

2015-2025 Master Facilities Plan - Priorities (Draft)

1. Advanced Manufacturing:

In the last five years, local manufacturers have made commitments in developing a strong workforce by retaining existing employees, by increasing their skill set or by working with the College to produce new employees with advanced manufacturing skills. Recent successful grant awards from Golden LEAF, Duke Energy, and strong support from the Blue Ridge Community College Educational Foundation, have provided the funding to implement Mechatronics Engineering, purchase updated welding equipment, increase Computer Numerical Control (CNC) lathe and mills, and retrofit existing labs to accommodate the new equipment to meet the demands of the local industries. These modifications to engineering, welding, and computer-integrated machining, and recent partnerships with local public education, have placed a heavy demand on lab space and existing equipment, increasing enrollment in these programs by more than 40%.

An additional 3,000 sq. ft. lab space will be needed to accommodate current equipment and allow expansion for a simulated advanced manufacturing floor. This area will accommodate increased demand from enrollment, meet certification requirements from ABET and NIMS, and provide dedicated areas for training. The additional space will work in conjunction with the current lab space of Mechatronics (4500 sq. ft.) and will require the Art lab area (3000 sq. ft.) to relocate. The additional 3000 sq. ft. footprint will need two classrooms with lab space for a clean work environment for sensitive computer-driven equipment from FESTO and Siemens. The current computer-driven sensitive equipment such as PLC trainers, MPS line, and Mechanical static equipment, needs to be separated from the dirty hydraulic-driven equipment such as the full size ABB robots, hydraulic assembly line, cutting lathes, and orbital welding equipment. The single lab space currently used in Spearman 128 does not adequately function with the combination of this equipment or create an effective learning environment for students.

Estimated Costs:

Timeframe: Phase II - 2016-17 academic year

2. Campus Security (Both Campuses):

The College currently has a great need for enhancements to several physical security features on our campuses. As part of a security risk assessment that the College had conducted by Risk Management Associates (RMA), there were four major components associated with physical security at the College that had recommended enhancements, upgrades or additions. Those four areas needing enhancements included outdoor lighting, video camera systems, mass notification systems and door access control.

The campus can be very dark in locations at night, creating both a safety and security concern. Having pathways and parking lots that are not properly lit can lead to safety hazards and increase opportunities for individuals to hide who may have nefarious intent. RMA conducted a campus-wide survey as part of their assessment and identified a need to upgrade campus lighting as a major concern among respondents. The plan is to add and change all current outdoor lighting on campus to LED lighting, which will be brighter, use less energy and extend the life of the lamps exponentially, saving on both materials and labor.

Our current video camera surveillance systems on campus have exceeded their life expectancy. RMA conducted an analysis of our current camera systems and determined that the entire system should be replaced and overhauled due to the fact that the majority of the cameras are not functioning at all and the technology is out of date. The system should be changed over from an analog system to an IP based system with a unified, non-proprietary system platform that is capable of expansion as needs increase. This replacement would include cameras that would capture additional exterior coverage that the College currently does not have.

RMA identified a safety/security concern regarding mass notification during an emergency situation on campus. Our current mass notification system allows us the ability to notify students by email, phone or text only if they have signed up as a subscriber to the notification system. Using only our current mass notification system leaves students who have not signed up as a subscriber to the system vulnerable to not knowing of an emergency that is taking place on campus. RMA has suggested that BRCC implement an audible mass notification system similar to what is being used at other colleges and universities that would notify students of an emergency using a tone or prerecorded message. The system would be expandable and allow the addition of audible and visual mass notification as needs permit.

The final significant area of physical security concern involves electronic door access control. Having the ability to lock exterior doors at the far ends of buildings helps to push foot traffic to the building main entrances. This helps to reduce cost by limiting the number of surveillance cameras needed to cover additional hallways and keeps a

person with nefarious intent from coming in through an outside door without being seen. Installing electronic access control, initially to main entrances, also allows the College to be able to instantly lockdown buildings during an emergency situation and allows the College the ability to limit access to buildings during specified times and for specified people, helping with key control.

Estimated Costs:

Timeframe: Phase I - 2015-16 academic year; Phase II - 2016-17

3. Science Labs:

In the past three years, the number of students enrolling in science courses with labs has increased over 120%. Much of this increase is due to expansion of enrollment in the programs in the Associate in Sciences degree courses in Physics and Chemistry. Additional and advanced courses in Biology, Chemistry, and Physics are required to meet the needs of several programs. An articulation agreement with Wingate University has been started, which allows students to complete their Pre-Pharmacy courses at BRCC. Students who complete the program at BRCC can apply directly to the School of Pharmacy at Wingate. BRCC has signed an articulation agreement with Appalachian State University for their Fermentation Sciences program, which requires that students have a strong grounding in biological, chemical, and physical sciences. Additional Biology, Chemistry, and Physics courses will be required to meet the needs of the new Associate in Engineering program, as a result of the statewide Engineering articulation agreement.

