

# FY15 Competitive Education

## Summaries and Staff Recommendations –May 2015

*The Commission received twenty proposals for FY15 Competitive Education grants by the announced due date of March 25th. The requests seek \$6.97 million dollars. The Education Committee will meet on May 20th in Martinsville to consider these proposals and make funding recommendations to be acted on by the Commission on May 21.*

<b>Req #</b>	<b>Organization Name</b>	<b>Project Title</b>	<b>Request Amount</b>	<b>Staff Rec</b>
3026	Bluefield College	Science Center Addition Architectural Design Phase	\$37,500	<b>\$37,500</b>
3030	CAWS, Inc.	CAWSTECH: A construction skills training project	\$140,000	<b>\$0</b>
3023	Central Virginia Community College Educational Foundation Inc	Modernization of STEM-H Labs	\$115,408	<b>\$115,408</b>
3028	County of Franklin	Southside Race to GED/NEDP Grant	\$80,000	<b>\$80,000</b>
3019	Danville Community College	Dimensional Metrology Career Pathways	\$585,155	<b>\$390,155</b>
3017	Integrative Centers for Science and Medicine	Martinsville Medical School Construction	\$1,945,000	<b>\$0</b>
3014	John Tyler Community College	2015/2016 Tobacco Region Scholarship Program	\$65,282	<b>\$65,282</b>
3018	Lynchburg College	Physician Assistant Medicine Program	\$296,968	<b>\$0</b>
3027	Mountain Empire Community College Foundation	MECC Healthcare Simulation Access	\$428,141	<b>\$370,000</b>
3020	Patrick Henry Community College	STEM and Advanced Manufacturing Training Facility	\$600,000	<b>\$600,000</b>
3024	Southside Virginia Community College Foundation, Inc.	Implement a Physical Therapist Assistant Program	\$275,000	<b>\$275,000</b>
3015	Southwest Virginia Community College	Advanced Manufacturing AAS Degree Program	\$87,890	<b>\$87,890</b>
3016	The Southwest Virginia Alliance for Manufacturing, Inc.	Employer Training Collaborative (ETC)	\$879,899	<b>\$200,000</b>
3021	The University of Virginia's College at Wise Foundation	Nursing Lab Simulation Mannequins	\$123,732	<b>\$123,732</b>

3012	Virginia Early Childhood Foundation	Southside School and Workforce Readiness Project	\$497,800	<b>\$110,000</b>
2849	Virginia Foundation for Community College Education	High School Career Coach Program - Advanced Manufacturing Specialization	\$490,000	<b>\$490,000</b>
3029	Virginia Highlands Community College Educational Foundation	Green-Energy Water Pumping System: Student Project	\$28,559	<b>\$0</b>
3025	Virginia Western Community College	BioLink: Biology Labs in Franklin County	\$99,966	<b>\$99,966</b>
3022	VirginiaFIRST	Growing the STEM Pipeline in Southside Schools	\$60,000	<b>\$0</b>
3013	Wytheville Community College Educational Foundation	VHCC & WCC at Summit Center for Higher EDU Project	\$130,120	<b>\$130,120</b>

Total (20 Requests/15 Recommendations)	\$6,966,420	<b>\$3,175,053</b>
Balance available before/after recommendations	<b>\$3,196,467</b>	\$21,414

## Bluefield College

### *Science Center Addition Architectural Design Phase (#3026)*

**\$37,500 Requested**

#### *Project Description Provided by Applicant:*

**Executive Summary:** Bluefield College is working to answer the workforce demands of more STEM-H degrees. The Science Center, the largest academic building at the College is home to all of its STEM-H programs. To expand and receive accreditation for new STEM-H programs a third floor addition must be designed and constructed for the Science Center. Commission funding will be utilized to engage William Huber to complete architectural design and construction documents for the third floor addition. The third floor addition is necessary for the national accreditation for the College's new Masters of Nursing Program.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** No program is within an hour's drive of the Bluefield College's proposed Master of Nursing with a concentration in Family Nurse Practitioner (FNP). The closest program similar to the Bluefield College (BC) FNP is King University located in Bristol, Tennessee. The BC FNP is a hybrid of on-line and on-site learning that will allow for flexibility in the student's schedule. The King University program meets each week on campus. The BC FNP program is focused on recruiting Virginia students who can qualify for Virginia Tuition Assistance Grant and BC's tuition is \$120 less credit/hour than King.

**What are the pre-requisite requirements for entry into your program?** Pre-requisites are currently being established for the Bluefield College Proposed Masters of Nursing with Family Nurse Practitioners.

**What resources are required to make the proposed program successful?** The third floor addition of the Science Center is essential for the national accreditation by the Commission on Collegiate Nursing Education of the Masters of Family Nurse Practitioners program. This facility must be completed by 2017 when the Commission on Collegiate Nursing Education makes its site visit to Bluefield College. To ensure that the addition is completed by this date the detailed architectural and engineering documents by be completed by Fall 2015 to be used to finalize the bidding funding for the third floor addition.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

Graduates of the BC program will possess a Masters in Nursing (MSN) with Family Nurse Practitioner concentration to educate baccalaureate registered nurses to fulfill the role of a dedicated d completed health care provider responsible for managing the care of families in primary care. The program will be based on the American Association of Colleges of Nursing (AACN) Essentials of Masters Education and the Commission on Collegiate Nursing Education. BC is conservatively projecting 15 graduates annually. This number of annual graduates has the potential to be much higher.

**What is the need in your regional area for graduates of the proposed program?** There were 681 job openings advertised online in Virginia for Nurse Practitioners on March 23, 2015. The desired salary range in the workforce system for Nurse Practitioners in Virginia on March 23, 2015 is \$80,000 - \$94,999. The employers with the highest openings advertised: CVS Health(37), Bon Secours Health System, Inc.(29), Job2Web CPC Feed HJN(24), UnitedHealth Group, Inc.(23), Sentara Healthcare(19), University of Virginia Health System(16), Inova Health System(16), VCU Health System(14), Mountain States Health Alliance(14), and UVA Physicians Group(12).

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** Bluefield College anticipates eventually submitting a second grant request to the Commission for financial assist with the construction and equipping of the third floor addition of the College's Science Center. This request will not exceed \$1.1 million dollars.

**Staff Comments and Recommendation:** This request to complete architectural design and construction documents for a third floor addition to the College's Science Center will allow the applicant to finalize the bidding funding necessary to complete the renovation by its goal of 2017. The created space will house the future Masters of Family Nurse Practitioners program and is critical to receiving national accreditation. The Commission has previously supported the creation of a BSN program for Bluefield and the application indicates that 75% of students enrolled in that program are from Southwest Virginia. It is assumed that many of those graduates would be interested in continuing their education in the FNP program which will enroll 15 students annually. Matching funds are committed from the College and the Thompson Charitable Foundation. The application indicates that a future request "not to exceed \$1.1 million dollars will likely be submitted to the Commission to fund approximately 50% of the anticipated cost to construct and equip the third floor. A request this size is likely to be quite challenging for the Committee to accommodate. The applicant should note that an award for this phase of the project does not indicate a commitment of future funding for the project. The operating budget provided with the application shows that by year 4 the MNP program will net income \$344,000 to \$373,000 annually indicating that financing may be a possibility for construction. **Staff recommends award of \$37,500.**

**CAWS, Inc.**

***CAWSTECH: A construction skills training project (#3030)***

**\$140,000 Requested**

***Project Description Provided by Applicant:***

**Executive Summary:** CAWSTECH is a construction craft training project that utilizes the National Center for Construction Education and Research Training model. The mandatory course is Construction Craft laborer 1 and 2. Students completing this course and passing the performance and written assessments will receive two nationally accredited portable and stackable certificates. Upon completion of this two-level course trainees will qualify for entry level positions in construction and/or maintenance as a laborer or helper with a median salary of \$13-\$15.00 dollars/hour. Training includes case management.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** The closest programs are in Alta Vista and Richmond, both are more than an hours drive. Technical training is provided but not with NCCER certification. We will succeed by providing NCCER, classroom and hands-on training that is needed in this area.

**What are the pre-requisite requirements for entry into your program?** No pre-requisite training is needed. They student must be at least 15 years old and have a desire to gain construction skills training.

**What resources are required to make the proposed program successful?** A building, lab equipment, certified NCCER employees, construction training supplies and operating funds.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

We will collaborate with the local community college for any student who does not have a GED. Attainment of a CRC is a training requirement. Craft/laborer certification will be offered. Ninety students will be enrolled annually with a 70% success rate.

**What is the need in your regional area for graduates of the proposed program?** The private employer review and feasibility study and the needs assessment are included in the business plan that will be aimed at being submitted by April 1, 2015. The delay is because this is being developed by the Longwood Small Business Development Center in Halifax County.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** Yes. Future funding requests will be used training cost. We anticipate requesting 55K.

**Staff Comments and Recommendation:** CAWS (acronym for Caring Arms Will Support) was formed by founder Cheryl Ann Wilson-Sprinkle in 2008 and obtained IRS 501 C3 tax-exempt status in 2011. It currently operates programs to assist seniors in preparing for re-entry to the job market (according to its Facebook page, it has served 276 seniors with assistance writing resumes, interviewing etc.). Its IRS filings show a \$180k annual budget and a service area of 13 counties in Southern VA. Funds are primarily requested for personnel (project administration and instructor(s)), plus supplies, contractual and continuous charges. CAWS representatives met with TICR staff a year ago in the hope of obtaining the former St. Paul's College campus to conduct this training. The proposed site is now a church property in Lawrenceville, although no information is provided on the lease terms of the property. The application indicates 30 unduplicated students receiving 170 credentials in the first year of operation. While the applicant indicates the national NCCER curriculum will be used, there is no evidence provided of an employment demand study, no letters from employers who would hire graduates, no information on costs to construct an adequate training space, and the business plan lacks an operating budget. All matching funds are in-kind or not yet committed. The application indicates

future funding requests will be submitted. Staff questions why this need cannot be met by the community college serving the region, and the long-term ability of this relatively small non-profit to deliver and sustain this type of program without reliance on continuous grant funding. **Staff recommends no further action on this proposal.**

**Central Virginia Community College Educational Foundation Inc**  
***Modernization of STEM-H Labs (#3023)***  
**\$115,408 Requested**

***Project Description Provided by Applicant:***

**Executive Summary:** Increased enrollment of students expected to pursue a new Associate of Science (AS) degree coupled with the influx of new students pursuing STEM-H career programs, notably in Pre-Nursing, is creating a critical need for more and improved science laboratory space at CVCC. Equipment, including microscopes, objective lenses, and other specialized equipment is needed for biology labs, an anatomy & physiology lab, a chemistry lab, physics lab and a new genetics lab. These upgraded labs are key to producing more 2-year STEM-H degrees and 1-year certificates.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** Similar programs exist at Virginia Western Community College (52.8 miles), Piedmont Virginia Community College (72.8 miles) and Patrick Henry Community College (75.4 miles).

