## 13.7 Physical resources

The institution ensures adequate physical facilities and resources, both on and off campus, that appropriately serve the needs of the institution's educational programs, support services, and other mission-related activities.

## Compliance Judgment: In Compliance

## Rationale

As shown on the <u>campus map</u><sup>[1]</sup>, the University of South Carolina Aiken operates and maintains physical facilities on a 453 acre campus that appropriately serve the needs of the educational programs, support services, and other missionrelated activities of the institution. USC Aiken maintains facilities and grounds in keeping with its status as a comprehensive institution with teaching, research and scholarship, and service functions within its mission.

**Physical Facilities at USC Aiken.** The total gross building footage at USC Aiken is 916,886 square feet. The major buildings on campus include:

• **Alan B. Miller Nursing Building.** The Alan B. Miller Nursing Building, which constitutes 23,641 square feet, houses classrooms, labs, and faculty offices for the nursing program. The building houses a state of the art simulation program and skills labs to complement and enhance classroom learning and clinical experience. The simulation program consists of four labs that include skills, health assessment, and two high fidelity labs.

• **Business and Education Building.** This building constitutes 90,968 square feet and houses the Schools of Business Administration and Education, a Wellness Center, the Small Business Development Center, the Counseling Center, Disability Services, the Assistive Technology Center, the Computer Services Help Desk, and the Office of Conferences and Continuing Education.

The facility has numerous classrooms. Lecture halls and computer classrooms and laboratories.

• *Children's Center.* The USC Aiken Children's Center, constituting 4,722 square feet, offers care for children of faculty, staff, students and community members. It is licensed by the State of South Carolina and employs qualified teachers as well as students of the University.

• **Convocation Center.** This 101,186 square-foot building has a seating capacity for 4,000 people. In addition to being the home for Pacer Athletics, the Convocation Center is designed to be a venue for entertainment and community events. The building includes three playing surfaces, dressing rooms, athletic training facilities, and meeting space.

• **Etherredge Center.** The Etherredge Center is the University's visual and performing arts facility. The building contains 53,849 square feet consisting of classrooms and offices for the academic department of Visual and Performing Arts as well as the O'Connell Experimental Theatre and a larger 687-seat main stage theatre. The facility is dedicated to presenting for the campus and the community top quality programs, including the USCA Cultural Series, the USCA Concert Choir, University Theatre, the Playground Playhouse, and the USCA Concert Band. The Etherredge Center hosts outside performances as well.

• **Gregg-Graniteville Library.** The faculty, support staff, and collections of the Gregg-Graniteville Library comprise an integral part of USCA's instructional program. The 43,634 square foot facility houses an extensive book, periodical, and microform collection. The USC Aiken Library also serves as an official depository for federal and state documents. The Library is fully automated and provides access to information in a variety of formats using state-of-the-art equipment. The Center for Student Achievement and the Math Lab are located on the first floor of the Library.

• *Humanities and Social Sciences Building.* Classes in the College of Arts, Humanities and Social Sciences are held in this building. The Department of Communications; Department of English; Department of History, Political

Science and Philosophy; Department of Languages, Literatures and Cultures; Department of Sociology; the Writing Center; and the Office of Institutional Effectiveness, Research & Compliance are located in this building. One of USC Aiken's food service operations – the Station – is also located in this building. The building constitutes 39,944 square feet of space.

• **Pacer Commons.** Pacer Commons features two and four bedroom apartments with full kitchens which open up onto interior hallways. Meeting rooms, lounges, a game room, multipurpose rooms, a sand volleyball court, a basketball court, a picnic pavilion, and a computer lab are located at or adjacent to Pacer Commons. The residence hall totals 115,923 square feet.

• **Pacer Crossings.** Pacer Crossings is the newest residence hall at USC Aiken and is designed for freshmen. It features suites which open into a common living space. Meeting rooms, lounges, multipurpose rooms, and a computer lab are located in Pacer Crossings. The facility totals 88,315 square feet.

• **Pacer Downs.** Pacer Downs is an on-campus housing facility that houses students with two-bedroom two-bath, garden-style apartments that total 79,820 square feet. A meeting room, pool, convenience store, sand volleyball courts, basketball court, and picnic pavilions are also located at Pacer Downs.

• *Alumni House.* This historic building was originally constructed in 1829 at Edgefield by Francis W. Pickens, minister to Russia and Secessionist governor of South Carolina. "Edgewood," as the Pickens family called the house, was exactly 100 years old when it was acquired in 1929 by Mr. & Mrs. Julian B. Salley and moved to Aiken, where it was reconstructed board-by-board but with a number of alterations and improvements. The building is on the National Register of Historic Places and iis situated on a site which makes it useful for campus and community activities and simultaneously preserves its historical integrity. The house is 4,427 square feet and provides space for the University Advancement Office.

• **Robert E. Penland Administration Building.** The Robert E. Penland Administration Building, which constitutes 58,447 square feet, was the first

structure to be erected at USC Aiken and has an open-air courtyard and garden in its center. This building houses the Admissions Office; Business Services Office; Registrar's Office; Financial Aid, Veterans and Military Student Success Center; Computer Services; Career Services; Human Resources; and the Chancellor's Office. The Department of Psychology; and the Department of Mathematical Sciences and Engineering are located in this building as are classes in math, computer science, engineering, and psychology.

• **Roberto Hernandez Baseball Stadium.** The Roberto Hernandez Baseball Stadium is a 1,000 seat, state-of-the-art stadium featuring a beautiful grass surface with all the amenities of a top-notch Division I ballpark. A clubhouse, players' lounge, coaches' offices, modern press box and radio broadcast booth, training facilities, and 850 covered seats are among the highlights. The facility is named for former Pacer athlete Roberto Hernandez, a two-time Major League Baseball All-Star. The stadium also features the Roberto Hernandez Hall of Fame Room.

• **Ruth Patrick Science Education Center.** The Ruth Patrick Science Education Center was established to provide a permanent program to enhance science and math education within the schools of the Central Savannah River Area. The Center offers educational institutes, courses, and workshops for K-12 teachers that are designed both to increase basic knowledge of math and science as well as to enhance teaching skills. Programs are also offered for K-12 students to encourage their interest in math and science. The Center emphasizes innovative, hands-on approaches to learning. The Center draws upon the expertise of professional educators as well as engineers and scientists from colleges, industries and schools throughout the Central Savannah River Area to provide its services. Among other things, the Center includes an observatory with a Bechtel telescope that provides views of planets, nebulae, and other celestial objects, and the DuPont Planetarium which consists of 45seats, a 30-foot diameter tilted aluminum dome by Astro-Tec, with a Digistar-6 planetarium projection system. The building is 41,259 square feet.

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• Sciences Building. The Sciences Building houses laboratory and classroom facilities for the Department of Biology and Geology and the Department of Chemistry and Physics. With 61,659 square feet of space and laboratories equipped with modern scientific instrumentation, faculty and students actively pursue scientific research and instruction. The building also serves as a model of energy efficiency through its design and unique combination of energy-conserving mechanical systems. The Office of the Executive Vice Chancellor for Academic Affairs is located in this building.

• **Student Activities Center.** Consisting of 58,740 square feet, the Student Activities Center provides students with a place to meet, relax with friends, and participate in activities and events. It is the focal point of activity for student services and organizations. Services and facilities available include the SAC Café, Starbucks, several conference rooms, TV lounge area, Intramurals gym, game-room, bookstore and natatorium. Many areas of the Student Activities Center are available for use by campus organizations, faculty and staff. Offices located in the Center to serve student needs are Student Life and Services, Vice Chancellor for Student Affairs, Student Health Center, Diversity Initiatives, International Programs, Student Government, Pacer Union Board, and Student Media.

• **Pedestrian Bridge.** The newest addition to the campus is a pedestrian bridge that connects the Convocation Center and athletic facilities to the academic heart of the campus, providing safe passage of students, faculty, staff and visitors across a major, four-lane, 55 mph road.

Adequacy of USC Aiken Physical Facilities. No known critical physical resource problems exist that directly prevent the University of South Carolina Aiken from meeting its objectives. Current space allocated to any institutional function is adequate for the effective operation of that function. The South Carolina Commission on Higher Education tracks <u>building data</u> <sup>[2]</sup> and conducts regular audits of space allocation and use. As shown in the <u>South Carolina Commission on Higher Education Facilities</u> <u>Utilization Reports</u> <sup>[3]</sup>, detailed statistics are monitored including but not limited to

assignable area by function, capacity/enrollment ratios, station utilization and space factor ratios for classrooms, and square footage of academic and support facilities per FTE students. These data allow the university to determine its relative standing within the state of South Carolina with respect to key facilities- related indicators. They show that the facilities' needs of the institution's educational programs, support services, and other mission-related activities are being appropriately served.