In order to ensure the safety of students, science labs must often be capped at a lower number of students than many other courses. The increase in the number of students needing these courses is significantly straining our ability to offer a sufficient number of course sections with our current lab space. For Fall term, 2015, 42 sections of science courses were offered.

Estimated Costs:

Timeframe: Phase I completed June 2016; Phase II completed 2016-17

4. Early College/Career Academy:

The current Henderson County Early College housed in the Industrial Skills Center on the Henderson County Campus is at its maximum capacity of approximately 200 students. For the most part, the current students major in one of the transfer pathways, either Associate in Arts or Associate in Science. Henderson County Public Schools, along with BRCC, is exploring the possibility of increasing the number of students at the Early College, with the additional students majoring in one of BRCC's career technical

areas. This will significantly increase the opportunity for students to obtain training that will lead to jobs in our local industries, which is a major goal of BRCC, and is a significant need for our community.

The current facility has no additional space within which to increase student enrollment. Currently, there is not another location on campus where the Early College could be moved. Thus, an additional facility will need to be built. Because the equipment necessary to train the students is very expensive, and is currently located on the BRCC campus, it would be most cost effective to build the facility on campus rather than at an off campus location.

Estimated Costs:

Timeframe: 2017-18 academic year

5. One Stop Concept: NC Works, Registration, Cashier, Security, Admissions, Testing, Financial Aid, Counseling, Basic Skills, Literacy Council:

A One Stop Welcome Center for all BRCC customers will offer a higher level of customer service. Potential students and those seeking job assistance or other information who come to campus for the first time often do not know with whom they should be speaking. This can be problematic for several reasons. In many cases, if they are interested in taking classes, they might not know the difference between curriculum and continuing education. If they are directed to other locations on campus, they may become frustrated and leave campus without ever obtaining the help or information they need. For that reason, many colleges have developed a “One-Stop” concept, where all critical sources of information are located in a single location. This allows visitors to be helped in a timely, efficient manner, and ensures that everyone on campus knows where to direct them.

The Sink Building currently houses Student Services, but many other services, such as Continuing Education short term training registration, and the career counseling, job seeking, training and job referral services of NCWorks Career Center, are located in other buildings on campus. Additionally, the Basic Skills and Literacy Council are now an integrated component of Workforce Investment and Opportunities Act (WIOA) and are now required to co-locate as part of the NCWorks Career Center.

With the move of allied health programs to the new facility in Hendersonville, additional space will be opened up on the second floor of Sink. Additionally, the College has had discussions with the Helping Hands Development Center administration concerning the current lease with the College and the College’s need for this space. This daycare center currently operates as a special education program under contract with Henderson County Public Schools.

With the additional space, the College will have the opportunity to implement a “One-Stop” location in the Sink building. This building could house most of the offices that are critical to ensuring that everyone looking for our assistance, whether for classes or employment preparation, have access to the correct people and offices in a single location for their critical first contact with the College.

Additionally, remodeling of the reception and waiting areas, and Cashier’s Office, will provide a higher level of customer service. The current layout does not provide adequate privacy for students completing necessary paperwork, or adequate security for the Cashier’s Office.

Estimated Costs:

Timeframe: Phase I completed June 2017; Phase II completed 2017-18 academic year

6. Public Safety Program Expansion

The College expanded its public safety program offerings in 2008 with the addition of the Associate in Applied Science Degree in Fire Science Technology and in 2010, Associate in Applied Science Degree in Emergency Medical Science. The enrollment in these two curriculum programs has increased significantly in the past few years creating need for additional classroom and lab space and storage. Additionally, changes to the North Carolina Standards and Training Council have required the College to expand scenario lab space for the Basic Law Enforcement Training Program.

With the relocation of the basic skills and literacy programs (currently located on the 2nd floor of the Continuing Education Building) to the 2nd floor of Sink Building (Allied Health Programs’ current location), and the continuing education and NCWorks Career Center (currently located on the 1st floor of the Continuing Education Building) to the 1st floor of the Sink building (Helping Hands Developmental Center’s current location), space will be available in the Continuing Education Building to provide the additional classroom and lab space needed for the public safety programs.

Estimated Costs:

Timeframe: Phase I completed June 2017; Phase II completed 2018-19 academic year)

7. Police Officer Physical Ability Test (POPAT) & Vehicle Garage:

In compliance with a statewide requirement of the North Carolina Standards and Training Council, Blue Ridge Community College’s Law Enforcement Department must expand its Basic Law Enforcement Training (BLET) to include portable physical agility

equipment to prepare cadets for the new Police Officer Physical Ability Test (POPAT) requirement. Required implementation date is July 1, 2015. This required portable equipment requires space for storage and set up. In addition, the BLET program needs space to store the vehicles used to train cadets. A garage type building will meet these needs. BLET will also use this building to provide training-required scenario-based exercises.