**What are the pre-requisite requirements for entry into your program?** In addition to the admission requirements established for the College, entry into the STEM-H programs requires proficiency in language and mathematics skills. These requirements are met by taking the Virginia Placement Test prior to admission.

**What resources are required to make the proposed program successful?** CVCC has all the resources in place to make the proposed program successful. The room alterations proposed are in existing facilities. The Facilities Department is available to make the physical modifications. Once the labs are completed and ready for classes, CVCC has the needed science professors on staff to teach the courses and run the labs. The proposal is in line with the CVCC operations plan.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

The credentials students will work for in the program include an Associate in Science (AS) degree (which will replace the existing Associate in Arts & Sciences degree), and STEM-H career programs including an Associate of Applied Science (AAS) degree in Medical Laboratory Technology, and Career Studies Certificates in Pre-Nursing I/II. Enrollment in the AS program will soon exceed 500 and graduate 100 annually and Pre-Nursing I/II will see enrollment grow to over 100 with 50 or more graduates annually.

**What is the need in your regional area for graduates of the proposed program?** Most graduates proposed program who receive a Career Studies Certificate in pre-nursing become employees of Centra Health (through their College of Nursing). Centra projects a need for 1500 new employees over the next decade to accommodate their growth and replace retirees. In addition to Lynchburg, they have added hospital operations in Farmville and Bedford, a new ambulatory center and emergency room in Gretna, and will soon break ground on an ambulatory center in Danville. In addition, they have acquired a number of primary care practices in our area.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** N/A

**Staff Comments and Recommendation:** CVCC has provided a detailed equipment list and construction budget to support cost estimates for TICR and the required 1:1 match. The majority of grant funds are requested for replacement and purchasing of new equipment for the science labs at the CVCC main campus (\$73,229) for their Associates in Science degree program. Grant funds are also allocated to renovation costs for converting a prep area into a 4<sup>th</sup> biology laboratory for the main CVCC campus (\$30,000) and for equipment and materials for a new chemistry lab at the Bedford Center (\$12,179). As noted in the application CVCC is replacing/renaming the existing Associates in Arts & Science degree, to an Associate in Science degree. CVCC explained that changes to the program primarily relating to transferability of credits to 4-year universities, are expected to result in increased enrollment and + 12 new net associate degrees annually (an increase from 43 to 54). The project also supports CVCC's pre-nursing program which is offered in partnership with, and is a pre-requisite for the Associate Degree in Nursing offered through Centra Health's College of Nursing. Outcomes for this area are projected to result in a net increase of + 36 career studies certificates in pre-nursing (an increase from 9 to 45). The status of Matching funds from state and private funding sources are identified as "application intended" and CVCC recognizes the need to provide for the required match in order for TICR funding to be released. **Staff recommends award of \$115,408, contingent on disbursement of grant funds for no more than 50% of eligible project expenses.**

## County of Franklin

### *Southside Race to GED/NEDP Grant (#3028)*

**\$80,000 Requested**

#### *Project Description Provided by Applicant:*

**Executive Summary:** The Franklin Center for Advanced Learning and Enterprise/VA Workforce Center and Southside Virginia Community College jointly request \$30,000 to market GED testing in twenty-three Southside Virginia localities to help families move (a) out of poverty, (b) into jobs, and (c) toward self-sufficiency. Scholarships totaling \$50,000 will be provided to adults 18 years or older who pass an Official Practice Test with a score of 150 or better (\$30.00 per test or \$120 per complete battery) or (\$10.00 per retest). The total request is \$80,000 for a project of \$160,000.

**Have you received prior commission funding for this project? If so, please list the grant(s)**

Yes: 2400, 2679

**Does a similar program exist within an hour's drive?** Programs exist in the Southside Region and most are accessible within an hour's drive. The NEDP is located only in Henry County and will soon locate in Franklin County. There are only six NED programs in the state. This will succeed as this program assists with students who may have earning challenges that prevent them from mastering the GED program. Funding to support scholarships will overcome the barrier of test fee expenses (\$120) from students who are either unemployed or underemployed.

**What are the pre-requisite requirements for entry into your program?** Students must be 18 years of age with a desire to earn a high school credential (NEDP) or a GED. They must pass an Official GED Assessment with a score of 150 or higher before a scholarship can be earned.

Recipients are expected to attend class to receive instruction in subjects that are not at a test-ready level. Providers are located in the 23 Southside counties/cities. The initial plan for marketing dollars includes \$30,000 for billboards, yard signs, media ads, and social media boosts over the duration of the grant with targeted seasonal and special event promotions.

**What resources are required to make the proposed program successful?** To ensure success, sites need to be located within 30 minutes of driving time for students due to limited personal funds/methods involving transportation. Access to GED Prep software and teacher instruction is an

integral part of the new GED/NEDP tests as they are now online. \$80,000 of TIC funding will provide scholarships for GED/NEDP testing while supplies, software, and instruction will be provided by partners in the amount of \$160,000.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

Students will work toward a GED or National External Diploma, and possibly a Career Readiness Certificate, depending upon which program they are enrolled in and funding availability. We hope to see a 25% increase in credentialing above the past year's average of the 23 counties/cities.

**What is the need in your regional area for graduates of the proposed program?** PlyGem in Franklin County announced plans to hire 100 within the next few months. TelVista in Danville has plans to employ 300 people, all of which will need high school diplomas or GED's. Starting wages for both employers is in the range of \$10 per hour. Advance Auto in the Emporia/Greenville area (Colonial Heights location) will be hiring multiple positions at various levels of leadership and a range of wages from minimum wage to \$50,000, based on experience.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** Yes, the test fees continue to be a challenge for most students due to unemployment/underemployment situations. Based on response to this opportunity, future requests should remain within the \$80,000 range with either slightly more or less.

**Staff Comments and Recommendation:** Grant funds are requested to directly support priority outcome measures and strategies for the Commission's Education program for regional programs to increase educational achievement as reflected by degree completion in GED attainment. The Commission previously awarded two grants at \$75,000 each for a total of \$150,000 to support the *Southside Virginia Race to GED Pilot Project* which was targeted to 13-localities. Prior to the Education program deadline, staff received an inquiry from the Adult Continuing Education of Central Virginia inquiring about how individuals from their service area including Appomattox, Bedford, and Campbell Counties could benefit from the Commission's grants supporting GED completion. This group was put in touch with the Franklin Center, who has sponsored the pilot program since September 2011, and from that and other conversations the Franklin Center expressed an interest in expanding this program to include all Southside localities. The current request expands the scope of the previously supported program from the 13-locality pilot to include all 23-localities in the Southside area of the tobacco region. Grant funds will be used to support costs for marketing materials and for participant test fees for the GED or National External Diplomas Program (NEDP) both of which are accepted adult secondary programs in the Commonwealth. Participants are required to pass an official practice test in order to be eligible for grant funds to support test fees. The project is expected to support test fees for as many as 400 individuals; and with an estimated 80% pass rate is expected to result in 320 new credentials for GED/NEDP. The applicant has agreed that if this proposal is awarded funding, that the balance remaining in the currently active GED grant (TICR #2679) following submission of eligible expenses for reimbursement, would be de-obligated and returned to the Commission so that there would be only one open grant to support this initiative. **Staff recommends award of \$80,000.**

**Danville Community College**  
***Dimensional Metrology Career Pathways (#3019)***  
**\$585,155 Requested**

***Project Description Provided by Applicant:***

**Executive Summary:** Danville Community College (DCC) plans to develop and implement a Dimensional Metrology Career Pathway certification and degree program to provide workers the technical skills needed to work as Quality Control (QC) Technicians in advanced manufacturing jobs. The metrology skills addressed in this project will serve as the QC counterpart to precision machining technology work and its attendant job functions; however, the fundamental skill sets taught in this program will have application to a wide range of advanced manufacturing sectors beyond machining.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** There are no similar programs within an hour's drive. The program does not exist nearby because it includes a specialized set of job skills that traditionally have been taught by advanced manufacturing companies through on-the-job training. DCC's program will succeed because there is a documented industry demand for such training, as employers are dissatisfied with the work slowdowns and training costs that the current OJT system results in. Attached supporting letters from industry and trade organizations confirm the shortage of these skills and the assurance of program success.

**What are the pre-requisite requirements for entry into your program?** Dimensional Metrology Career Pathways targets entry of students directly out of high school, as well as incumbent workers. The program has an open door policy, with coursework starting at the rudimentary skill level. Dual enrollment options in local high schools enable students to enter the program at DCC (upon high school graduation) with up to one year of credits toward the Dimensional Metrology AAS degree.

**What resources are required to make the proposed program successful?** This \$1,958,452 project includes \$1,373,297 in matching funds, and requests \$585,155 from the TIC. Resource needs start with state-funded capital improvements to DCC's Business & Engineering Technologies building (\$800K of which will go toward development/upfitting of Dimensional Metrology lab space). Equipment costs of \$679,452 include a \$315,155 request to the TIC. Personnel include the Program Director (DCC assumes funding) and program instructor (2 years of start-up salary requested). Finally, another \$120,000 is requested to develop a national certification.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

DCC students will work toward Associate of Applied Science degrees (40 students per year in program – 20 in first year of study + 20 in second year of study) and/or standard certificates or accelerated certificates (20 students per year). Local high school students will work toward dual enrollment certificates (40 students per year in program – 20 as high school juniors + 20 as high school seniors). High school graduates can apply their dual enrollment coursework toward an AAS degree, thus accelerating the time it takes them to earn a college degree.

**What is the need in your regional area for graduates of the proposed program?** Nearly all advanced manufacturing and machining companies have a need for employees with metrology skills. In our region, Babcock & Wilcox (starting salary of approx. \$50,000) has 41 current openings, plus annual hiring needs of 8 to 12. Piedmont Precision Machining identifies the need for 5 metrologists per year. Master Gage & Tool, another 3 per year. Goodyear and Brown Machining also have identified a need for skilled metrology specialists.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** N/A

**Staff Comments and Recommendation:** This request is to support a new *Associate of Applied Science Technical Studies—Dimensional Metrology* degree offering. DCC is also partnering with the National Institute for Metalworking Skills (NIMS), a nationally recognized credentialing organization in advanced manufacturing, to develop an entry-level industry certification for a metrology/quality technician training program. DCC formed a Dimensional Metrology Career Pathway Industry Working Group in 2014, to initiate the process for development of the national certification, which is currently proposed as a NIMS Level 1 Nondestructive Testing and Dimensional Metrology skills certification. In follow-up meetings from a 2013 study of Danville area industries needing advanced manufacturing workers, DCC identified critical skills shortages in specialized jobs with the most often cited need being in the field of metrology. DCC is working closely with industry on developing the coursework and equipment needs for the new Associates Degree program. Employer letters indicating specific hiring needs were provided by Babcock & Wilcox, Piedmont Precision Machine Co, Master Gage and Tools, and North American Mold Technology. TICR funding is requested for equipping the dimensional metrology lab area and workstations (\$315,155), personnel for one instructor over two-years during the program start-up period (\$150,000) and contractual services for costs to develop the NIMS certification (\$120,000). Matching funds include \$424K for new equipment funded by the Danville Regional Foundation and donated equipment from Master Gage & Tool and Babcock & Wilcock; as well as \$800K match from state funding already under contract for renovations to the Business Engineering & Industry Technology building on the DCC's main campus which is where the new Dimensional Metrology lab and all equipment included in this proposal will be located; and \$96K match for personnel time contributions to support curriculum development and program implementation. DCC is projecting 20 students to enroll in each of the two years of the program (40 students annually); and estimates awarding 18 new associate degrees annually. As noted, the TICR funding request includes \$120,000 for the NIMS certification. DCC has clarified that they plan to contract with a consult through NIMS to facilitate efforts for regional and national working groups to develop the proposed NIMS certification including validation meetings across the U.S. and conducting national industry validation surveys. While staff recognizes the leadership role DCC is providing and the value for having the NIMS national certification available, given the benefit of this certification extending nationally beyond the tobacco region and the related expected future revenues that would accrue to DCC for its role in the development, this appears to be more appropriate to be financed by DCC, its Foundation, or from other funding sources. **Staff recommends award of \$390,155, to support the \$315,155 of equipment costs and \$75,000 for one-year of the personnel costs for the new instructor.**

## **Integrative Centers for Science and Medicine Martinsville Medical School Construction (#3017) \$1,945,000 Requested**

### ***Project Description Provided by Applicant:***

**Executive Summary:** 47% of this request is for renovation of the Shackelford Medical Education Building which will house Basic Sciences for the first and second year classes of Henricopolis School of Medicine. 53% of the request is for purchase and renovation of two buildings on a nine-acre site near Memorial Hospital to serve as the medical school's clinical campus for third and fourth year classes.

**Have you received prior commission funding for this project? If so, please list the grant(s)**  
Yes: #2994 (in part)

**Does a similar program exist within an hour's drive?** Yes. Virginia Tech Carilion School of

Medicine is located in Roanoke, 55 miles to the northwest of Martinsville. VTC serves southwest Virginia whereas CHSM will be the only M.D. school serving Southside Virginia.

**What are the pre-requisite requirements for entry into your program?** Applicants to the M.D. program are required to have completed all premedical courses at the undergraduate level, and usually a Bachelors degree as well. CHSM will also consider for admission graduates who have completed all premedical courses from Patrick Henry Community College with an Associates Degree of Arts & Sciences, Medical Sciences Specialization.

**What resources are required to make the proposed program successful?** \$3.0 million will be invested by the CHSM benefit corporation for capital equipment to complete classrooms and laboratories to be renovated in this project. \$10 million is the investment from CHSM benefit corporation that will fund all faculty and staff for the medical school, which will lease the renovated buildings from ICSM.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

Graduates from CHSM after four years of study will receive the M.D. degree. They will then enter residency to complete clinical training for eventual licensure to practice medicine. Class size is projected to be 320 students per year.

**What is the need in your regional area for graduates of the proposed program?** Nationally there is an estimated need for 90,000 physicians, particularly primary care physicians, to serve small urban and rural communities. Southern Virginia is below the national norm in physicians per population and has the lowest healthcare measures in the state. A medical school attracts more physicians to locate to an area, increases quality of care, and provides economic benefits as well.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** N/A

**Staff Comments and Recommendation:** This 501 C3 non-profit applicant submitted a Special Projects request in 2014 for this project, to assist the creation of the for-profit College of Henricopolis medical school, and was passed by. Subsequently, a TROF grant of \$800k was approved to the City of Martinsville to assist the project, with commitments to create 111 jobs and \$3M of taxable private capital investment (ICSM will lease the educational sites to the College). The College is provisionally certified by SCHEV to provide instruction in Virginia, and is diligently pursuing the accreditation process from the national Liaison Committee for Medical Education (LCME). Both ICSM and the College appear to have experienced board membership, however: this request seeks nearly two-thirds of the available funds in this grant cycle; 99% of the \$5.9M in matching funds are not yet committed (including new Market Tax Credits, Harvest Foundation and a General Assembly appropriation), and: several steps must still be accomplished to achieve LCME accreditation. TICR staff readily acknowledges the need for additional doctors in this medically-underserved region, as well as the vision and commitment of the qualified ICSM leadership. However, the Commission already has a significant investment in the project, and until such time as additional progress toward LCME accreditation is demonstrated, it appears the other funding sources needed to open the College are waiting to commit to the project. The likelihood of LCME accreditation is extremely difficult to predict, and given that full or even partial funding of this request would come at the cost of other competing proposals that have committed matching funds and are closer to implementation **Staff recommends no further action on this proposal.**

**John Tyler Community College**  
**2015/2016 Tobacco Region Scholarship Program (#3014)**  
**\$65,282 Requested**

***Project Description Provided by Applicant:***

**Executive Summary:** John Tyler Community College is requesting scholarship support for students from the Amelia, Dinwiddie and Sussex counties who participate in the college's precision machining program, welding program and other STEM-H programs. The goals of the 2015/2016 John Tyler Community College Tobacco Region Scholarship Program are to improve educational opportunities for students, increase the number of students who graduate with associate degrees in STEM-H disciplines, increase the number who transfer to four-year institutions, and increase the number of employees with technical skills in Virginia.

**Have you received prior commission funding for this project? If so, please list the grant(s)**  
Yes: 2397, 2876

**Does a similar program exist within an hour's drive?** STEM-H: VCU, ODU, VSU, VUU, Longwood, William & Mary, Richard Bland, Southside Virginia C.C., Rappahannock C.C., Reynolds C.C. This is program dependent. JTCC offers a wide variety of programs at reasonable tuition. Many programs offer industry credentials.

**Precision Machining:** JTCC program is NIMS certified and takes a student from manual machining to computer numerical control machining. The program at Southside CC is new and is not NIMS certified and only offers manual machining.

**Welding:** JTCC's program is AWS certified and the instructor is a certified welding inspector and educator

**What are the pre-requisite requirements for entry into your program?** For most programs: Students must meet JTCC admission requirements, complete placement tests (or equivalent) in English and math. Scores are used for placement. Developmental and prerequisite courses are available. Specific admission requirements for CTE courses include threshold scores in VPT, Compass, Asset, SAT, and PSAT.

**What resources are required to make the proposed program successful?** Equipment, instructors, student engagement and support, operating expenses, relationships with school systems, industry support expressed through the Technical Advisory Committees.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

Transfer A.S. degrees

Associate of Applied Science Degrees

Certificates

Career Studies Certificates

Precision Machining Concurrent Program

Welding Concurrent Program

**What is the need in your regional area for graduates of the proposed program?**

**Precision Machining:** Currently 10 posted job openings in Richmond area. Starting wages for graduates for no experience is \$12 - \$15 per hour. Currently hiring or projected to hire in next six months: Jewett Machine, Showbest Fixture Corp., Mahle-Behr, Coesia, Enclos.

**Welding Concurrent Program:** Currently 18 posted job openings in area. Starting wages for graduates with no experience is \$12 - \$15 per hour. Currently Hiring: ALSTOM, Capital Boiler Works, Chicago Bridge @ Iron Co., Westminster Canterbury, Master Halco.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** Future scholarship requests will continue to assist students from Dinwiddie, Amelia and Sussex counties expand their employment opportunities through JTCC

programs.

**Staff Comments and Recommendation:** Due to turnover in staffing at the JTCC Foundation, it did not apply during the community college financial aid round in Fall 2014. This request would comply with the guidelines and objectives of that latter funding cycle, by serving students from tobacco region counties during the 2015-16 school year. It would continue the focus of previous TICC funding to JTCCF which has assisted students in STEM-H and precision machining, and adds welding to the uses of funds. Outcomes are shown as 141 STEM-H students, 16 in machining and 12 in welding. Matching funds are shown as \$297k. JTCC's approach to serving these "concurrent" students is an exemplary partnership of the local school districts covering costs to transport students to the JTCC campus, and the College providing training in state of the art science, welding and machining labs with certified instructors (as opposed to having separate labs and instructors in each of the participating school districts). This proposal satisfies all requirements of the community college financial aid cycle, and will result in credentials for a significant number of students in the three tobacco counties. **Staff recommends award of \$65,282.**

## Lynchburg College

### *Lynchburg College Physician Assistant Medicine Pro (#3018)*

**\$296,968 Requested**

#### *Project Description Provided by Applicant:*

**Executive Summary:** Lynchburg College has established a new Physician Assistant Medicine Program in order to meet critical workforce needs for healthcare professionals in the region, state and nation. This new educational program will begin in May 2015 with an inaugural class of 25 students and will increase in size to 40 new students annually by 2020. Students will complete 27 months of intensive coursework and clinical experiences leading to the Master of Physician Assistant Medicine degree. Lynchburg's innovative program will be the second in the nation to also offer the doctoral level.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** Jefferson College of Health Sciences in Roanoke offers a physician assistant program and is 53 miles or 1 hour and 15 minutes from Lynchburg College. Lynchburg's program will be successful as it emphasizes critical thinking, problem-based learning approaches within courses and ample simulation clinical experiences. Additionally, Lynchburg's program offers the doctorate level degree to students who successfully complete the Master's level program and want to progress to an area of specialty.

**What are the pre-requisite requirements for entry into your program?** Applicants to Lynchburg College's Physician Assistant Medicine Program must have completed a bachelor's degree with a minimum GPA of 3.0, 31 semester credit hours in the sciences, additional coursework in psychology, mathematics, and the social sciences, 500 hours of direct patient care, and 8 hours of shadowing a licensed physician assistant. Patient care may consist of work or volunteer experience including but not limited to: athletic trainer, paramedic or EMT, military medic, nurse, nurse aide, laboratory technician, radiology technician, respiratory therapist, and surgical technician.

**What resources are required to make the proposed program successful?** The success of Lynchburg College's Physician Assistant Medicine Program during the start-up phase requires personnel costs for ten credentialed faculty members; extensive facility renovations for laboratories, classrooms, offices and library space, medical training equipment; contractual services for recruiting students and clinical arrangements; and other necessary resources in order to meet accreditation

standards and ensure a state-of-the-art program.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

Graduates of the Lynchburg College's Physician Assistant Medicine Program will receive a Master of Physician Assistant Medicine degree and may then opt to continue for additional nine months of advanced study to earn the Doctor of Physician Assistant Medicine degree. Graduates are eligible to become licensed through the Physician Assistant National Certifying Exam. The first graduating class in 2017 will consist of 25 students, and subsequent graduating classes will grow to 30 students and eventually 40 graduates annually by 2022.

**What is the need in your regional area for graduates of the proposed program?** Healthcare providers such as Centra Health have indicated a need for additional physician assistants to serve in their network facilities in the Tobacco Region. The national average salary is \$90,930, or \$43.72 per hour. Approximately 17 percent of physician assistants practice in rural areas compared to 10 percent of physicians. The Bureau of Labor Statistics projects a 38 percent increased need nationally for physician assistants through 2022.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** N/A

**Staff Comments and Recommendation:** The application provides very solid evidence of need for physician assistants, the College's commitment to begin the program within the next month, and commitment of \$7.2M of matching funds (of which \$3.5M is capital costs and equipment, while \$3.5M is operating capital). The program received provisional accreditation in April and will begin classes June 1. The College makes a valid and reasonable argument that 15% of the now-enrolled first cohort are tobacco region residents, and eight of the 15 clinical sites are in tobacco localities (generally within an area stretching from Bedford to Farmville to Danville). It appears reasonable to estimate that 4-6 tobacco region residents could graduate from the program annually and return to the clinical sites to practice. That annual number can be multiplied by the number of years of useful life for the requested equipment (presumably ten or more) to extrapolate perhaps 50 or more new highly-paid PAs in the tobacco region within a decade. However, the LU campus is located outside the tobacco region, albeit by a mere three or four miles, and Staff is aware that other colleges/universities located further outside the tobacco region can make arguments similar to Lynchburg's regarding tobacco region student enrollment numbers. The Committee recognized that fact when it voted to provide \$200k of support for the College's nursing simulation lab in the City of Lynchburg five years ago. In this case, however, this program will be implemented with or without Commission support, and in light of that, and despite a very well-scoring proposal, Staff feels a precedent-setting decision to again award funds outside the region is not warranted. **Staff recommends no further action on this proposal.**

## **Mountain Empire Community College Foundation**

### ***MECC Healthcare Simulation Access (#3027)***

**\$428,141 Requested**

#### ***Project Description Provided by Applicant:***

**Executive Summary:** Mountain Empire Community College (MECC) requests grant funds to support the creation of a healthcare simulation laboratory to benefit students in its Registered Nursing, Licensed Practical Nursing, Respiratory Therapy, and other allied health programs.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** Virginia Highlands (VHCC) and

Southwest Virginia (SWCC) are partners with MECC in the Virginia Appalachian TriCollege Nursing Program (VATNP). Although both institutions are more than an hour drive from MECC, we should note that both operate simulation labs. The original plan for the three colleges to share VHCC's simulation lab has proven not to be practicable due to scheduling demands and traveling distances for students. Simulation facilities at each campus will broaden access to simulation training, not just for nursing students, but for students in MECC's other healthcare programs.

**What are the pre-requisite requirements for entry into your program?** The proposed simulation lab will primarily serve three of MECC's healthcare programs: Registered Nursing (RN); Licensed Practical Nursing (LPN); and Respiratory Therapy (RT). Each of these programs accepts students for limited slots via a competitive application process. Pre-requisites for admission include MECC's basic admission requirements (at least a high school diploma or GED), as well as program-specific requirements, which may include specific high school coursework; minimum GPA in high school or other higher education institutions; college placement tests; and/or other requirements.

**What resources are required to make the proposed program successful?** The simulation lab requires physical space, equipment, supplies, and personnel. Space has been identified, and plans are being developed to make necessary modifications. Renovations will include demolition of interior walls, construction of new interior walls; relocation of utilities, and replacement/repair of flooring and ceiling materials. IT support is needed to assist with set-up, networking, and maintenance of system components. Adjunct faculty support is needed to free-up full time faculty to oversee the design of simulation scenarios; scheduling; and maintenance of equipment.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?** MECC's simulation lab will primarily serve three programs, each of which allows students to work toward both academic and industry-based credentials. LPN students may earn a Certificate from MECC, and may sit for the NCLEX-PN certification. RN students may earn an Associate Degree from MECC, and may sit for the NCLEX-RN certification. Respiratory Therapy Students may work toward an Associate Degree, and may sit for three different professional certifications (NBRC, CRT, RRT). Together, these three programs enroll a total of 165 new students and graduate approximately 80 students each year.

**What is the need in your regional area for graduates of the proposed program?** Healthcare is one of the largest private industry sectors in the region. Employers include hospitals, nursing homes, home health care agencies, and physicians' practices. In February 2015, there were 31 advertised openings for LPNs, 62 for RNs, and 2 for RTs. A major regional health system plans to hire 1,000 RNs, 150 LPNs, and 50 RTs in the next 5 years alone. Typical entry-level wages are competitive at \$12/hour for LPNs; \$17/hour for RTs; and \$19/hour for RNs. Clearly articulated pathways also provide graduates with opportunities for advancement and increased earning potential.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** N/A

**Staff Comments and Recommendation:** Funds are requested for the creation of a healthcare simulation laboratory on the campus of Mountain Empire Community College. This lab, which will serve students in the RN, LPN, and Respiratory Therapy, and other allied health programs is consistent with similar projects funded at other schools across the Tobacco Region although the request amount seems somewhat higher compared to those awards. Because this lab will serve existing programs there does not appear to be any net increase in enrollment numbers or in the number of credentials awarded annually. However, it will eliminate the need for MECC students having to drive more than an hour each way to use the Tri-College nursing simulation lab at VA Highlands in Abingdon. Despite the lack of increase there is a strong argument that simulation laboratories such as

the one proposed at MECC are a critical resource for nursing programs. MECC provides evidence of 94 job openings during February 2015 in its service area for program graduates. Commission funds are requested for renovation of the space in Robb Hall (\$83k), purchase of simulation mannequins and related software (\$168k), contractual (\$126k) and various supplies and materials for the lab (\$50k). \$111,559 of matching funds is committed from a U.S. Department of Education/ Title III grant to be used to support technology and software components of the lab. Additional funds are committed from MECC for salary support and supplies and materials, and from Carl Perkins federal funding for professional development costs. The MECC Foundation will continue efforts to raise the remaining \$170,571 of matching funds needed for the remaining mannequin purchases. Because the simulation laboratory is not due to open until the fall semester of 2016, a reduced award would enable substantial completion of the lab, while allowing MECC the opportunity to apply to next year's Competitive Education round once the additional match has been raised. **Staff recommends award of \$370,000.**

**Patrick Henry Community College**  
***STEM and Advanced Manufacturing Training Facility (#3020)***  
**\$600,000 Requested**

***Project Description Provided by Applicant:***

**Executive Summary:** In order to expand capacity and introduce new programs in high-demand industrial sectors, PHCC requests funds to complete renovation to the recently purchased advanced manufacturing and workforce training facility that will equip the facility for educational use. Tobacco Commission funds are requested to create lab space within the facility. The facility will house STEM, Advanced Manufacturing, and Workforce Development programs.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** Although Danville Community College also offers some of the similar advanced manufacturing programs, for many of our students, transportation to this far more distant training is limiting. New College Institute also offers advanced manufacturing training programs, however, PHCC is a partner and our portion of Center of Excellence training with NCI will occur in the proposed facility. Many of our programs are unique to our service area, because of the rural nature of our region, including Motorsports, which is the only program like it in the state.

**What are the pre-requisite requirements for entry into your program?** All incoming PHCC students must successfully pass the Virginia Placement Tests in order to enroll in any program in the new facility. Should students not receive the required score on the VPT, they must first successfully complete developmental classes before enrolling in on-level college classes.

**What resources are required to make the proposed program successful?** While the majority of this renovation project will be funded through state funds allocated for this purpose, the estimated cost of the project to make the facility usable for educational purposes and ADA compliant currently exceeds funding. Therefore, PHCC requests funding from the Tobacco Commission to cover the costs of creating lab space within the training facility and that will allow the renovation project to proceed as planned.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?** Multiple programs, degrees, and certifications will be housed in the new facility: General Engineering Technology, Industrial Electronics Technology, Computer Aided Drafting & Design, Industrial Controls, Industrial Maintenance Electronics, Residential/Commercial/Industrial Electrician, Siemens Mechatronics Level 1 and Level 11, Cisco Network Certification, Siemens Variable

Frequency Drive Certification, Siemens Programmable Logic Controller System Certification, Motorsports, and Autosports. We anticipate a total of 348 students and 189 degrees/certificates in the first year of operation.

**What is the need in your regional area for graduates of the proposed program?** Regional estimates project a large growth in STEM and advanced manufacturing in the area in the coming years. The Boston Consulting Group projects demand for additional manufacturing workers will reach 6,840 by 2017. Current supply indicates that there will be a gap of 1,045 jobs left unfilled by 2017. Eastman Chemical Company has announced an additional 25 new jobs at a competitive starting wage. Additionally, multiple local employers anticipate ongoing success and growth in the coming years, with more openings anticipated by the time the new facility is ready to welcome students in 2017.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** N/A

**Staff Comments and Recommendation:** Grant funds will be used toward construction costs for development of five laboratories for the areas of Engineering, Motor Control, Instrumentation, Automation, and Mechatronics at PHCC's new STEM and Workforce Development training facility. The new facility will be housed at the facility previously known as the Virginia Motorsports Technology Center located in the Patriot Centre Industrial Park within 2 miles of the main college campus. The complex of two buildings was purchased with ~ \$5.44 million of state funding. There remains a \$2.85 million balance in an \$8.7 million General Assembly appropriation to support development of this facility, which is being provided as match for this proposal and will be used toward the total construction costs. This project directly supports the Commission's expressed priority consideration for proposals that provide for advanced manufacturing workforce training. Detailed schematics on proposed plans for the facility were submitted to BCOM in March 2015; and the college is currently on schedule to advertise for construction bids by the end of this year, with a schedule for substantial completion of renovations by November 2016. The project supports net new annual outcomes of + 36 Associates Degrees in General Engineering Technology, Industrial Electronics Technology, and Motorsports Technology; + 97 Career Studies Certificates in Industrial Controls, Industrial Maintenance Electronics, Residential/Commercial/Industrial Electronics, Autosports, and Advanced File Technology; and + 22 postsecondary and industry certifications primarily in areas of mechatronics through Siemens. **Staff recommends award of \$600,000.**

## **Southside Virginia Community College Foundation, Inc.**

### ***Implement a Physical Therapist Assistant Program (#3024)***

**\$275,000 Requested**

#### ***Project Description Provided by Applicant:***

**Executive Summary:** Southside Virginia Community College (SVCC) requests funding to implement a Five-Semester (2-Year) Physical Therapist Assistant program. Graduates will receive an Associate of Applied Science Degree. Examples of work environments for Physical Therapist Assistants (PTA) include: hospitals, long-term care and skilled care facilities, rehabilitation centers, and home health care agencies.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** The closest program is located in Richmond and 70 miles from the Estes Community Center. It is a private provider. Southside Virginia Community College (SVCC) covers a service area of 4,200 square miles and serves 4 hospitals and many nursing homes. SVCC's program will succeed because of the job opportunities and wages paid.

**What are the pre-requisite requirements for entry into your program?** All general education co-requisites for the PTA program and any developmental coursework will be taken through the community college.

**What resources are required to make the proposed program successful?**

\*Physical space to include a open lab, classroom and faculty office

\*Lab equipment and supplies

\*Full-time 12-month faculty member

\*Designated support time (Dean of Nursing and Health Technology and Administrative Support

\*Accreditation Support

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

This program is a 5 semester (Two-Year) Program that leads to an Associate of Applied Science in Physical Therapist Assistant with a major in Physical Therapist Assistant. Enrollment will be open to 15 students annually. We expect for 12 to receive the degree.

**What is the need in your regional area for graduates of the proposed program?** VEC Online Advertised Jobs data 2013 shows 850 job openings for physical and occupational therapy assistants in Workforce Investment Regions 8 (South Central) and 15 (Crater). With this data in mind, SVCC did a telephone survey with 18 facilities in our service area to inquire regarding employment of PTA's, interest in providing clinical opportunities for students, open positions and salary ranges. One agency did not hire PTA's and the other 17 employed PTA's, and all agencies have or had recent openings. Hourly salaries ranged from \$20 to \$40.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** N/A

**Staff Comments and Recommendation:** Commission funds will be used toward start-up equipping, faculty salaries, and costs associated with accreditation and marketing of a new Physical Therapist Assistant Program to be offered at the Estes Community Center in Chase City. County Health Rankings from the Robert Wood Johnson Foundation identified all ten Southside counties in the SsVCC service area as medically underserved areas and eight of the ten counties as high priority target areas. This data combined with U.S. Bureau of Labor Statistics data identifying Physical Therapy Assistant as a high manpower need area in Virginia with 41 percent faster than average growth rate forecast were used in the college's assessment of the need for this program. Letters from Sentara, The Woodland, and Heritage Hall expressed levels of staffing for physical therapy assistant positions at their facilities and the challenges they have faced in filling these positions. SsVCC will limit the number enrolled in the program to 15 students, in order to meet the clinical requirements and for placement of students; with a new cohort of 15 students expected to start annually. The operating budget for this program at \$179K exceeds projected tuition revenues, however, the college has committed to sustaining the program once established and expressed that some staffing can be shared with the nursing program; and also emphasized that the program will be taking advantage of existing science lab facilities already in place at the Estes Center. Of the 15 students enrolled annually the college estimates that 12 students will complete the program to receive their Associate of Applied Science Degree. **Staff recommends award of \$275,000.**

**Southwest Virginia Community College**  
**SWCC Advanced Manufacturing AAS Degree Program (#3015)**  
**\$87,890 Requested**

***Project Description Provided by Applicant:***

**Executive Summary:** Major goal of project is to fill training need expressed by local employers. Development of an AAS Technical Studies degree in Advanced Manufacturing will fill this gap in training that employers have identified. The second goal is establishment of a clearly defined, articulated career pathway to allow student progression with multiple entry/exit points to meet local employer needs. The third goal includes integration of Manufacturing Technician Level I (MT1) into developed curriculum. Program will prepare students for both entry-level technical positions and career growth.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** A similar program does not exist within an hour's drive or anywhere in region to our knowledge. The training will create a uniquely qualified, extremely employable graduate who is trained and certified in multiple job areas, including welding, industrial mechanics, programming robotics, etc.

**What are the pre-requisite requirements for entry into your program?** General college admissions criteria. No special pre-requisites.

**What resources are required to make the proposed program successful?** Class consumable supplies/mats.; equipment needed for classroom instruction in CNC operations: HAAS Minimill (CNC Vertical Mill), HAAS Toolroom Lathe (CNC Lathe); coordinate measuring machine (CMM); and HAAS CNC Control Simulator Module Dual Machine. Examples of other resources: wax for CNC machines, metal for welding and machine shop, etc. In addition, staff time to coordinate, instructor time to develop and teach courses, and funds to cover MT1 authorization and certification process and tests for students pursuing NIMS, AWS, SIEMENS, and/or MT1 certifications.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?** Students will earn 65-69 cr/hr AAS degree in Adv. Manufacturing. New certification will also be offered for Manufacturing Technician 1 (MT1). Students will have opportunity to earn other nationally recognized credentials in precision machining (NIMS), welding (AWS), mechatronics (SIEMENS) or have completed previously in one or more area by completing respective career studies certifications. Additional certifications include Career Readiness Cert., First Aid, CPR & AED, OSHA10, OSHA30, and Microsoft Digital Literacy. Project 28 students enroll; 16 receive credentials.

**What is the need in your regional area for graduates of the proposed program?** Local adv. manuf. employers have indicated current & future needs for trained technical workers as existing workforce approaches retirement age. Needs involve wide range of skill-sets & includes welders, fabricators, machinists, CNC programmers/operators, engineers, & electricians. The consensus was if a student completed a basic technical skills program providing introductory knowledge to multiple skills & processes, they would be employable upon completion of the program. Employers expressed the need for graduates who have demonstrated the ability to learn & perform technical skills.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** N/A

**Staff Comments and Recommendation:** This request for one time equipment needs will help with the development of the AAS technical Studies degree in Advanced Manufacturing. No similar program currently exists in the area and the applicant provided compelling employer reviews and letters from employers to document the demand for employees with the skill sets developed through this degree. In addition to the AAS degree focusing on a combination of precision machining, welding,

and mechatronics, participants will have the opportunity to earn nationally recognized certifications from NIMS, MT1, AWS, and Siemens Mechatronics Level 1 certification. The AAS degree and related career studies certificates can be completed in half the time typically needed to complete a program because of a unique and flexible combination of course formats. Cohorts will begin annually with approximately 28 participants but could start more frequently if needed. The 28 participants can earn 164 cumulative credentials. Matching funds are committed from the Department of Labor, SWCC, and the SWCC Foundation. **Staff recommends award of \$87,890.**

**The Southwest Virginia Alliance for Manufacturing, Inc.  
*Employer Training Collaborative (ETC) (#3016)*  
\$879,899 Requested**

***Project Description Provided by Applicant:***

**Executive Summary:** The Southwest Virginia Alliance for Manufacturing, Inc (SVAM) is developing an Employer Training Collaborative (ETC) designed to accomplish its goal "to close the skill gap for regional manufacturers by aligning educational and workforce training resources with the most pressing demands of area manufacturing." The ETC, made up of manufacturers, training partners, etc., will identify and coordinate 3 types of training: New employer, ongoing training, training sharing. TIC dollars will provide reimbursements to employers. ETC and SVAM will work to create a sustainable training program.

**Have you received prior commission funding for this project? If so, please list the grant(s)**

Yes: 2111

**Does a similar program exist within an hour's drive?** NO. SVAM is the only incorporated nonprofit organization of manufacturers in southwest Virginia. SVAM offers inclusive programming and services to members and nonmembers alike. The program will succeed because, when manufacturers have ownership of a program, they will participate and contribute to ensure its success - as evidenced by the Center of Excellence. Their on-demand training is absolutely essential for their continuing success.

**What are the pre-requisite requirements for entry into your program?** Employers will identify the participants for all training and will screen them for the appropriate skill levels based on the needs of their companies. If pre-requisite or remedial training is required, it will fall to the employer to facilitate that as best suits need.

**What resources are required to make the proposed program successful?** Training sites will include the SVAM office site, CoE campuses, and employer shops. If manufacturing equipment is required, training will occur at a manufacturing site or at CoEs. A laptop computer and projector are required for on-the-road marketing purposes. Staffing for program operations will be provided by a SVAM Program Coordinator, SVAM-CoE, and volunteers. There will be a combination of in-house, vendor and contract training.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

For new employee and ongoing training, industry-specific credentials will be earned. For instance, OSHA certification, NCRC Platinum, AWS, ASME, NIMS. For training sharing, certification will also be training specific, i.e., MT1, Lean certification. Employer surveys indicate 257 new jobs plus 380 ongoing training slots. The training sharing will be limited to about 20 each event for a total of 80. Total number of training units = 717.

**What is the need in your regional area for graduates of the proposed program?** New employee training:

Unnamed Company - 157 @ \$30,000+ with new training cost @ \$5798+ per employee; OSHA, Hazardous Comm, Braze...

Utility Trailer - 30 @ \$16-\$21 - OSHA, new machinery, LEAN;

Steel Fab - 30 @ \$14 - ASME welding certification, OSHA, Six Sigma.

Universal Fibers - 20 @ \$35,000

General Engineering - 22

Examples of employers needing ongoing training include: General Dynamics, Scholle, TRW, Paramount, Tadano Mantis, Tempur, PBE Group, Ball Corporation

Some Potential Training Sharing participants include: Central Machine Shop, Coalfield Services, American Wood Fibers

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** Yes. This Collaborative will establish an organized approach to

on-demand training in the Region and the Training Sharing component will reduce overall costs.

However, sustainability may take a three-year period to reach. It is anticipated that the second year request might be \$300,000 and perhaps a third year request of \$150,000 to facilitate a phased-in sustainable Collaborative.

**Staff Comments and Recommendation:** Commission funds are requested for a one-year period to provide up to 50% reimbursement to area industries for costs associated with new employee training, and ongoing technical and topical training for existing employees. The request seeks 27% of the Competitive Education Program's total budget for this fiscal year, and the application indicates that future requests in the amounts of \$300,000 for the second year and \$150,000 for the third year are anticipated. These trainings will be provided from numerous public and private sources (e.g. VA Manufacturers Association, community colleges etc.) and will cover a variety of topics ranging from occupational skills such as welding, machining, and lean manufacturing to soft skills such as communication, technical writing, teamwork, and professionalism. Specific training programs and credentials include VMA's MT1 certification, National Career Readiness Certificates, OSHA-10 and -30, ISO and Human Resources Manager certification. Of these specific areas, the largest numbers of credentials will be obtained in welding and machining, which develops the foundational skills pipeline that will feed into SVAM's efforts as the designated advanced manufacturing Center of Excellence approved by the Commission in September 2014. Conversely, Staff suggests that certain training sought in this request, such as soft skills, OSHA, ISO and HR certification – while they have merit and value - are arguably more so the responsibility of the individuals and the companies, do not align as well with Education program objectives, and should be not be a funding priority within this proposal. Previous grants totaling \$390,000 since 2007 have been awarded to the Smyth-Washington Industrial Facilities Authority and to SVAM for similar training reimbursement programs. It remains somewhat unclear how effectively this would be coordinated with the community colleges' role as the customized workforce training provider for employers in the Commonwealth, and no information was provided for the usage of the Virginia Jobs Investment Program resources committed to assist with the Bristol Compressors expansion, or other workforce training sources such as WIBs (no state training funds are shown in the budget). Although SVAM has strong industry connections to its member companies, and has done a commendable job expanding its membership to include all areas of the Southwest region (from its initial roots in Smyth-Washington), it should be noted that many of the industries that will benefit from the proposed project have received large amounts of support from the previous grants. Supplemental information provided by the applicant shows that 157 of the estimated 257 new employees served under the grant will be at one industry (Bristol Compressors). The cost of training these new Bristol Compressor employees totals \$901,348, with half the amount presumably reimbursed from this grant. The remaining \$400,000 requested in the application is to be spread across the 17 jurisdictions for training needs. Previous Commission grants have disallowed the

reimbursement of training focused on soft skills and required that training be limited to a previously agreed upon list of technical skill subjects. While the proposal requests 50% reimbursement from Commission funds, Staff suggests a more equitable approach is to provide 25% reimbursement to companies that have been supported under previous grants, and up to 33% reimbursement for new companies that have not been reimbursed previously. This would allow Commission funds to serve more companies and workers, and generate more nationally-recognized credentials. **Staff recommends award of \$200,000 for 25-33% reimbursement of training in MT1, NCRC, welding and machining.**

**The University of Virginia's College at Wise Foundation**  
***Nursing Lab Simulation Mannequins (#3021)***  
**\$123,732 Requested**

***Project Description Provided by Applicant:***

**Executive Summary:** Nursing students need the most current, up-to-date equipment on which to practice high acuity scenarios. The University of Virginia's College at Wise's Department of Nursing's current SimMan mannequins (2) are over ten years old. We are unable to update the software in them due to their age, and can only do repairs and updates on the skins and non-software mechanics of them. The new SimMan 3G would allow us to increase the complexity of our scenarios, and give us more leeway in terms of maintenance. They should last 10-12 years.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** Programs do exist within an hour of UVa-Wise at Mountain Empire Community College, Southwest Virginia Community College, and Virginia Highlands Community College. The difference in the nursing program at UVa-Wise is that we offer a 4 year degree in (Bachelor of Science in Nursing).

**What are the pre-requisite requirements for entry into your program?** As an entering freshman a nursing major must meet the entry requirements for UVa-Wise. Entering their sophomore year they must have a 2.75 GPA and have completed all of their science and general education courses. As a junior and senior they must maintain a 2.5 GPA and not fail any courses.

**What resources are required to make the proposed program successful?** The sustainability of the nursing program depends on the following:

1. Our ability to recruit the best students from SW Virginia.
2. Our ability to raise the necessary funds that will supplement state funding.
3. Our ability to recruit and retain top nursing faculty.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

The nursing students at UVa-Wise will work towards receiving their Bachelor of Science in Nursing degrees. The College annually graduates between 15-25 nursing students.

**What is the need in your regional area for graduates of the proposed program?** The need for BSN nursing graduates in SW Virginia is great, especially with the evidence that patients who are cared for by a BSN prepared nurse have a reduced mortality rate. Currently only 9% of the nurses in SW Virginia are BSN prepared compared to 38% statewide. The Commonwealth would to see this figure be at 80% by 2020. Local employers include Norton Community Hospital, Lonesome Pine, Mountain View, Health Wagon, Dickenson Home Health, Winchester Medical Center, and Bristol Regional.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** N/A

**Staff Comments and Recommendation:** This project to replace outdated simulation mannequins at UVA-Wise is consistent with similar requests from other nursing programs in the region. The College's program is unique in that it is the only public 4-year (BSN) program in the Southwest area of the Commission's footprint. While this project does not result in an increase to the 26 degrees awarded annually it is commonly acknowledged that the experience gained by students performing simulations of real life scenarios is critical to the skill level of the graduates and has become a state of the art educational tool. Matching funds are not yet committed but will be used to fund 50% of each of two mannequins. Additional information provided by the College showed that for the current fiscal year \$223,000 was budgeted for equipment replacement. These funds are distributed among 10 academic departments. Due to the significant cost of equipment such as what is requested in this application, the College must rely on external support to accomplish the upgrades. **Staff recommends award of \$123,732 to fund 50% of each of two mannequins.**

**Virginia Early Childhood Foundation**  
***Southside School and Workforce Readiness Project (#3012)***  
**\$497,800 Requested**

***Project Description Provided by Applicant:***

**Executive Summary:** This project will drive long term workforce success by increasing the quality of early learning programs, the credentials of early learning teachers, and the number of children accessing high quality services in all 23 Southside jurisdictions. Strengthened regional Smart Beginnings coordination and leadership will drive a 50% increase in the number of high quality child care programs and a 51% increase in the number of children served in these programs. In addition, 40 early childhood teachers will enroll in college level coursework leading to an early childhood certification.

**If you have selected Other as the strategy, please explain how your program supports the Commission's mission and strategic plan.** This project focuses on revitalizing 23 localities in Southside, Virginia by providing children and families with the opportunity for quality early childhood education and other supports that will prepare them for future employment and enhanced prosperity over the long term. The outcomes will include increasing the number of child care centers participating in VSQI program and increasing the competencies of child care staff by providing more professional development, in order to improve the quality of care and put children on a path toward life-long workforce contributions to the region.

**Have you received prior commission funding for this project? If so, please list the grant(s)**  
Yes: Grant Number 1697; Grant Number 2404

**Does a similar program exist within an hour's drive?** This project is unique in the region. However, it will build upon and leverage (not supplant) existing resources, including community colleges offering early childhood coursework, the existing Smart Beginnings partnerships, the federally-funded Virginia Star Quality Initiative, and the new Kellogg Foundation initiative. VECF's goal is to utilize the Tobacco Commission grant to promote more efficient use of existing resources and attract other investments. VECF has secured a \$1.1 million grant from the Kellogg Foundation to support the school and workforce readiness of families in this region.

**What are the pre-requisite requirements for entry into your program?** While participation in the Virginia Star Quality Initiative is voluntary and free of charge, early learning programs of various types (center, home, church, and school-based) must be in good standing with the regulating body (such as licensing through the Virginia Department of Social Services) and be willing to engage in

quality improvement activities for a sustained period. In order for an early childhood teacher to access the coursework and supports offered through this project, he/she must be employed in an early childhood program that is participating in the Star Quality Initiative.

**What resources are required to make the proposed program successful?** Project outcomes can result only through the skilled coordination of the regional effort. Grant funds will be used to ensure expertise in the Regional Director, who will be responsible for connecting the necessary partners and resources. While some state and federal funding exists for quality improvement in child care programs and coursework for early learning teachers, grant funds will be used to enhance the accessibility and scope of those services for this region. Funding for information management expertise will enable us to monitor progress, track outcomes and course-correct as needed.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

Students will likely work toward a Child Development Associate (CDA) or an early childhood development career studies certificate, which are both designed to provide teachers with competencies specific to early childhood. We expect the number of students enrolled in coursework through this project to be 20 in year 1; 30 in year 2; and up to 40 by year 3. Because of the duration of time needed to complete the required coursework, and the particular challenges child care providers' work schedules pose, we project that up to 20 students will have earned their credential by the end of year three.

**What is the need in your regional area for graduates of the proposed program?**

Studies show that teacher competency drives improved outcomes for children. Children from low-income families, like many in this region, often start school without the same preparation as those from higher-income families, placing them at-risk for falling behind. In this region, the majority of early learning providers do not have a significant level of education past high school. With training through the VA Star Quality Initiative and increased professional development, teacher competency and education quality will improve, ensuring greater school readiness for the children in their care.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** If we are showing success in our benchmarks and in our goal of using the TCIRC funding to leverage other investment in the region, we would like to have the option of requesting additional funds to continue the project. Our capacity to provide for the effort, including regional coordination, could then be sustained for Southside, and targeted quality improvement efforts over an additional three years would continue to expand the impact and allow participating teachers to complete coursework to achieve their professional certification.

**Staff Comments and Recommendation:** The majority of this proposal is to support staffing and operating costs for a non-profit organization whose mission is focused on advancing school readiness; the majority of which does not align well with what the Commission's stated priorities for this program, which are focused on adult education and outcome measures for increasing the number of workforce credentials. The Commission has supported VECF and the early childhood coalitions over six years with \$1.7 million in funding to develop regional partnerships for early childhood development. This request includes \$304,000 in personnel costs primarily for hiring a new position of Southside Regional Director. Staff points out the Commission previously provided funding for Project Officers positions for both the Southside and Southwest areas of the tobacco region under the first grant to VECF, and a Director of Community Investments whose responsibilities were primarily targeted to the tobacco region was supported under the second grant. Grant funds totaling \$14,800 are allocated for support costs for this position including travel, supplies, and equipment; \$69,000 is allocated to Contractual Services for a data and evaluation contractor; and \$110,000 is allocated to Transfer Payments to cover 50% of costs for day care centers participation in the VSQI program and 100% of scholarships for tuition at community colleges. The proposal does not provide clear details

on the existing coalitions and the localities served and the gaps in serving these areas that would be targeted through this proposal. While the VECF identifies \$1.077 million of grant funds from the W.K. Kellogg Foundation as match for this request, the Kellogg grant does not require matching funds, and minimal details are provided for how the Kellogg funds are budgeted (these funds are identified to “be utilized to focus on families in the Southside region by leveraging the Smart Beginnings infrastructure and enhancing current programming”). Staff notes that the VECF has been in existence for ten years and receives funding annually from the General Assembly, for which appropriations appears to be \$1.5 million for FY15 and FY16, suggesting that state resources may be available for VECF to continue to serve the Southside area of the Commonwealth, and to serve as a sustainable long-term source of funding for the requested Southside Regional Director position. Recognizing the value of the Virginia Star Quality Initiative (VSQI) in certifying the quality of child care programs, and the quantifiable measures that would result, supporting this aspect of the request may be a reasonable consideration. Supporting the community college tuition costs for child care workers to receive formal educational training is the one aspect of the request that most closely aligns with the Commission’s outcome measures for this program. Based on information available from VCCS, existing Early Childhood Development/Education programs serving residents in the tobacco region include Associate of Applied Science degrees through DCC, PHCC, VWCC, and JTCC; and Career Studies Certificate programs through SsVCC, DCC, PHCC, VWCC, and JTCC. **Staff recommends award of \$110,000 to support the Transfer Payment project costs for VSQI program participation fees, and to support tuition reimbursement for child care workers who commit to completing a community college associates degree or career studies certificate program, contingent on at least 1:1 match from/for all beneficiaries.**

**Virginia Foundation for Community College Education**  
***VCCS High School Career Coaches for Advanced Manufacturing (#2849)***  
**\$490,000 Requested**

***Project Description Provided by Applicant:***

**Executive Summary:** The VFCCE will partner with 5 colleges to hire and support High School Career Coaches who will receive specialized training on advanced manufacturing and its workforce needs. The coaches will identify, or receive referrals from other coaches who have identified, students with an aptitude for the sophisticated technology skills required by the industry and will promote related careers and assist students to develop an educational path leading to the new Centers of Excellence and beyond. This demonstration project, when proven, could open the door for future specializations in other industries.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** A similar program (career coaches who have specialized knowledge of advanced manufacturing careers) does not exist within an hour’s drive of any of the partner colleges. However, the VCCS’s High School Career Coach Program does operate in each partner college service region and has been proven successful, as described in the attachment. We believe this pilot project will prove the value that coaches with more in-depth knowledge of high demand careers will bring to the high school students they serve.

**What are the pre-requisite requirements for entry into your program?** There are no pre-requisite skill requirements for participating in this program. However, the placement of career coaches in high schools will result in services provided to students who are attending those high schools in the service region of each of the partner colleges. The coaches will rely on referrals from school personnel, such as guidance counselors and instructors, to identify candidates to receive the

specialized services. The mechanisms of interaction between high school and college personnel have already been proven successful.

**What resources are required to make the proposed program successful?** The primary resources are High School Career Coaches who will be funded by this grant. Additional resources include industry expertise from subject matter experts to provide content for the training curriculum for the coaches, which will be facilitated by the Virginia Manufacturing Association; instructional design expertise provided by contractors secured by the VCCS; and project management and implementation expertise to drive programmatic outcomes, develop and coordinate coach training, document outcomes at partner colleges, and complete required progress reports, all provided by the VCCS.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

Each career coach will provide specialized services to 300 high school students annually. The coaches will serve both 11th and 12th grade students. During the grant period, it is unlikely that any of these students will achieve one of the credentials listed under “Credential Information.” However, the VCCS will track students served by the coaches and report how many graduate from high school; participate in manufacturing related camps, competitions, or workplace activities; achieve another certification such as a Career Readiness Certificate; and enroll in post-secondary education.

**What is the need in your regional area for graduates of the proposed program?** VCCS will collaborate with our college partners to provide this information by April 24 for the occupations related to advanced manufacturing.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** If the pilot project proves effective, the VFCCE will most likely request additional funding from the Tobacco Commission to expand the advanced manufacturing specialization concept to the remaining Tobacco Region colleges, continue to develop and implement consistent coach training for advanced manufacturing that potentially results in an official certification for the coaches, and create additional specializations in other high-demand occupations in the region.

**Staff Comments and Recommendation:** This revised request replaces a much larger proposal that was submitted by VFCCE a year ago during the Centers of Excellence designation cycle. It is intended to put in place for a two-year pilot period the career marketing services – using VCCS’s successful career coaching program - that supports development of the foundational level skills training that will ultimately provide students for the advanced manufacturing CoEs. The five colleges participating in this include a full-time employee at each of Danville, Patrick Henry, Southside and Southwest, as well as a part-time employee at Virginia Western (to serve Franklin County only). The majority of funds (\$448k) are requested for transfer payments to the five colleges to hire the advanced manufacturing career coaches, while the remaining funds are requested for travel/training, supplies, marketing materials etc. Matching funds are proposed from VCCS, VFCCE and the five colleges. VFCCE commits to developing and documenting outcome and effectiveness measures, beyond the 2,500+ students who are expected to receive coaching services in the two-year period. Future funding will be determined by effectiveness and state/regional support. This proposal falls under the umbrella of VCCS’s Rural Horseshoe Initiative and aligns well with the Commission’s advanced manufacturing initiatives, and should boost the pipeline and preparedness of students entering community college programs in welding, machining, industrial maintenance and other manufacturing skill areas. **Staff recommends award of \$490,000.**

**Virginia Highlands Community College Educational Foundation**  
***Green-Energy Water Pumping System: Student Project (#3029)***  
**\$28,559 Requested**

***Project Description Provided by Applicant:***

**Executive Summary:** VHCC and SVHEC are collaborating to offer a student-driven hands-on project for Electricity/Energy Technology, Engineering Science, and Wood Science Production and Design students to conceive, design, manufacture, install, and monitor/trouble-shoot a renewable-energy powered water pumping system on a former tobacco farm now raising livestock. Students will collaborate, develop critical thinking and problem-solving skills, enhance their employability "soft skills", and learn about "all aspects of industry" which will better prepare them for employment in these STEM fields.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** No similar project exists in this region. This highly unique hybrid project, blending engineering, energy, electricity, machining and drafting program areas, combining hydro and solar energy systems, incorporating theory with practical application, and being a service learning project for a local former tobacco farmer, will produce enthusiastic students. The project will be integrated into 4 college courses for sustainability, and the system will serve as a "field laboratory" site for future students.

**What are the pre-requisite requirements for entry into your program?** Students participating in this project will all be program students at either VHCC or SVHEC, so all will be gaining the needed technical expertise through those courses. This project will be integrated into the standard curriculum in 2 Energy courses and 2 Engineering courses at VHCC.

**What resources are required to make the proposed program successful?** Faculty overload time for curriculum development (2 faculty, 3 credits each); faculty time for producing the water wheel at SVHEC, CAD time for producing blueprints for waterwheel, CAM machining time and production materials for manufacturing waterwheel, solar system components (panels, racks, inverters, generators, batteries), plumbing components (pipes, couplings, hardware), general supplies (wire, switches), Travel for students to the other site (VHCC to SVHEC and v.v.)

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

VHCC students will be in an AAS degree or Certificate program in Electricity, Energy Technology, or Engineering Science. SVHEC students will be in an AAS degree in Wood Science - Production and Design specialization or a Career Studies Certificate in Product Design and Development. VHCC Energy students can also write for an industrial credential in Solar technician.

**What is the need in your regional area for graduates of the proposed program?** VHCC faculty have inquired of the regional employers: Appalachian Castings would hire 12-15 program graduates over the next 8-10 years, Eastman Chemical currently has 15 openings for Engineers and Technicians; the SVAM indicated that their members would be hiring 20+ advanced manufacturing technicians, including electricity, over the next several years. All of these positions would pay \$11 - \$16/hour for technicians; \$55000+ annually for engineers. SVHEC states a demand for adv. manufacturing machinists at \$35000+ salary, a career representing 15% of all employment in the region.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** N/A

**Staff Comments and Recommendation:** This project is a collaboration between the applicant, VHCC, and the Southern Virginia Higher Education Center to conduct a service learning project by installing and maintaining a renewable energy powered water pumping system on two farms located in VHCC service area. Students at the SVHEC in the Product Design and Development program (part

of the Danville Community College Associates in Applied Science Wood Technology program) will conduct the CAD design and CAM fabrication processes for the waterwheel which students in the Electricity, Energy Technology Associates or Certificate program and the Engineering Science Program will conduct the installation and operation of the system. Students from each location will travel to observe the work being done at the other. It is estimated that enrollment in the three programs will increase from a baseline of 107 to 137 and the number of students completing credentials will increase from 48 to 75, however it is difficult to determine that these increases are a direct result of this project. Commission funds will be used to support faculty time at each location, materials to construct the water system, and student travel between locations. While all Commission funds will be spent during the first year of the project, a large portion of the matching funds will not be spent until the second year. Of the total match committed nearly half is in-kind from the SVHEC. Although the application did contain letters of support from industries in the region who stated a need for employees with these certifications there is no evidence that this project experience is relevant for their hiring needs beyond critical thinking/soft skills factors. Ultimately, while this is certainly a modest request, it involves improvements to private properties with public funds, and is an enhancement to existing programs which does not result in a new credential for participants. **Staff recommends no further action on this proposal.**

## **Virginia Western Community College**

### ***BioLink: Biology Labs in Franklin County (#3025)***

**\$99,966 Requested**

#### ***Project Description Provided by Applicant:***

**Executive Summary:** Virginia Western Community College will provide Biology 101 and 102 at the Franklin Center to support post-secondary STEM-H education previously unavailable in Franklin County. According to the Bureau of Labor Statistics, STEM jobs have the best opportunities for growth in the future and have wages twice the U.S. average (2014). The highest ranked job openings in Franklin County, as of March 22, 2015, included: #1 Physical Therapists, #3 Speech-Language Pathologists and #5 Nurses (Virginia LMI). Biology classes in Franklin will help to expand the STEM H pipeline in Southside VA.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** VWCC is 24 miles from the Franklin Center and Patrick Henry Community College is 23 miles away: both college's offer Biology 101 and 102. Providing Biology at the Franklin Center will allow Franklin County students to earn critical science credentials early in their STEM-H program. Currently, there are no science courses available at the Franklin Center. Research tells us the more credits a student earns early in their program, the more likely they are to complete and graduate. Early access to Biology will help to extend the STEM-H pipeline from Franklin to local two and four year colleges.

**What are the pre-requisite requirements for entry into your program?** For all Virginia Western curricular students, a completed official application for admission with social security number and documentation of a diploma from an accredited high school or equivalent is required. Graduates who complete secondary school in a home school setting must provide a graduation date and may be required to provide documentation of coursework. Additionally, placement testing is required of new students who are seeking a degree or entering a program of study.

**What resources are required to make the proposed program successful?**

Site: Franklin Center classroom. Equipment & Supplies: Biology Lab equipment and supplies for sustaining 101 and 102. See VWCC BioLink itemized budget list.

Man-Power: Biology Faculty to teach 101 and 102.

Operating Funds: Overhead costs to maintain the classroom (heating, electrical etc.) are supported by the Franklin Center. Classroom costs for maintaining the lab including: microscope and hood maintenance, and annual consumables will be covered by Virginia Western Community College.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

Many degree seeking students choose to take Biology 101 and/or 102 as an elective course for transfer to a four-year university. Students who have Biology 101 and/or 102 as a requirement include the following degree programs in the Health Professions: Dental Hygiene, Nursing (RN), Medical Laboratory Technology, Radiation Oncology and Radiography. Degrees in the School of(STEM) which require Biology include: Science, Science/Health Science or Science/Environmental Studies. We anticipate 32 students will take Biology 101 & 102 annually. Approximately 12 will graduate or transfer annually.

**What is the need in your regional area for graduates of the proposed program?** Within the Western Virginia Workforce Region (III) (no data was available for Franklin County: VA LMI) there is a significant demand for STEM-H professionals as indicated by the following growth occupations:

Occupation/Starting Wage/# of positions open as of March 22, 2015

\*Registered Nurses: \$43,485 - 663

\*Speech Language Pathologists: \$50,800 - 91

\*Physical Therapists: \$54,878 - 75

\*Medical & Clinical Laboratory Technicians: \$25,337 - 8

\*Physical Therapy Assistants: \$42,677 – 20

Carilion Hospital in Franklin expressed a need for more STEM H professionals in their letter of support.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** N/A

**Staff Comments and Recommendation:** In July 2014 Patrick Henry Community College, which previously shared responsibility of serving Franklin County residents with Virginia Western Community College and which had offered daytime college classes at the Franklin Center, announced it would no longer be serving Franklin County. This was announced under a joint agreement with VWCC which would be taking over full responsibility for serving Franklin County residents. An opportunity for VWCC to expand its offering at the Franklin Center and specifically adding the Biology Labs included in this proposal was created when classroom space previously dedicated to PHCC was vacated. VWCC provided Commission staff with a revised project budget that provides in excess of the 1:1 match requirement on the \$99,966 funding request. Primary match contributions include \$44,277 for 37 microscopes and centrifuges, \$44,000 salaries over the three year project period for personnel to deliver biology classes, and a \$24,000 annual increase to the lease agreement with the Franklin Center for the additional classrooms (\$72,000 over the three year project period). VWCC estimates that this proposal will result in an annual increase of 32 students from Franklin County participating in STEM-H programs. Over \$2.3 million of Commission funds was awarded to Franklin County beginning in 2004 to support construction of the Franklin Center to be a central location for adult education. Under a grant to PHCC in 2009 approximately \$20K was provided to support costs for equipping a nursing program at the Franklin Center, with ownership of this equipment having recently been transferred to VWCC. While VWCC is an eligible recipient of the Commission two-year scholarship grants, this request would be the first grant award for equipping of classrooms, which staff supports given their expanded responsibilities and commitment to serving Franklin County. **Staff recommends award of \$99,966.**

## VirginiaFIRST

### *Growing the STEM Pipeline in Southside Schools (#3022)*

**\$60,000 Requested**

#### *Project Description Provided by Applicant:*

**Executive Summary:** The US ranks 52nd in the quality of math and science education. By 2024, the number of STEM jobs in Virginia will have grown by 18% - or nearly double the growth projected for non-STEM employment. It is imperative that strong STEM-based programming be instituted in middle and high schools to help provide today's youth with the competitive skills to supply tomorrow's workforce. VirginiaFIRST will collaborate Southside communities to build sustainable after school programs for children ages 12-18 to build their STEM skills through experiential learning while developing valuable life skills.

**If you have selected Other as the strategy, please explain how your program supports the Commission's mission and strategic plan.** The initiative supports building human infrastructure through education and training as prerequisites for citizen participation in the global economy. By integrating technology and STEM into structured and sustainable after school programs, VirginiaFIRST will facilitate the process of transforming the Southern and Southwestern regions.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** No. VirginiaFIRST offers more than an episodic STEM experience for youth in Southern VA. No other initiative in the area compares to the length & structure of FIRST STEM-based programs. Long-term project-based learning is the best method for teaching STEM skills. This comprehensive program integrates different technical concepts into an inquiry-based experience that spans the majority of the academic year & educational content areas. This program will succeed because of the staff support to help teams develop a business plan. This plan will help guarantee the program's sustainability.

**What are the pre-requisite requirements for entry into your program?** There is no pre-requisite requirement for entry into the program. All middle and high school students who are enrolled in schools with participating teams are encouraged to participate.

**What resources are required to make the proposed program successful?**

Site to build and test team robots, usually no charge at school after hours.

Coaches (2 per team) school faculty to receive a stipend of \$500 each for the season.

Start up funds - FTC teams are \$2,000 per team & include the standard program KOP.

Support - staff & contracted employee \$2083/month who will support teams & provide resources/coaching to develop a business/sustainability plan for each team within the program.

Materials & venue costs for FTC workshops & scrimmages in the Danville area.

Materials & venue costs to launch FRC Off Season event & introduce District Model concept

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

Students will be encouraged to take the necessary courses for admittance to the Academy of Engineering & Technology to receive an Advanced Manufacturing Certificate. The credentials for this program are very STEM-centric & it is anticipated that the first year of this program will produce approximately 5 additional applicants. As youth build their STEM skills, it is anticipated this number will double by 2017. Students will be encouraged to apply to STEM-based 2 & 4 year college programs. Anecdotal evidence points very strongly to FIRST programs influencing youth to pursue these programs.

**What is the need in your regional area for graduates of the proposed program?** Rolls Royce currently employs @140 individuals & anticipates additional need for local STEM-based workers as the company grows. CIT anticipates the program feeding into existing adult workforce development programs such as Launch Place, IALR, SPTC & GENEDGE. Mid Atlantic Broadband current

average starting salary is \$87K and pulls from the local workforce. They often encounter businesses who are considering relocating who are interested in the number of STEM-based programs in the schools. Donnachaidh anticipates hiring an additional 30 STEM-based professionals over the next 3 years

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** Yes, future funding may be requested in FY17 to help support continued program growth in Southern Virginia. Funding requests would not exceed \$30,000 and would only be applied for if program growth outstrips the organization's capacity in FY16.

**Staff Comments and Recommendation:** The Commission previously provided a \$76,000 grant to VirginiaFIRST in October 2007 to address the problem of lack of participation by tobacco region schools in the statewide competitions. The Committee declined to fund additional requests from VirginiaFIRST in each of the three following years. The LEGO League and FIRST robotics competitions are well-known and highly successful across Virginia and the country, and TICR staff acknowledges the challenges of maintaining participation among tobacco region school districts. However, no letters of interest from local school districts are provided to demonstrate that the number of participating schools (currently five) can be tripled in one year, as the proposal indicates. While this is certainly a modest one-year request to contract with a regional director and provide stipends and supplies to promote participation by more schools, the applicant has indicated a future request will be submitted, but provides little in the way of a path to sustainability. Matching funds are mostly in-kind and appear to be spent almost entirely outside the tobacco region. Ultimately, as well-regarded as FIRST is in attracting STEM-focused students, the program's experiential learning does not align well with the Commission's Education outcomes of granting academic and workforce credentials that will lead to employment in the way an engineering or science higher education degree would. **Staff recommends no further action on this proposal.**

## **Wytheville Community College Educational Foundation VHCC & WCC at Summit Center for Higher EDU Project (#3013) \$130,120 Requested**

### ***Project Description Provided by Applicant:***

**Executive Summary:** The Summit Center for Higher Education project is a partnership between Wytheville Community College (WCC) and Virginia Highlands Community College (VHCC) to provide affordable higher educational resources to Smyth County citizens by equipping classroom space in a new facility. It will be housed on the second floor of the Wayne C. Henderson School of Appalachian Arts in the renovated 1908 schoolhouse in downtown Marion. WCC and VHCC are entering into a long-term lease agreement for the entire second floor to provide educational opportunities to students in Marion and Smyth County.

**Have you received prior commission funding for this project?** No

**Does a similar program exist within an hour's drive?** WCC and VHCC are both about 30 minutes from The Summit Center, and WCC currently has a center in nearby Atkins. This program is different because it provides short commutes for all students in Smyth County. It also brings the pre-engineering program to a central location instead of students commuting to both WCC and VHCC. Having The Summit in Marion provides more classroom space than the Atkins center. Including both colleges at The Summit provides access to public transportation and increases the types/numbers of courses available to students in Marion.

**What are the pre-requisite requirements for entry into your program?** The Summit Center will

offer general education courses and house the science with a specialization in pre-engineering program, a WCC/VHCC shared program. Anyone who is 18 or older or who has obtained a high school diploma or the equivalent may be admitted to WCC or VHCC. Special consideration is given to others on a case-by-case basis. The colleges' admissions offices are available to assist students in completing applications and submitting necessary information to determine student eligibility. Some of VHCC's and WCC's health programs are selective admission programs.

**What resources are required to make the proposed program successful?** The recently renovated facility is currently available for use. Through a signed memorandum of understanding, WCC and VHCC plan to provide all necessary staffing for The Summit Center, and both colleges have budgeted operating funds for The Summit Center for the upcoming year and will plan for all subsequent years. Equipment for the facility is being requested partially through both colleges' Equipment Trust Fund and through granting agencies.

**What academic or workforce credentials will students work towards achieving in the program? How many students do you expect to enroll and receive credentials annually?**

The Summit Center will provide associate degree general education courses, which are a basic foundation for any of the associate degree programs offered at WCC or VHCC. Workforce credentials will be offered as needed and/or requested by local business and industries in the community. WCC and VHCC expect to enroll at least 300 students annually and produce at least 45 credentials (diplomas, certificates, and associate's degree) the first year.

**What is the need in your regional area for graduates of the proposed program?**

Because students will be able to take basic coursework at the Summit, this project will produce graduates in various degree programs including several degrees in healthcare and machine technology curricula, two regionally sought after credentials. Students may also prepare for transfer programs that can feed into programs at most of the local four-year colleges and universities.

**Is a future request for additional funding from the Tobacco Commission anticipated for this program and/or facility?** N/A

**Staff Comments and Recommendation:** The application requests one time funding for equipping the The Summit Center for Higher Education located in the Wayne C. Henderson School of Appalachian Arts in Marion. The location is centrally located between the VHCC and WCC and is also located along a public transportation route making it an excellent location to serve Smyth County and the surrounding area. The applicant provided a solid list of employer letters and a very detailed budget showing the commitment of funds for additional equipment and operating support from the two colleges. Students will take general education coursework at the Summit then complete associate degree programs offered by WCC or VHCC. Workforce credentials will be offered on an as needed/ requested basis by businesses and industries in the area. The colleges estimate an annual enrollment of 300 the first year with 45 credentials awarded. This is a substantial increase from the baseline enrollment of 120 with 18 credentials. **Staff recommends award of \$130,120.**