectives

» **Maintain or reduce instructional costs associated with noncredit assessment-based certifications earned during the fiscal year.**

Description

Southern Virginia Higher Education Center staff practice good fiscal and resource stewardship in order to maximize post-secondary education and workforce training opportunities offered through the Center. The objective for this goal is to maintain or reduce the ratio of instructional costs to noncredit assessment-based certifications earned in SVHEC Workforce Training programs, thereby contributing to the continued enrollment strength and long-term fiscal stability of the Center.

Objective Strategies

- The Southern Virginia Higher Education Center has in place policies to ensure that all spending commitments are analyzed and reviewed prior to expenditure.
- The Workforce Development division reviews certification rates regularly to ensure that trainees are being prepared to the highest degree possible to succeed on the assessments.
- The Chief Finance & Operations Officer meets regularly with the Chief Workforce Development Officer to review expenditures versus certifications earned.

Measures

Major Products and Services

The Southern Virginia Higher Education Center (SVHEC) builds workforce capacity by providing educational products and services in four distinct yet related categories:

Turnkey Operations For Degree-Granting Institutions: By providing turnkey operations for degree-granting institutions, the SVHEC makes it financially feasible for degree-granting partners to bring high-demand degree and certificate programs to Southern Virginia. The SVHEC provides facilities, technology, equipment, and complete operational support services (custodial, security, and IT support). Education partners have access to more than 100,000 square feet of technologically-sophisticated space including: classrooms equipped with networked personal computers and digital audio-visual projection systems; labs featuring advanced machining and simulation technology; and a tiered conference center equipped with dual high definition (HD) projection systems and digital audio-visual presentation capabilities. Facilities are continually being upgraded to meet the needs of degree-granting partners and their students. Upgrades slated for the 2018-20 Biennium include adding two video conference web classrooms compatible with next generation VCCS schools, upgrading the campus wireless system to support the latest student mobile devices, upgrading five classroom projector/AV systems to wide format high definition, adding a new large format touch enabled computer classroom and purchasing new laptops for the student "day-loaner" laptop checkout

program. In 2019, the SVHEC IT Academy will be expanded by an additional 10,000 square feet with support from Microsoft.

Non-Degree Technical Training and Credentials: As the economy improves and workforce training needs expand, employers are increasingly seeking out the SVHEC to develop and deliver non-degree, credential-based technical training. The SVHEC's slate of third-party, industry-approved, credential-based programs in high-demand careers such as welding, mechatronics, heating, ventilation, and air conditioning (HVAC), and information technology enable the SVHEC to meet employer needs. Training is offered on a compressed schedule, allowing employers to rapidly fill new jobs or upgrade existing ones. For program participants who are out-of-work, the compressed schedule also means getting back into the workforce quickly. Training is developed around real-world, practice-based exercises so program completers offer employers an immediate "value-add" when they are hired. Credentials are stackable and can be built up over time to increase job qualifications supporting a sequenced career path. In the 2018-20 Biennium, the SVHEC continues to build capacity of its non-degree programs. This includes developing articulation agreements with degree-granting partners to award college credit to SVHEC training program participants for industry-recognized credentials earned. Allowing non-degree program participants to receive college credit for credentials earned is another example of how stackable credentials are expanding educational opportunities and access in Southern Virginia.

Prekindergarten-12th (PreK-12) Science, Technology, Engineering, Math, and Healthcare (STEM-H) Outreach: Developing a robust worker pipeline in STEM-H careers is vital to building workforce capacity in Southern Virginia. The agency recognizes this work begins early, at the elementary school level. The SVHEC invests significant resources to prime the worker pipeline by delivering hands-on activities that introduce PreK-12 students to STEM-H careers and build awareness about available jobs and training in Southern Virginia. In the 2018-20 Biennium, the agency is increasing its STEM-H outreach significantly. The SVHEC Area Health Education Center has launched a campaign to recruit students to community college and university nursing programs in an effort to stem the regional nursing shortage. A project also is underway to expand regional high school career and technical programs and build connections to high-demand community college technical programs. Because the high price tag for career and technical programs makes them cost-prohibitive for individual rural school systems, the SVHEC is leveraging current resources with grant funds to build out lab facilities for the new Career Tech Academy (CTA). The CTA serves students from three geographically-connected public school systems, providing access to high-demand community college technical programs at the centrally located SVHEC-based labs. CTA students can earn college credit, the Career Studies Certificate, and industry-recognized credentials preparing them to enter a degree-program or the workforce.

Research & Development Services: The SVHEC R&D Center for Advanced Manufacturing & Energy Efficiency (R&D Center) provides affordable, business-boosting research and development services to help regional industry and entrepreneurs succeed. R&D Center staff advise industries and entrepreneurs on technology adoption, provide short production runs and offer proof-of-concept services. The R&D Center also

collaborates regularly with the Commonwealth's research universities on a variety of energy efficient construction materials projects. In the 2018-20 Biennium, the R&D Center is assisting in the commercialization phase for a proof-of-concept project to develop and commercialize a recyclable wine barrel. If successful, the barrel will be manufactured in Southern Virginia with the SVHEC developing an apprenticeship/internship opportunity tied to one of the agency's non-degree programs. The R&D Center also continues to investigate solar and micro-grid opportunities in the new biennium.

Performance Highlights

Performance Highlights

Performance metrics for the Southern Virginia Higher Education Center (SVHEC) demonstrate that the agency has adjusted and continues to adjust to the sea change currently churning higher education. Educators, legislators, employers and parents are rethinking the "college for all" mindset as college graduates collect degrees and debt but not jobs. Well-paying skilled jobs on the other hand are going unfilled in Southern Virginia. While high school graduates were being pushed into four-year degrees, the skilled worker pipeline dried up. On the verge of economic recovery and with skilled worker baby boomers aging out, employers are in the unenviable position of gearing up without a trained workforce. As a result, the agency has adjusted its program and service mix to reflect the changing environment.

While college degrees continue to be needed in Southern Virginia, demand has shifted. Performance numbers bear this out. Degree program enrollments are down to 2,500 in 2019 from a high of over 4,000 in 2011. The agency recognizes this as a market adjustment and is working with two and four-year degree-granting partners to ensure the "right" programs – programs that lead to jobs in the region – continue being offered. The agency has also implemented new technology to increase access without increasing partner costs. Linking classrooms remotely across the region prevents the need to replicate programs in multiple locations and is a better educational option for SVHEC students than strictly online offerings. The agency sees degree program enrollments stabilizing and does not anticipate further significant declines. It should be noted that lower degree program enrollment has negatively impacted fees generated under the SVHEC's partner cost share agreements. While the fees generated are minimal, (approximately three percent of total revenues) any decrease in funding affects the SVHEC's ability to maintain operational standards.

The numbers of credentials being produced by SVHEC demonstrates the agency's response to employer demand for non-degree credential-based technical programs. In 2019, nearly 400 credentials were produced in information technology, mechatronics, heating, ventilation, air conditioning (HVAC), welding, and Work Ready Foundations programs. The agency expects to produce more certifications as programs are expanded to meet employer need. Increased access to financial support for non-degree programs through initiatives such as the New Economy Workforce Credential Grant Program also is anticipated to drive enrollment. A positive, yet unanticipated consequence of credential attainment, is the tendency for non-degree students to continue their higher education pursuits into degree programs. As non-degree students become more confident in their ability to perform in the higher education setting and more proficient in their job positions, they increasingly are seeking additional post-secondary opportunities in degree programs. The local community colleges are making this easier by developing articulation agreements that give credit for credentials earned in non-degree SVHEC programs.

Building the skilled worker pipeline begins by developing an early interest in science, technology, engineering, math and health (STEM-H) careers. In 2019, the agency engaged nearly 6,000 public school students STEM-H career activities and events. The agency will continue to expand public school outreach in the next biennium.

As the region's economy recovers, the SVHEC R&D Center for Advanced Manufacturing & Energy Efficiency (R&D Center) provides affordable services to help regional industry and entrepreneurs grow and succeed. In addition to serving clients, R&D CAMEE accomplished two additional major milestones in FY 2019. First, the SVHEC contracted with GENEDGE to engage in a comprehensive R&D CAMEE "Mission & Model: Strategic Review." The review used Technology Driven Market Intelligence research to zero-in on a meaningful and manageable domain of problem areas faced by regional small to medium-sized manufacturers (SMEs) and to identify technologies through which R&D CAMEE can offer solutions. Second, the R&D CAMEE machine centers and other tangible assets were relocated to a newly up fitted space on the SVHEC campus. During a six-month period, R&D CAMEE staff coordinated the logistics, sub-contracts and overall project management of this major move. The number of businesses is expected to rise again in the next fiscal year as the R&D Center continues to forge new relationships with wholesale and retail businesses, manufacturers, materials producers, and equipment manufacturers. Many of these new relationships involve R&D Center consulting and prototyping services. The R&D Center also continues to build its relationship with Siemens AG especially through the SVHEC's designation as a Siemens's GO PLM Training Center. These relationships and the establishment of the SoVA Center of Manufacturing Excellence at the SVHEC have raised the R&D Center's profile among industry partners.

The SVHEC's productivity measure reflects the most distinct impact that changes in the higher education environment are having on the agency. The ratio of direct operating costs to course enrollments – the cost of supporting a single enrollment – rose. This increase is the result of (1) declining enrollment in degree programs and (2) increasing enrollment in high-cost non-degree technical programs. Declining degree enrollment is associated most immediately with the recovering economy but also increasingly with the cultural shift away from a "college-for-all" mindset. As the economy improves and the number of available jobs increases, individuals leave or forego enrollment in degree programs to take jobs. Community colleges are disproportionately impacted by this counter-cyclical response to the economy. Because over 90 percent of degree program enrollments are through community college partners, degree enrollments at the SVHEC have taken a correspondingly disproportionate hit, decreasing approximately 20 percent annually. The SVHEC operating costs to support those enrollments have decreased by nine percent. In the future, however, it is anticipated that the costs associated with delivering SVHEC technical programs (e.g. specialized equipment, materials and instructors) will experience higher increases relative to costs required to support traditional, lecture-based academic programs.

Staffing

Authorized Maximum Employment Level (MEL)	60
Salaried Employees	37
Wage Employees	17
Contracted Employees	1

Key Risk Factors

TECHNICAL PROGRAM CHALLENGE: The SVHEC has responded to employer demand for technically skilled workers by developing and delivering a slate of non-degree, industry-approved, stackable credential programs. These programs are producing increasing numbers of in-demand credentials and putting Southern Virginians to work in well-paying jobs in the region. In spite of this success, however, maintaining these programs is proving to be a challenge. Unlike traditional, seat-based degree programs, technical programs require specialized and costly equipment, materials, lab spaces and instructors. Recruiting instructors that possess both technical experience and classroom competency is difficult. In addition, because technical programs do not facilitate large enrollments, the amount of revenue generated is limited. Raising fees to a breakeven amount would price most program applicants out of the market. While programs like the New Economy Workforce Grant Program are extremely helpful in reducing financial enrollment barriers for students, the challenge for the agency is finding a comprehensive way to sustain these in-demand yet high-cost technical programs. Overcoming this challenge is vital in order for the agency to meet the growing need for skilled workers in Southern Virginia.

PARTNER OFFERINGS: Like the SVHEC, the agency's degree-granting partners are adjusting to changes in the higher education environment. Both two and four-year educational partners are struggling to adjust to declining student enrollment and decreasing revenue. Rather than maintaining an onsite SVHEC presence, universities have responded by relying on online education to meet the needs of students in outlying areas. While cost-efficient, this modality is not ideal for most Southern Virginia students who often lack the hardware, software or high speed connectivity required to reliably access online programs. The agency's two community college partners have been the most impacted by declining enrollment. Each has experienced lay-offs and been forced to significantly reduce degree offerings.

PERSONNEL: The SVHEC's continued success is directly associated with maintaining the agency's unique and talented complement of staff. Because the agency is small, however, the talent bench is not deep. Combined with the fact that 70 percent of the SVHEC's key leadership is within five years of retirement, the agency is vulnerable to an approaching brain drain. With this in mind, the SVHEC Strategic Plan (2018-20) includes an objective to develop a leadership succession plan by July 2019. Another personnel related vulnerability relates to the significant percentage (50 percent) of full-time positions that continue to be compensated through non-general funding – grants and other funding that is non-recurring and will expire in the next several years. The uncertainty of funding to compensate these full-time employees puts the SVHEC at additional risk of losing essential human capital. These are the individuals that drive the agency's mission-critical programs and services.

Management Discussion

General Information About Ongoing Status of Agency

The Southern Virginia Higher Education Center (SVHEC) continues to grow its short-duration, non-degree, credential-based technical training programs in order to build Southern Virginia's workforce capacity. One of the agency's most important initiatives involves credential-based training to support manufacturing, Southern Virginia's third largest employment sector. Because manufacturers are increasingly incorporating automation in production and distribution, the SVHEC is focused on training that provides the predicted "skills mainstay" of automation and robotics-based processes – Mechatronics. Since 2015 the agency has partnered with Siemens AG to offer the Siemens Mechatronics System Certification Program (SMSCP) in South Boston. The central theme of SMSCP is the System Approach, a special set of teaching and learning methods developed over 25 years in Siemens technical schools in Germany. SVHEC instructors traveled to Berlin in 2016 to learn the System Approach and become certified to teach Mechatronics Level 1 and 2. Siemens also tapped the SVHEC to develop a condensed, non-degree version of its Level 3 Mechatronics Credential; the SVHEC is now the only location in the world where non-degree Level 3 Mechatronics training is offered. Level 3 training is most closely aligned with academic-level engineering courses and provides the skills to design and build mechatronics systems. SVHEC instructors developed the Level 3 curriculum and traveled to Siemens Academie Technik in July 2017 to receive Level 3 instructor certification. Siemens executives were onsite in September 2017 when the SVHEC officially launches the Mechatronics Program with regional manufacturers and distributors. A Summer Siemens Experience is also under development with Virginia State University (VSU). Students in VSU's engineering technology program are slated to put classroom theories into practice at the SVHEC's Mechatronics' labs while earning Level 1 and 2 SMSCP, and eventually Level 3, credentials. Because there is increasing international demand for non-degree Level 3 Mechatronics training, the agency has engaged a consultant to determine the requirements for accepting nonimmigrant M-1 Visa students.

Another important initiative involves building workforce capacity by growing the science, technology, engineering, math and health (STEM-H) worker pipeline. Over the next biennium, the SVHEC will collaborate with two local community colleges and three geographically connected public school systems (Charlotte, Halifax, and Mecklenburg) to increase access to high-quality technical training for careers in in-demand fields. By leveraging its current resources with existing grants, the agency has established high school dual enrollment labs at the SVHEC for high-demand but otherwise cost-prohibitive technical programs. The SVHEC Career Tech Academy (CTA), launched in fall 2018, provides career technical education in advanced manufacturing and information technology. Students spend a portion of each school day with SVHEC instructors who teach community college technical curricula with industry-recognized credentials imbedded.

In its inaugural year, the CTA had 31 students complete their training programs, earning college credit and over 75 industry-recognized credentials. In Year 2, seniors who completed CTA Year 1 will enroll in the year-long "Work-Based Learning Experience," where they will spend two days each week in class and three working in a job related to their CTA field of study. The CTA will feed the pipeline to sought-after community college

technical programs. This initiative is consistent with the call to work regionally to leverage resources and advance potential.

Partnership 2.0 is an initiative formed to address the degree access gap created as a result of declining degree program enrollment and decreasing revenues. Identified as an objective in the SVHEC Strategic Plan (2018-20), Partnership 2.0 brings together the SVHEC and its founding partners, Danville Community College, Southside Virginia Community College, and Longwood University, for a partnership “reset.” The purpose of the initiative is to revisit the original reasons for the partnership, determine if and how this has changed, determine what degree programs are needed (e.g. lead to jobs in the region), identify gaps and challenges to offering these programs, and determine how resources can be leveraged to overcome the gaps and challenges. Much has changed since the original partnership was forged in 1986, but educational access remains a priority.

Information Technology

The Southern Virginia Higher Education Center (SVHEC) provides current, reliable, and sustainable technologies to meet the needs and expand the horizons of our students, faculty, partner institutions, and staff. The SVHEC’s campus includes several renovated historic industrial building in downtown South Boston that are interconnected by the SVHEC fiber optic network. The SVHEC has three premier workforce training labs. The SVHEC’s Innovation Center, home to the SoVA Center of Manufacturing Excellence (CME), houses the Welding Lab and the Mechatronics Lab, the latter containing a high-performance Dell workstation windows-based Computer Aided Drawing (CAD) lab, three dimensional (3D) printers, a reverse engineering robotic arm, and CAD/Computer Aided Machining (CAM) workstations running Siemens’ GO PLM and Tecnomatix software. In addition, the Bruce Street building houses the IT Academy (ITA) which contains a 1,250 square-foot student operated data center equipped with hundreds of donated servers from Microsoft, network hardware gear, a “sandbox” security experimental learning-lab, and 24 seat computer repair workstation lab supported by two connecting computer classrooms.

The SVHEC’s IT network operation center (NOC) utilizes a virtualized server environment supporting local and cloud services, campus wide wireless local area network (LAN) and a single gateway “BYOD” (Bring Your Own Device) wireless network controller, single authorization network, supporting over 320 student computers in 12 computer classrooms and three -portable laptop labs. Laptops are available for check-out by students for daily use throughout the SVHEC campus. Campus facilities includes 27 classrooms of various sizes equipped with high definition (HD) digital audio-visual (AV) projection systems. An 80 seat tiered executive classroom outfitted with dual high definition projection digital audio-visual presentation technology. An iMac computer based Adobe Suite Digital Technology & Design computer lab.

Through interagency collaboration, the SVHEC’s educational partners are able to deliver distance education using Virginia’s Mid-Atlantic Broadband open access fiber network, the SVHEC’s Internet gateway providing multiple distance education classes simultaneously from educational partners including Danville Community College, Longwood University, Old Dominion University, Southside Virginia Community College, University of Virginia, Virginia Tech; and collaborative partners including the Southern Virginia Regional Technology Consortium (SVRTC) (Prekindergarten-12th grade regional consortium), Longwood University’s Institute for Teaching Through Technology and Innovative Practices and Lake Country Distance Education Center.

Estimate of Technology Funding Needs

Workforce Development

The Southern Virginia Higher Education Center workforce is susceptible to future brain drain associated with top leaders approaching retirement and the difficulty of replacing highly-skilled workers should they choose to relocate or leave. Succession planning and ongoing professional development are essential to mitigating these impacts. A recent agency reorganization continued streamlining and flattening the organization for efficiency and effectiveness. All full-time staff have now received project management training and are regularly called on to participate in cross-functional project teams.

Physical Plant

The Southern Virginia Higher Education Center (SVHEC) is housed in two facilities totaling 116,000 square feet. These buildings are former tobacco processing facilities that were renovated using historical tax credits and grant funds, including grants from the Virginia Tobacco Region Revitalization Commission.

In the current appropriation act, general capital maintenance is funded through Central Maintenance Reserve. Chapters 759 and 769 (2016) provide Virginia College Building Authority construction funds to replace the roof and address other HVAC system needs. Because the SVHEC’s facilities were originally built in the 1800s, with one building renovated in 2001 and one in 2010, access to facility maintenance and replacement funds is critical to maintaining the buildings’ mechanical and physical infrastructure.

Supporting Documents

Title	File Type
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Administrative and Support Services [199]

Description of this Program / Service Area

The Southern Virginia Higher Education Center (SVHEC) builds critical workforce capacity in rural Southern Virginia, a historically underserved region, by providing affordable access to comprehensive post-secondary education and training opportunities. For 33 years the SVHEC has brokered unique academic and industry partnerships, leveraging resources to overcome barriers to economic advancement.

By partnering with two and four-year colleges and universities, the SVHEC provides access to a comprehensive range of educational choices, from GED to PhD. In providing facilities and a full array of support services for for-credit degree-granting institutions of higher education, the SVHEC makes it possible for those institutions to bring their programs to Southern Virginia. Facilities available to education partners include classroom, administrative and meeting space. The SVHEC's Center of Nursing Excellence (CNE) also supports regional partner health professions training programs with high-definition simulation training.

The SVHEC Workforce Development division works with industry and educational partners to identify areas of unmet need in workforce training and where that need cannot be met by other institutions, the SVHEC develops and delivers the training. Students in the SVHEC's Workforce Training programs earn industry-recognized, stackable credentials through SVHEC non-credit programs in welding, mechatronics, heating, ventilation, and air conditioning (HVAC), information technology, and work ready foundations.

Today's SVHEC provides access to post-secondary education and training access to approximately 1,200 partner-enrolled students annually and to 550 individuals enrolled in SVHEC noncredit workforce training programs conferring industry-recognized credentials. This is a sea change from three decades ago when residents of Southern Virginia had little or no access to affordable post-secondary advancement opportunities within the region.

Recognizing the importance of building the educational and workforce pipeline, the SVHEC Student and Partner Advancement division delivers technology, engineering, mathematics, and healthcare (STEM-H) outreach services to Prekindergarten-12th grade students in the region's public schools. Over 6,000 students annually participate in SVHEC outreach activities and events.

Through its Research and Development Center for Advanced Manufacturing and Energy Efficiency, the SVHEC support regional business and industry, providing human capital and advanced manufacturing solutions for design and production needs. The R&D Center also collaborates with the Commonwealth's research universities on applied research projects in advanced manufacturing techniques and energy efficient building materials.

Mission Alignment

The Southern Virginia Higher Education Center (SVHEC) was created through **§ 23.1-3120** of the Code of Virginia. The SVHEC, previously established as an off-campus center of Longwood University, was continued as an educational institution in the Commonwealth to:

1. Encourage the expansion of higher education, including adult and continuing education and associate, undergraduate, and graduate degree programs in the region and foster partnerships between the public and private sectors to enhance higher education in the Southside region;
2. Coordinate the development and delivery of continuing education programs offered by the educational institutions serving the region;
3. Facilitate the delivery of teacher training programs leading to licensure and graduate degrees;
4. Serve as a resource and referral center by maintaining and disseminating information on existing educational programs and resources; and
5. Develop, in coordination with the Council, specific goals for higher education in Southside Virginia.

Through partnerships with the SVHEC's education, industry, workforce development, and coalition partners, and by providing a high quality educational facility with state of the art technology, support staff, meeting space and conference rooms for community, regional and state use, the SVHEC expands access to a broad range of post-secondary education and training programs for the citizens of Southern Virginia. SVHEC programs and services serve to promote economic development, economic vitality, and quality of life for the region's citizens.

Products and Services

Description of Major Products and Services

Description of Major Products and Services

The Southern Virginia Higher Education Center (SVHEC) provides the following core services:

For-credit programming that affords access to numerous degree and certificate programs through affiliations with accredited education partners and the SVHEC's partners in the Southside Higher Education Coalition;

Support services including administrative, technology, custodial services, conference space logistics, and provision of information to students and educational partners;

Programming and support for workforce training leading to third-party, industry-recognized credentials including welding, mechatronics, "heating, ventilation, and air conditioning" (HVAC), offered at the SoVA Center for Manufacturing Excellence (SoVA CME) and information technology training, provided at the SVHEC's Information Technology (IT) Academy. The SVHEC's Center of Nursing Excellence (CNE) provides training and a full-service simulation center for education partners' health professions programs and industry workforce training.

Customized workforce training tailored to meet industry needs and available on-site in the workplace or at the SVHEC Innovation Center.

"Transfer of Technology" services through the SVHEC's Research & Development Center for Advanced Manufacturing & Energy Efficiency (R&D CAMEE) advanced manufacturing applied research and development services, including design, prototyping, fabrication, and training for regional business and industry;

Outreach programming and support for programs to engage Prekindergarten-12th grade (PreK-12) in science, technology, engineering, math, and healthcare (STEM-H) academic and career pathways;

Facility and support services to business and community-based organizations for conferences, meetings, workshops, training, and other events.

The SVHEC is equipped and staffed to support its current educational partners and their programs, with capacity to add partners and programs. The agency is a leader in advanced manufacturing training and applied research, and has made significant investments in this area.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
For-Credit Post-Secondary Educational Programming Through Partners	§ 23.1-3120 of the Code of Virginia		Required	76,656	123,961
Support Service for Education Partners	§ 23.1-3120 of the Code of Virginia			1,269,896	183,551
Workforce Training Programming	§ 23.1-3120 of the Code of Virginia			468,741	354,000
Customized Workforce Training Solutions for Industry	§ 23.1-3120 of the Code of Virginia			30,849	20,539
Advanced Manufacturing Applied Research Services	§ 23.1-3120 of the Code of Virginia			220,352	194,828
Science, Technology, Engineering, Math, and Healthcare Outreach to PreKindergarten-12th grade students	§ 23.1-3120 of the Code of Virginia			193,951	46,492
Facility and Support Services for Community-Based Organizations Meeting at the SVHEC	§ 23.1-3120 of the Code of Virginia			0	13,118

Anticipated Changes

To continue meeting its mission, the Southern Virginia Higher Education Center (SVHEC) will maintain its commitment to the core services listed above. To do so, the Center is expanding both spatially and programmatically, in response to regional need.

In the 2018-2020 biennium, the SVHEC's Workforce Development and SoVA Center of Manufacturing Excellence training programs are expected to have continued strong enrollments. Training program participants are earning third-party, industry-recognized credentials conferred by American Welding Society (AWS), National Center for Construction Education & Research (NCCER), National Institute for Metalworking Skills (NIMS), and Siemens AG. Two years ago, the SVHEC became the first non-credit institution in the world approved to offer Siemens Level 3 training. To date, five cohorts have completed training in Siemens Level 1 Industrial Maintenance/Mechatronics and a sixth will begin fall 2019; the inaugural Siemens Level 2 class has also completed training and a second cohort is underway, laying the foundation for a Siemens Level 3 cohort.

The SVHEC Welding lab, completed in FY 2015 in the Innovation Center, became an American Welding Society accredited Welding Testing facility in FY 2018. Eleven cohorts have successfully completed training and two more will begin fall 2019.

In fall 2018, the SVHEC established the Career Tech Academy (CTA) to provide students from the Charlotte, Halifax, and Mecklenburg County school divisions with high-quality technical training in two in-demand fields: advanced manufacturing and information technology. In the program's first year, 31 students completed training, earning college credit and more than 70 industry-recognized certifications. In fall 2019 the rising seniors who completed year 1 at the CTA will participate in the year-long Work-Based Learning Experience, with two days each week spent in class and

three days spent in a job related to their CTA studies. New cohorts will enroll in the year 1 programs.

The IT Academy, established in FY 2015 will expand both its physical facility and its programming in FY 2020. CompTIA programs including CompTIA IT Fundamentals, CompTIA Linux+, CompTIA PenTest+, and CompTIA Cloud+ are slated to be offered with support from the Virginia Tobacco Region Revitalization Commission and Microsoft. Microsoft also established the Data Center Scholars program at the SVHEC to enable underrepresented individuals to pursue training and careers in information technology (IT). Regional IT employers continue to partner in the IT Academy programs, providing in-kind support, interview opportunities, and employment placement for program and credential completers. To date the IT Academy has completed training for nine cohorts in CompTIA A+/Server+, three in CompTIA Network+, and two in CompTIA Security+.

The SVHEC, through its Center of Nursing Excellence (CNE), became a regional Area Health Education Center (AHEC) in the Virginia AHEC Program in FY 2016 and continues this affiliation. The Virginia AHEC Program is a federally funded initiative that aims to: (1) educate and train students to become culturally competent primary care health professionals who will provide healthcare in underserved areas and to health disparity populations; (2) increase the number and variety of primary care health professionals who provide care to underserved populations in Health Professional Shortage Areas (HPSAs) and other medically underserved areas; and (3) recruit into health careers individuals from underrepresented minority populations or from disadvantaged or rural backgrounds. The Southern Virginia AHEC, as the SVHEC AHEC is known, works closely with educational and training partners as well as the public school divisions across the 15 county-three city region to build and maintain the health workforce pipeline. Through a 2016 grant from the TRRC, the SVHEC and the Southern Virginia AHEC are working with Southside Virginia Community College, Danville Community College, and regional health care providers to combat regional nursing shortages through a campaign to attract students to the community college nursing education programs.

Factors Impacting

Funding has the greatest impact on the Southern Virginia Higher Education Center's (SVHEC) ability to develop and deliver its products and services, and in turn continue to have positive impacts on regional economic development. The SVHEC is in the midst of developing a sustainable business model that reflects the realities of the slowly recovering and uncertain economy at a time when the higher education industry as a whole is experiencing dramatic changes, with many institutions searching for new ways to remain relevant and financially healthy. General operating funds, as well as funds for additional technology, programmatic development, furnishings and personnel continue to be the SVHEC's primary need. The SVHEC's state appropriation is and will continue to be the primary source of these operating funds. In addition to state funds, the SVHEC receives operating funds from Halifax County and the Town of South Boston. The Center has also developed a partner affiliation fee model to more fairly and equitably cover SVHEC resources expended in providing services to its education partners and students, and pursues grant funding as appropriate to support programmatic efforts.

Other strategic initiatives undertaken by the SVHEC to support operations and ensure the Center's sustainability include: 1) increasing facility usage through marketing the SVHEC's conference facilities in collaboration with Halifax County Tourism and the Prizery, Halifax County's Community Arts Foundation; 2) attaining approval to operate as a fee-for-service Pearson VUE™ Testing Center; and 3) developing and providing training fee-based noncredit workforce training programs for in-demand industry-recognized credentials in response to industry need.

Beyond basic operating funding needs, the Center needs additional funds to successfully market SVHEC and partner programs throughout the region, especially to reach the many residents who reside outside of the region's few population centers. While SVHEC staff members have worked diligently to reach those residents, increased funding is critical to address this challenge.

In addition to monetary resources, collaborative partnerships are critical to the development and delivery of the SVHEC's products and services. A number of current successful partnerships with higher education institutions allow the SVHEC to facilitate access from the General Educational Development (GED) level to doctorate level across a number of disciplines. However, it is still difficult to attract programs from many of the Commonwealth's four-year universities, which are reluctant to offer full degree programs at off-campus locations. Most recently, the SVHEC has expanded its partnerships to include workforce training providers, business and industry, and the public workforce system in order to produce the workforce regional employers need. The growing demand for competency-based post-secondary training by industry has fueled the progress these partnerships are making. Partnerships have also been developed with Virginia's research universities through the SVHEC's Research & Development Center for Advanced Manufacturing & Energy Efficiency (R&D CAMEE) to develop applied research for advanced manufacturing; these applications will help transform regional manufacturers and position them for global competitiveness.

Financial Overview

The Southern Virginia Higher Education Center's (SVHEC) facilities, operations, and services are supported by both general and nongeneral fund dollars. General fund appropriation supplies approximately 47 percent of the resources required to operate SVHEC facilities and to provide personnel who (a) support SVHEC degree-granting educational partners and their students, (b) deliver customized workforce services to local and regional employers, (c) deliver non-credit credential-based technical training for in-demand regional careers, (d) stimulate awareness and interest in STEM-H careers through K-12 and (e) provide applied research services to industry. In addition to the General fund appropriation, the Center receives state funds from the Higher Education Equipment Trust Fund, capital reserve funds, and the New Economy Workforce Credentials Grant program. Nongeneral funds are nonrecurring and are comprised of grants, donations, partner and tenant fees, and fee-based training and services. With the tremendous growth in programs and services being provided at the SVHEC, the demand on nongeneral funds continues to increase.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	3,543,932	3,982,992	3,718,615	4,089,450

Changes to Initial Appropriation	0	0	0	0
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Supporting Documents

Title	File Type
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