Estimated Costs:

Timeframe: 2017-18 academic year

8. Relocation of Fine Arts:

The Fine Arts - Art program currently occupies space in the Spearman Building, along with advanced manufacturing and transportation programs. The program itself is very strong and continues to attract a significant number of students, and Introduction to Art is one of a very few Fine Arts courses which meets the Universal General Education Core for Associate in Arts and Associate in Science transfer students. While the number of students taking Art courses has increased, the space available has decreased due to much needed expansion of advanced manufacturing programs such as Welding, Machining, and Engineering, and the addition of the Brewing program. By relocating the Art program, BRCC would ensure that students interested in Art either as a program or for transfer purposes would have the space required, while at the same time freeing space for the continued expansion of applied technology and customized training programs. The plans are to relocate the fine arts program to the space in the Industrial Skills Center (Early College current location).

Estimated Costs:

Timeframe: 2018-19 academic year

9. Horticulture Program Expansion to include Specialty Crops:

The brewing, artisan beverage, and wine industries are exploding across western North Carolina. While BRCC is currently training students for jobs that are directly tied to these industries, a significant opportunity exists to also train workers in support areas, such as specialty crops. As the demand for raw materials increases, there will also be an increase in demand for workers who are trained in the cultivation, growing, and harvesting of these commodities. These crops could include hops, grapes, apples and other fruits. In order to provide the trained employees these support organizations will require, BRCC proposes to expand training in the horticulture area and add additional courses. A portion of the Henderson County Campus could be converted to nursery areas to grow these crops. The expansion will also involve upgrades on the current

greenhouse, cultivating new grounds within the area, and reconditioning existing grounds.

Estimated Costs:

Timeframe: 2018-19 academic year

10. Customized Training Program Expansion:

The Customized Training Program provides training to local manufacturers who are expanding or locating to the area, deploying new technology or increasing production capacity. The program has increased in recent years, with multiple training projects delivered to 22 companies. Some industry specific training is delivered at the manufacturing site but the majority of training is delivered on the BRCC campus.

In August 2014, BRCC reestablished the Manufacturing Advisory Council with 26 manufacturers participating. These manufacturers are exploring the possibility of combining the training needs of incumbent workers at several manufacturing facilities into one course offering. The Council has identified four pilot projects including a Machining Certification Program, a Maintenance Upgrade Training Program, a Logistics Upgrade Training Program and a Production Technician Upgrade Training Program.

Locating available classrooms on campus for blocks of time convenient to manufacturers is becoming increasingly more difficult. The Customized Training Program needs dedicated classroom and lab space to provide for these manufacturing training needs. While there is some space in the Applied Technology Building for smaller classes, the Customized Training Program often needs training space for 20 or more students. Adding 7,600 sq. ft. expansion on the north end of the Spearman Building would provide the additional classroom, labs, and office space to accommodate the customized training needs.

Estimated Costs:

Timeframe: 2019-2020 academic year

11. Teaching Kitchen:

The Division for Economic and Workforce Development launched the Culinary Institute several years ago offering classes in a variety of culinary skills including catering, wait staff training and food preparation. Having no teaching kitchen on campus, the classes have been offered in the Quantity Foods classroom at East Henderson High School. Expanding BRCC's Conference Center Catering Kitchen to a Teaching Kitchen would allow the Institute to increase both types and times classes are offered. Additionally, an expanded kitchen and increased amount of kitchen equipment, would be more

conducive for outside groups to use and would therefore increase the facility usage. Currently, the fact that the Conference Hall only has a small “catering” kitchen limits the number of groups and types of events that are held in the facility.

Estimated Costs:

Timeframe: 2019-2020

12. Fletcher Academic Building

Population growth in the Fletcher area has grown significantly in the last twenty years with the highest percentage in young families with children at home. During the past few years, the College administration has had discussions with the Town of Fletcher administration regarding educational opportunities that could be provided to the growing population. The College has offered courses in the Fletcher area for many years and is currently offering continuing education classes at the Fletcher Town Hall. The Land Use Plan for Fletcher provides for mixed-use development and for academic and institutional spaces surrounding the Town Hall. Blue Ridge CC has been asked to consider a presence on this property.

Estimated Costs:

Timeframe:

13. Transylvania County Campus Program Expansion to include Innovative High School Concept:

The success of Innovative High Schools throughout North Carolina, including the Early College on our Henderson County Campus, is being closely studied for opportunities to spread the concept to other counties. Transylvania County Schools has approached BRCC about developing an Early College for Transylvania County. Depending on the number of students who may be enrolled, renovations of existing space will be required or new facilities will need to be secured, either through new construction or finding space off campus.

Estimated Costs:

Timeframe: