

2016-18 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 credentials including degrees, certificates, and diplomas, and 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.

SVHEC leaders, staff, and stakeholders believe collaboration yields creative solutions that leverage scarce resources.

SVHEC leaders, staff, and stakeholders believe in trying new approaches in order to meet changing educational and workforce demands.

SVHEC leaders, staff, and stakeholders believe 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 support supplies approximately 30 percent of the resources required to operate SVHEC facilities and to provide personnel who (a) support SVHEC educational partners and their students, (b) deliver workforce services to local and regional employers, and (c) provide applied research services to industry. A reduction of General fund support is attributed to the Commonwealth's Savings Plan.

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

	2017 General Fund	2017 Nongeneral Fund	2018 General Fund	2018 Nongeneral Fund
Initial Appropriation for the Biennium	2,870,883	5,919,441	3,211,657	6,139,754
Changes to Initial Appropriation	-143,544	0	-160,582	160,582

(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 eight distinct yet related groups:

- Higher Education Institutions - Public and private two and four-year institutions of higher learning:** The SVHEC provides 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.
- Higher Education Students - Partner-enrolled students:** Through its collaborative relationship with public and private higher education partners and with regional industry, the SVHEC provides students educational access to for-credit higher education programs and noncredit workforce development and training programs provided by SVHEC Partners.
- Student - Regional Prekindergarten-12th (PreK-12) grade students:** The SVHEC helps prepare the educational pipeline to post-secondary degree and training programs by providing Science, Math, Engineering, Technology, and Health (STEM-H) outreach opportunities. The SVHEC works collaboratively with regional PreK-12 school divisions, higher education partners, and foundations to provide outreach year-round.
- 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.
- Adult Workforce - SVHEC workforce training program participants:** The SVHEC provides noncredit workforce training programs with

opportunities for trainees to obtain third-party, industry recognized credentials.

6. **Manufacturing - Regional industry:** The SVHEC provides applied research and fabrication services to regional manufacturers, leveraging technological innovations for competitive advantage.
7. **Organization - Regional organizations:** Regional organizations increasingly are utilizing the SVHEC's facilities, equipment, and services for local and regional events.
8. **Consumer – Attendees at regional organization events:** Individuals from across the region and the Commonwealth attend events held at the SVHEC by national, state, and local public and private organizations.

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 unique alliances with a variety of academic and industry partners. Among those partners are two community colleges serving localities to the east and to the west of the SVHEC; four public universities; and two non-degree granting institutions of higher education, who 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 educational partners have experienced enrollment declines in the last several years as the economy and job market improve (a national trend) and some partners have stopped offering onsite programming at the SVHEC, while others have modified program offerings to target specific markets. For-credit partners will be added as demand warrants and aligns with SVHEC sustainability.

Higher Education Students: Partner-enrolled students - The SVHEC's academic partners provide students seeking credit-based higher education with access to more than 100 degree, diploma, and certificate programs at the Center. 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 while others were beginning college courses for the first time. Since 2000, there has been a significant increase in the proportion of traditional (18-24 year old) college students pursuing degree programs at the Center. For many students in Southern Virginia, the programs offered by the SVHEC's academic partners on or through the SVHEC campus provide an affordable and geographically accessible education option compared to residential higher education programs outside of the region. The partners provide enrollment, advising, and financial aid support services to their students choosing a program offered at the SVHEC. From 2008-2012 enrollments increased in response to the recession and shrinking employment opportunities. As the economy and jobs began to recover, for-credit enrollments decreased as individuals returned to the job market. This trend at the SVHEC reflects the national trend in higher education.

Student: Regional Prekindergarten-12th (PreK-12) grade students - The SVHEC provides Science, Math, Engineering, Technology, and Health (STEM-H) outreach opportunities to promote a culture of higher education and build the educational pipeline beginning at the elementary school level. The Center works collaboratively with regional PreK-12 school divisions, higher education partners, and foundations to ensure that outreach opportunities are available year-round. During the academic year, middle and high school students are invited to the SVHEC for tours and demonstrations. Through the Dan River Year AmeriCorps program, the SVHEC hosts AmeriCorps Members who work 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. In FY 2016, the SVHEC served over 7,000 PreK-12 students through STEM-H outreach events and activities.

Employer/Business Owner: Regional employers - The SVHEC provides general and customized workforce training designed to meet regional industry's specific workforce needs. With the exception of training customized for company-specific needs, SVHEC foundational and advanced skills programs prepare individuals to earn assessment-based third-party, industry recognized credentials. Post-training employment rates are currently close to 90%, a success rate reflecting industry engagement in and support for the SVHEC workforce training programs.

SVHEC's foundational workforce training programs supporting the manufacturing industry include Welding@ SVHEC, Industrial Maintenance/Mechatronics (Siemens Level 1), Precision Machining, and Work Ready Foundations. Advanced skills training in these areas, including training for Siemens Levels 2 and 3 certifications, 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 and the Commonwealth Center for Advanced Manufacturing (C-CAM).

The SVHEC's IT Academy provides IT foundational and advanced training to support information technology businesses, as well as businesses in other sectors whose workforce needs include skilled IT workers. The IT Academy offers programs including CompTIA A+, Server+, Network+, and Security+. Industry partners provide input on specific employment needs and participate in job fairs for program completers. 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.

SVHEC Workforce Advancement staff also work with regional industry to develop and deliver training tailored to the employer's specific needs. Since completing a multi-year training pilot program customized to meet the needs of over 400 workers employed with one of Halifax County's largest manufacturers, the SVHEC has developed relationships with additional industry partners seeking customized training. In 2017, SVHEC Workforce Advancement has entered into one contract for customized training and is in discussions with three additional companies to design and deliver training.

Manufacturing: Regional industry - In addition to meeting the educational and training needs of individuals and industry employers, 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 the knowledge and competitive capabilities of regional industry through transfer of technology. R&D CAMEE staff work with industry and university researchers to develop innovative product design, materials,

advanced manufacturing techniques, and to subsequently move those products, materials, and techniques into the hands of regional industry.

An example of this work is parts 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 combines staff expertise, fluency in Computer-Aided Design/Computer Assisted Manufacturing (CAD/CAM) software, and advanced technology machining assets 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. The 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. The barrel is currently being field-tested with Virginia wine and spirits producers with results expected in late 2018.

SVHEC workforce training program participants - The SVHEC serves individuals regionally by facilitating, developing, and providing workforce training and career development services. SVHEC staff analyze regional workforce needs, identify existing training resources among education and industry partners, and connect individuals with the training programs they need. The SVHEC Workforce Advancement division works collaboratively with education and industry partners to develop and offer programming needed. The SVHEC's Center of Nursing Excellence (CNE) is an example of this collaboration: with partners Danville Community College and Southside Virginia Community College, the CNE supports clinical and simulation learning experiences for all levels of nursing and for other healthcare providers.

In cases where training needs remain unmet, the SVHEC develops and offers proprietary workforce training programs culminating with assessment-based third-party, industry recognized credentials. This was the case in 2014 when the SVHEC launched the Welding@SVHEC program at the request of regional employers and with support of the Tobacco Region Revitalization Commission (TRRC). Since the program began, seven cohorts have completed the program and an eighth is currently underway.

The TRRC also awarded 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) to address the regional shortage of skilled workers in manufacturing and related industries. This regionally-distributed training program was developed in response to industry demand and labor market analyses including that provided by the Boston Consulting Group (2012). The SoVA CME offers advanced and specialty-level training in welding, industrial maintenance/mechatronics, and precision machining to prepare individuals for credentials conferred by American Welding Society (AWS), National Center for Construction Education & Research (NCCER), National Institute for Metalworking Skills (NIMS), and Siemens Corporation. Cohorts began training at the SoVA CME in fall 2015.

Information technology employers in the region have also faced shortages of skilled workers and the SVHEC responded by establishing the Information Technology Academy (IT Academy) with input and support from employers and the TRRC. The IT Academy provides short-duration training programs preparing individuals for third-party, industry-recognized IT credentials in demand 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 enroll in IT Academy programs on a for-credit basis; those students earn college credit and have the opportunity to earn third-party, industry-recognized credentials.

In FY 2016, over 400 third-party, industry-recognized credentials were earned by individuals across all SVHEC workforce training programs. The SVHEC is an approved Pearson VUE testing center and provides assessment services for the region so that needs of individuals and incumbent workers who are pursuing industry-recognized certifications can take needed assessments locally. SVHEC workforce training programs offer individuals the opportunity to pursue training and credentials without leaving the region and serve to meet employer needs. Additional programs will be developed as demand warrants and as align with SVHEC sustainability.

Organization: Regional organizations - The SVHEC supports local and regional businesses, localities, Prekindergarten-12 (PreK-12) educators, community-based organizations, and professional groups with meeting space, technology, and logistical assistance for meetings, conferences, and other events. With funding from the Virginia Tourism Corporation, the SVHEC partnered 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/>).

Consumer: Attendees at regional organization events - An estimated 2,715 individuals annually attend events held by businesses, community-based organizations, and professional organizations at the SVHEC. This number is expected to increase over the current biennium with the establishment of the Bruce Street Conference Facilities partners (see section above). The numbers in the Current Customer List Table (below) reflects the portion of the Bruce Street Conference Facilities initiative that are attributable to the SVHEC alone.

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	10	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	1,200	Stable
Employer/ Business Owner	Business and industry entities whose labor force receives training at the Southern Virginia Higher Education Center	15	25	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	500	700	Increase
Manufacturing	Industry organizations receiving applied research services through the Research & Development Center for Advanced Manufacturing & Energy Efficiency	27	40	Increase
Organization	External organizations using the Southern Virginia Higher Education Center facilities for conferences, meetings, and events	38	50	Increase
Consumer	Individuals attending conferences, meetings and events at the Southern Virginia Higher Education Center	2,715	3,000	Increase
Student	Prekindergarten-12th grade students to whom the SVHEC provides Science, Technology, Engineering, Math, and Health (STEM-H) outreach services to encourage pursuit of higher education	7,020	8,000	Increase

Partners

Name	Description
Commonwealth Graduate Engineering Program (CGEP)	The Commonwealth Graduate Engineering Program (CGEP) is 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 (DCC) 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 (IALR) 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, servings 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 (LU) 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 & culture either online or onsite at the SVHEC, as demand warrants.
New College Institute (NCI) via the Southside Higher Education Coalition	New College Institute (NCI) 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 (ODU) 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 (SVCC) 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 (UVA) 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 Manufacturers Association (VMA)	Virginia Manufacturers Association (VMA) is the Virginia affiliate for the National Association of Manufacturers and works to development the supply of skilled workers needed to keep Virginia manufacturers competitive. VMA collaborates with the SVHEC as a founding member of the Manufacturing Skills Institute (MSI) at the SVHEC, provides training content and delivery, and supports collaborative marketing for SVHEC workforce training in the skilled trades areas.

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 State University	Virginia State University's (VSU) Department of Engineering and Technology will send Engineering Technology students to the SVHEC for Siemens Level 1 & 2 training and certification during the summer semester beginning in 2017. VSU students will also be able to earn Siemens Level 3 certification at the SVHEC after fall 2017.
Virginia Technical Institute (VTI)	Virginia Technical Institute (VTI) provides National Center for Construction Education & Research (NCCER) sponsorship for the SVHEC Welding program, as well as curriculum and program delivery in welding and other skilled craft trades programs for third-party, industry recognized credentials.

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 originally 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 recognized the need to address long-standing barriers to post-secondary education and workforce training across the entire southern Virginia region and passed legislation to create the SVHEC as an institution of higher education and a state agency. Today's SVHEC works collaboratively 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 meet the goal of providing accessible, affordable, and relevant post-secondary and training to citizens of the Southern Virginia Region. The SVHEC's community college partners offer students a particularly 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 students at the Center 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 works to find and/or develop funding support for individuals in noncredit training programs; this is a critical initiative as many citizens in the Southern Virginia 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. In the last two years, the SVHEC has opened the 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) and through the Virginia Department of Rehabilitative Services (DARS). The SVHEC is also an approved provider under the Commonwealth of Virginia's New Economy Workforce Credential Grant Program (FY2017) which provides financial assistance for trainees in noncredit training programs that include the opportunity to obtain a third-party, industry recognized credential. The Center also actively engages the private sector to support noncredit workforce training with tuition assistance for students demonstrating need. Mid-Atlantic Broadband Corporation has provided tuition assistance funds for IT Academy training program participants since the initial cohort started. Academic and noncredit programming offered at the SVHEC is and will remain relevant because the Center and its partners use data-driven decision to determine programming needs. The SVHEC uses sound labor market analyses and regularly elicits input from regional industry, including the Halifax County Chamber of Commerce's Senior Executive Roundtable. The SVHEC Workforce Advancement division conducts in-depth interviews with key industry representatives to facilitate the exchange of information among industry, educators, and economic development staff. Where programs and resources 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 Center in the heart of the Southern Virginia region, many individuals in the region 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) will form a "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 will be 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 meeting these needs 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) is not just focused on elevating the regional education and workforce preparedness levels of today: the Center is focusing on preparedness that meets critical industry need now and in the future. Working from a new perspective on what “workforce readiness” means in today’s economy, the Southern Virginia Higher Education Center (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 aid support for participants in its workforce training programs; this is a critical initiative as many individuals in the Southern Virginia 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 to meet current and anticipated employer demands with career pathways and training solutions for dislocated, underemployed, and future workers; 2) Establishing goals and identifying ways to increase statewide third-party, industry recognized credentials that align with employer current and future needs. 3) Facilitate 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 Advancement 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

- 1. The Southern Virginia Higher Education Center's Workforce Advancement division works collaboratively with higher education and industry partners to identify skills needed and to offer education and training programs to meet those needs.
- 2. Where programming is not available to meet the identified needs, The Southern Virginia Higher Education Center's Workforce Advancement division develops programming to address the need.
- 3. 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).

• 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 the former economic "pillars" of manufacturing and tobacco production. Jobs in these emerging sectors, which include 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 access to post-secondary education and training is imperative now for all students and 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 PreK-12 students in the region. During the academic year, elementary, middle and high school students are invited to the SVHEC for tours and demonstrations. 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 and Partner Advancement 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.

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

- 1. 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.
- 2. 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 Southern Virginia Higher Education Center's (SVHEC) Research & Development Center for Advanced Manufacturing and Energy Efficiency's (R&D CAMEE) mission is to transform the manufacturing sector in the region, 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 computer-aided design/computer aided-manufacturing man (CAD/CAM) software and equipment distributors (Siemens). In addition to conducting applied research projects, and providing design, fabrication, and training services to industry, R&D CAMEE also 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, education and 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 strengthening 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 direct operating costs associated with supporting course enrollments during the fiscal year.**

Description

Southern Virginia Higher Education Center staff practice good fiscal stewardship in order to maximize post-secondary education and workforce training opportunities offered through the Center. Maintain or reducing direct operating costs required to support course enrollments supports 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 Chief Finance & Operations Officer meets regularly with finance staff to review expenditures.

Measures

- ◆ Ratio of Direct Operating Costs to Course Enrollments During the Fiscal year

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 affordable for degree-granting partners to bring high demand degree and certificate programs like nursing, business administration, human services, criminal justice, education and counseling to Southern Virginia. The SVHEC provides educational spaces, technology, and equipment, as well as complete operational support services: custodial, security, and IT support. Partners have access to more than 100,000 square feet of technologically sophisticated educational space. Facilities include classrooms equipped with networked personal computers and digital audio-visual projection systems; labs featuring advanced machining and simulation technology; and an 80 seat 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.

Non-Degree Technical 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 has responded by developing a slate of third-party, industry-approved, credential-based programs in high-demand careers such as welding, mechatronics, information technology and work ready foundations. Training is offered on a compressed schedule, which allows employers to rapidly fill new jobs or upgrade existing ones. For program participants who may be out-of-work, the compressed schedule also means getting back into the workforce quickly. In addition, because training is developed around real-world, practice-based exercises, program completers are positioned to offer employers an immediate value-add. Because credentials are stackable and can be built up over time to increase job qualifications, they also serve as a sequenced career path. The advent of stackable credential programs is allowing the SVHEC to expand educational access, particularly for non-traditional students without the time or resources to pursue traditional two or four-year degrees. In the 2018-20 Biennium, the SVHEC will continue building the capacity of its non-degree programs. This includes developing articulation agreements with degree-granting partners. Allowing non-degree program participants to receive college credit for credentials earned in SVHEC non-degree programs is another example of how stackable credentials are expanding educational opportunities and access in Southern Virginia.

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 will assist 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 will continue investigating solar and micro-grid opportunities in the new biennium.

Prekindergarten-12th (PreK-12) Science, Technology, Engineering, Math, and Healthcare (STEM-H) Outreach: Developing a healthy worker pipeline in STEM-H careers is vital to building workforce capacity in Southern Virginia. The agency recognizes this work begins early – in public schools. Therefore, 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 anticipates increasing its STEM-H outreach significantly. The SVHEC Area Health Education Center will launch a campaign to recruit public school students and others into community college and university nursing programs in an effort to stem the regional nursing shortage. A project also is underway to facilitate regional expansion of high school career and technical programs and prime the pipeline 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 plans to leverage its current resources with existing grant funds to build out lab facilities to serve students from three

geographically connected public school systems. Under this plan, juniors and seniors from three counties will have dual enrollment access to high-demand community college technical programs at the centrally located SVHEC-based labs. By pooling the SVHEC's resources with those of the local community colleges and public school systems, rural students will have access to in-demand STEM-H careers in the Southern Virginia.

Performance Highlights

Performance metrics for the Southern Virginia Higher Education Center (SVHEC) demonstrate how 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 clearly has shifted. Performance numbers bear this out. Degree program enrollments are down to 1,200 in 2016 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 also is investigating how technology might be leveraged 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 believes degree program enrollments are stabilizing and does not anticipate further significant declines. It should be noted that lower degree program enrollment negatively impacts 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 2016, 401 credentials were produced in information technology, mechatronics, welding and work ready foundations programs. The agency expects to produce more credentials as the agency continues to build out these programs in response to employer need. Increasing access to financial support for non-degree programs 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 2016, the agency engaged 7,020 public school students from 22 different public school systems in high-demand STEM-H career activities and events. The agency will continue to expand public school outreach in the next biennium. By leveraging its current resources with existing grants, the agency will establish high school dual enrollment labs for high-demand but otherwise cost-prohibitive technical programs. The labs will serve juniors and seniors in three regional public school systems and feed the pipeline to sought-after community college technical programs.

As the region's economy slowly 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. While the numbers of businesses assisted this year are down slightly (four percent) from the previous fiscal year, the numbers served still exceed the short term target of 20 for 6/30/2016. 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 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 agency expects to increase the number of business and industry entities served in the next fiscal year.

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 by 15 percent. This increase is the result of declining enrollment in degree programs at a ratio exceeding the reduced operating costs in FY 2016. 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, a 21 percent annual decrease. 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)	57.3
Salaried Employees	30
Wage Employees	19

Key Risk Factors

The following risk factors pose the most significant threat to the Southern Virginia Higher Education Center's (SVHEC's) ability to accomplish its mission in the coming years:

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. While students continue to have access to individual program courses at the SVHEC, students must travel to the main college sites to get the full complement of courses required to complete their programs. Both of these trends are reducing access to higher education in Southern Virginia.

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) will continue growing its short-term, 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 many manufacturing jobs are at risk to automation, the agency is focused on training that provides what is predicted to be the skills mainstay of automation and robotics-based production and distribution – 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, setting the SVHEC up to become the only location in the world where non-degree Level 3 Mechatronics training will be 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 are now developing the Level 3 curriculum and will travel to Siemens Akademie Technik in July 2017 to receive Level 3 instructor certification. 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. Siemens executives will be onsite in September 2017 when the SVHEC officially launches the Mechatronics Program with regional manufacturers and distributors. 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 to increase access to in-demand technical career and technical training. By leveraging its current resources with existing grants, the agency will establish high school dual enrollment labs at the SVHEC for high-demand but otherwise cost-prohibitive technical programs. The labs will serve juniors and seniors in three regional public school systems and 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 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 will bring 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) strives to provide current, reliable, and sustainable technologies in a timely manner to meet the needs of students, faculty, partner institutions, and staff. The SVHEC’s 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, and a virtualized desktop environment [also wide area network (WAN) accessible] supporting over 275 student computers in 11 computer classrooms and two 12-unit mobile laptop labs. The mobile lab laptops are available for check-out by students for daily use through the SVHEC campus. Campus facilities includes 27 classrooms equipped digital audio-visual (AV) projection systems, and an 80 seat tiered conference center with dual high definition (HD) projection systems and digital audio-visual presentation technology. The SVHEC’s Innovation Center has a Mac-based Adobe Suite Digital Technology & Design computer lab and a Dell workstation windows-based Computer Aided Drawing (CAD) labs each housing 20 computers, three dimensional (3D) printers, a reverse engineering robotic arm, and CAD/Computer Aided Machining (CAM) workstations running Siemens’ GO PLM and Tecnomatix software.

Through interagency collaboration, the SVHEC’s educational partners are able to deliver distance education using our 100 Megabyte 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) and Lake Country Distance Education Center. The SVHEC also serves as a distance learning site for Old Dominion University.

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) is an educational catalyst and economic driver. By serving as a “turnkey” facility for for-credit degree-grant institutions of higher education, the SVHEC makes it possible for those institutions to bring their programs to Southern Virginia. The SVHEC supports partner programs in healthcare professions through its Center of Nursing Excellence, providing advanced technology simulation equipment and simulation expertise. The SVHEC 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. Through its Research and Development Center for Advanced Manufacturing and Energy Efficiency, the SVHEC serves regional business and industry, providing human capital and advanced manufacturing assets to find solution to industry’s design and production needs.

The SVHEC provides post-secondary education and training opportunities to approximately 1,200 partner-enrolled students and 500 workforce training individuals annually through collaborative partnerships with its for-credit partners, training providers, and industry organizations conferring third-party, industry recognized credentials for assessment-based training. As recently as three decades ago, residents of Southern Virginia had little or no access to affordable post-secondary advancement opportunities within the region. Lack of access, coupled with an abundance of jobs that required no post-secondary preparation, resulted in a persistent low level of educational attainment documented for the region.

When the region’s economic stalwarts of manufacturing and tobacco began to collapse in the late 1980’s, the need for post-secondary preparation rose dramatically. The SVHEC, then known as the “Continuing Education Center (CEC),” was established in 1986 as a county-funded initiative in a mobile unit on the grounds of Halifax County High School to offer community college courses. A year later, the CEC became an off-campus site for Longwood University, allowing the Center to offer classes towards a four-year degree while still offering community college classes.

By 2005 it had become imperative that access to post-secondary education and training be vastly expanded in the region to meet the needs of employers faced with structural economic changes. Much of the region’s workforce was not ready for employment in the sectors that had begun to replace manufacturing and tobacco, including advanced manufacturing, information technology, healthcare, and education. Jobs in these sectors require skill sets and knowledge very different from that required in traditional manufacturing and tobacco production. Access to institutions and programs through which one could become prepared for jobs in the “new economy” was limited within the Southern Virginia region.

In establishing the SVHEC as a center for higher education and a state agency on July 1, 2005, the General Assembly made inroads toward addressing the access problem. The agency was established not as a degree-granting institution itself, but rather as a collaborative “education facilitator,” providing infrastructure (including facilities, technology assets, administrative and support staff, and technology) and bringing together education partners and citizens of the Southern Virginia region who might otherwise never have connected. The Center’s name changed from the Continuing Education Center to the Southern Virginia Higher Education Center, and the focus became providing accessible, affordable education across the spectrum from General Education Development preparation to PhD programs. Since 2005, the SVHEC, in collaboration with its education and industry partners, has had a significant impact on the region, both in expanding access to and shifting the cultural valuation of post-secondary opportunities.

Today, the SVHEC’s programs and services include:

- Associate, undergraduate, and graduate degree programs through accredited higher education partners;
- Healthcare training using high-fidelity simulation technology through the SVHEC Center of Nursing Excellence (CNE);
- Workforce training programs customized for regional industry through the SVHEC Workforce Advancement division;
- Foundational, advanced and specialty-level preparation and industry-recognized third-party, industry recognized credentials in welding, precision machining, and industrial maintenance through the SoVA Center for Manufacturing Excellence (SoVA CME);
- Testing and assessment services for professional third-party, industry recognized credentials as a Pearson VUE Authorized Assessment Center;
- Design, prototyping, production, and training services to industry through applied research in advanced manufacturing for business and industry at the SVHEC’s Research & Development Center for Advanced Manufacturing & Energy Efficiency (R&D CAMEE);
- Financial aid services through Danville Community College’s federal TRIO grant-funded Educational Opportunity Center (EOC);
- Literacy and continuing education services, including one-on-one tutoring and English as a Second Language (ESL) through the SVHEC’s Volunteer Literacy Program; and General Education Development (GED) preparation through Southside Virginia Community College.

The SVHEC’s current accredited and certified higher education and training partners include: Danville Community College (DCC), the Commonwealth Graduate Engineering Program (CGEP), the Institute for Advanced Learning & Research (IALR), Longwood University (LU), New College Institute (NCI), Old Dominion University (ODU), Southside Virginia Community College (SVCC), Virginia Tech, and Virginia Technical Institute. The SVHEC is a member, with IALR (Danville) and NCI (Martinsville) in the Southside Higher Education Coalition. The coalition was formed to eliminate duplication in programming and to enable cross-site content delivery. Remote content delivery to coalition sites and to other offsite partners is facilitated by Mid-Atlantic Broadband Community (MBC) Corporation’s broadband infrastructure.

In addition to serving the region’s post-secondary population, the SVHEC provides outreach to Prekindergarten-12th grade (PreK-12) divisions in the region, focusing primarily on connecting PreK-12 students to postsecondary learning pathways in the science, technology, engineering, math, and healthcare (STEM-H) areas. The SVHEC Division of Student and Partner Relations reaches over 5,000 PreK-12 students and their parents

annually through outreach activities.

The SVHEC fosters partnerships between the public and private sectors to enhance post-secondary education and training opportunities in the region. Industry leaders, municipal representatives, and education partners serve on the Advisory Committee for the SVHEC's Center of Nursing Excellence (CNE) and provide informal but regular guidance for the SoVA Center for Manufacturing Excellence (SoVA CME), allowing for efficient input and dissemination of expert information from those entities. Through advisory committees and other forms of public-private interface the SVHEC connects education and training to employment.

The SVHEC and its partners are providing individuals with advancement opportunities, strengthening local economies, and enabling the region as a whole to prosper. These efforts will ultimately transform Southern Virginia into a region where current industries thrive, new industries seek to locate, and individuals want to live and work.

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 increase access to higher education.

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

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 multiple academic 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; and

Workforce training solutions customized to the needs of regional employers;

Programming and support for workforce training and attainment of third-party, industry recognized credentials through: the SoVA Center for Manufacturing Excellence (SoVA CME) including the SVHEC Welding Training program; the SVHEC Information Technology (IT) Academy; the Center of Nursing Excellence (CNE) training and simulation center; and other SVHEC Workforce Advancements initiatives including Work Ready Foundations®.

Advanced manufacturing applied research services, including design, prototyping, fabrication, and training for business and industry through the Research & Development Center for Advanced Manufacturing & Energy Efficiency (R&D CAMEE);

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.

The SVHEC's Innovation Center houses \$2 million in advanced manufacturing equipment and the Research & Development Center for Advanced Manufacturing and Energy Efficiency (R&D CAMEE) has fostered strong partnerships with both Virginia Tech and the University of Virginia as well as a variety of employers representing multiple industry sectors (i.e., automotive, advanced manufacturing, housing, etc.). These relationships have afforded the agency an opportunity to play a key role in on-going research in the area of energy-efficient construction materials and techniques, with a focus on energy-efficient affordable housing solutions.

In response to regional industry and economic development needs, the SVHEC has developed innovative workforce training initiatives leading to third-party, industry recognized credentials. These programs are short in duration and are designed to meet industry-identified needs to ensure availability of the skilled workforce needed now and in the future.

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) adjusting the SVHEC business model to include partner affiliation agreements; 3) attaining approval to operate as a fee-for-service Pearson VUE™ Testing Center; and 4) developing and providing training fee-based noncredit workforce training programs for in-demand third-party, industry recognized credentials.

Anticipated Changes

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

In the 2016-2018 biennium, expansion is happening again as recently implemented workforce development programs gain traction and expand. Equipment acquisition, curriculum development and program planning have been completed for the SoVA Center for Manufacturing Excellence (SoVA CME) and two of the three programs (Welding and Mechatronics) have completed training for multiple cohorts. Additional cohorts are being added to programs across all training sites, including the SVHEC. Training program participants are earning third-party, industry recognized credentials from the American Welding Society (AWS), the National Center for Construction Education and Research (NCCER), the National Institute for Metalworking Skills (NIMS), and Siemens Corporation. Three cohorts have completed training in Siemens Level 1 Mechatronics and recruitment is underway for the fourth. Virginia State University students will begin coming to the SVHEC in summer 2018 for Siemens Level 1 and 2 training through the SoVA CME. In fall 2017, the SVHEC will become the first non-credit institution in the world approved to offer Siemens Level 3 training. The Industrial Maintenance/Mechatronics program is also expanding to the second floor of the Innovation Center. Precision Machining took longer to establish but is moving toward starting training. The SVHEC is working with Danville Community College (DCC) and the school divisions of Halifax County, Charlotte County, and Mecklenburg County to begin Dual Enrollment classes in precision machining at the SVHEC in fall 2018. SVHEC will equip the lab through grant funds available and the school divisions would include precision machining in their Dual Enrollment offerings and arrange for transportation of students to the classes.

The SVHEC Welding lab, completed in 2014 in the Innovation Center, will become an American Welding Society accredited Welding Testing facility in 2017. Seven cohorts have successfully completed training, an eighth began in fall 2016, and recruitment is underway for the ninth.

The IT Academy, established in 2015, has completed training for four cohorts in the CompTIA A+/Server+/Network+ course and a fifth cohort is underway. Planning is underway to offer training for additional third-party, industry recognized IT credentials. Regional IT employers are partnering in the program, providing in-kind support, interview opportunities, and employment placement for program and credential completers.

The SVHEC, through its Center of Nursing Excellence (CNE), became a regional Area Health Education Center (AHEC) in the Virginia AHEC Program. 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 14 county region to build and maintain the health careers 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 develop and implement a nursing education recruitment campaign to combat regional nursing shortages.

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 implementing 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 an important 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 developed a partner affiliation fee model to more fairly and equitably cover SVHEC resources expended in providing services to its education partners and students.

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 deliver programming 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 have traditionally been reluctant to offer full degree programs to off-campus locations. Most recently, the SVHEC has expanded its partnerships to include workforce training providers and business and industry 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 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 support supplies approximately 30 percent of the resources required to operate SVHEC facilities and to provide personnel who (a) support SVHEC educational partners and their students, (b) deliver workforce services to local and regional employers, and (c) provide applied research services to industry. A reduction of General fund support is attributed to the Commonwealth's Savings Plan.

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

	2017 General Fund	2017 Nongeneral Fund	2018 General Fund	2018 Nongeneral Fund
Initial Appropriation for the Biennium	2,870,883	5,919,441	3,211,657	6,139,754
Changes to Initial Appropriation	-143,544	0	-160,582	160,582

Supporting Documents

Title File Type