**Maintenance and Improvements to Campus**. Decisions regarding the construction or renovation of facilities on campus are directed by the <u>University of South</u> <u>Carolina Aiken Campus Master Plan</u>.<sup>[4]</sup> Facilities and maintenance staff are charged with maintaining the physical plant and grounds. With the exception of the Pickens-Salley House, constructed in 1829, there are no historic structures on campus. Facilities have been well-maintained and buildings are less than 50 years old. Nonetheless, for many years there was a widening gap between available state funding and the annual investment necessary to properly maintain campus infrastructure; maintenance had been under funded for years by the state. In response to this concern, the University embarked upon a strategic effort to develop a more comprehensive funding plan for deferred maintenance and renewal projects by developing a <u>Deferred Maintenance Plan</u> <sup>[5]</sup> that provides a priority list of projects with an estimated cost of each. A <u>summary list</u>

of Deferred Projects <sup>[6]</sup> is also maintained and updated as work progresses on projects. The basis for recommended projects is the combined result of in-house facility condition assessments performed annually, and standard building system life cycles. The South Carolina state legislature recently approved funding that has allowed USC Aiken to address several deferred maintenance projects listed on the Deferred Maintenance Report – most notably replacement of the HVAC system in the Penland Building.

The Executive Director of Facilities also prepares an annual <u>Comprehensive</u> <u>Permanent Improvement Plan (CPIP)</u> <sup>[7]</sup> for review by the Vice Chancellor for Finance & Administration and the Chancellor. The CPIP is a five year budget plan for new construction and renovation projects for the campus, and is updated annually to address changes in campus needs. Once approved the plan is submitted to the USC System President, the Board of Trustees, the South Carolina Commission on Higher Education, and the Capital Budgeting unit for the State.

**Physical Resources.** USC Aiken provides many physical resources that support the academic endeavors of faculty and students. While a description of the complete inventory of all physical resources is impractical, some of the more notable resources that support the teaching, research, and service mission of the institution include:

• **Biology and Geology Laboratories.** The teaching and research laboratories of the Biology and Geology Department house a wide range of equipment and academic support resources for developmental, ecological, toxicological, and molecular biology. These include, but are not limited to laser scanning confocal fluorescent microscope, stereo and compound fluorescent microscopes, high-speed centrifuges, UV/Vis spectrophotometers, electrophoresis equipment for nucleic acid and protein analysis, real time and standard PCR systems, mammalian cell culture facility with biological safety cabinets and CO2 incubators, plant cell culture facility, microinjection system for developmental biology studies, digital gel documentation systems, marine and freshwater systems for vertebrate and invertebrate studies, environmental chambers, and experimental and specimen greenhouses.

• *Wellness Center.* The Wellness Center includes a large fitness area with cardiovascular equipment (bikes, rowers, treadmills, ski machines, elliptical cross trainers and stair steppers), selectorized and plate-loaded weight equipment, dumbbells and a 1/16 mile walking track. There is a studio with wall to wall mirrors, gymnasium, dry sauna, locker rooms, and an exercise physiology laboratory, as well as an instructional classroom. The facility is supervised by CPR trained staff. The USC Aiken Natatorium is a six lane pool with attached locker room facilities.

• **Chemistry and Physics Laboratories.** The Chemistry and Physics Laboratories include but are not limited to an atomic absorption spectrometer, a spectrophotometer, a diode-array detector and UV absorbance system; two gas chromatographs, a photomultiplier tube (PMT) detector with excitation provided by an argon ion laser, an imaging microscope, a research-grade stereoscope, a compound microscope equipped with digital imaging software, and a custom electron beam glancing angle vapor deposition (GLAD) system.

• *Ruth Patrick Science Education Center.* The DuPont Planetarium, housed in the Ruth Patrick Science Education Center at the University of South Carolina Aiken, consists of 45-seats, a 30-foot diameter tilted aluminum dome by Astro-Tec, with a Digistar 6 planetarium projection system from Evans & Sutherland. The RPSEC Observatory (on the roof of the Ruth Patrick Science Education Center) is open after public shows on Saturday evenings, weather permitting. The Bechtel Telescope housed in the RPSEC Observatory provides views of planets, nebulae and other celestial objects.

**Technological Resources and Infrastructure.** USC Aiken maintains a robust technology infrastructure and support system which enables the academic endeavors of faculty and students; exceeds the business requirements of administrative staff; and furthers the community relationships USC Aiken has developed. To meet this commitment, USC Aiken has created and maintain a scalable, converged and secure telecommunications network leveraging many enterprise standard technologies which deliver network services 24 hours a day across the entire campus. All of these technologies traverse the network over a Gigabit Ethernet infrastructure which has a fiber optic backbone and two enterprise class Cisco Catalyst switches for redundancy at its core. The University has a 500 MB link to the Internet, and uses a 250 MB WAN link to the Columbia campus which can also be used for redundancy if the link to the Internet is unavailable. This infrastructure allows the connectivity of over 1,600 university-owned nodes consisting of Macintosh and Windows computers, IP Phones, and printers. These connect mainly through the University's wired Ethernet network. On average per week, the University supports approximately 1,500 student-owned wireless devices on the network which primarily connect through the 225 Aruba hospitality access points (APs) providing the wireless cloud in residence halls. The University also has over 100 Cisco APs that provide the wireless connectivity for our

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faculty, staff, students, and guests when on campus. Using voice over IP technology, our network allows hundreds of incoming and outgoing telephone calls to be routed and connected each day.

In the datacenter at USC Aiken, we manage approximately 80 virtual servers and 25 physical servers. Six of those servers cumulatively store 6 TB of security camera footage for our Public Safety Department. The Computer Services Division oversees the RAVE emergency notification system. We ensure the system maintains current emergency contact data for the USC Aiken community in the event of a true emergency. We have a redundant EMC VNX 5200 storage area network (SAN) that replicates USC Aiken's operational data for faculty, staff, and students to a duplicate system housed in the USC Columbia datacenter. We also provide secure VPN access for faculty, staff, and students to easily and remotely access university resources.

Creating such a robust, integrated network enables us to provide the best technology-integrated learning environment possible for our faculty and students. We have laser printers and virtual desktops in all of our computer labs which allow for software updates to be easily deployed because of the central control that type of setup provides. As our minimum standard, each classroom at USC Aiken is equipped with an LCD projector and computer for faculty lectures and student presentations. Many rooms are also equipped with Smartboards, Epson BrightLink projectors, Sharp Aquos TVs, and Sympodiums for collaborative and interactive learning. We also have a classroom with a Polycom Telepresence system for students to use while taking courses from other campuses. Many of our faculty utilize Blackboard and other web technologies which allow our students to easily access a multitude of multimedia educational content from anywhere they have Internet connectivity in support of distance education.

Maintenance and Control of Physical Resources. USC Aiken exercises appropriate control over all physical resources. The accountability, proper care, maintenance and security to prevent misuse or loss for all University of South Carolina property is delegated to deans and department heads, depending on their division or area of responsibility. Computer Services oversees a <u>computer replacement cycle</u> <sup>[8]</sup> of the over 2,000 computers in campus labs and offices that are assigned to faculty and staff.

Salkehatchie Campus. USC Aiken offers education completion programs in Elementary Education and Early Childhood Education at the University of South Carolina Salkehatchie campus located in Allendale, South Carolina. USC Salkehatchie was established in 1965 as a regional center of the University of South Carolina Columbia offering Associate in Arts and Associate in Science degrees. The campus is approximately 150 acres. Several notable facilities support the USC Aiken completion programs, notably:

• *Education Building.* The Education and Extended Campus building houses offices for Salkehatchie Consortium, Tri-County Workforce, Graduate Studies, Education Advisor, and also meeting/conference rooms, and classrooms for graduate classes. This building and its annex constitutes 3,828 sq. ft.

• **Original Classroom Building.** The building contains the office of the Faculty Secretary, office of the Academic Dean, Student Lounge and vending machines, restrooms, classrooms, computer labs, offices, and the tutoring center. This building comprises 19,098 sq. ft.

• **Conference Center.** The Conference Center constitutes 12,344 sq. ft. This building is used primarily for Convocation and Graduation but is available for other events as well.

• **Student Services Building.** The Student Services building constitutes 3,890 sq. ft. and houses the Admissions and Records, Financial Aid Office, the Associate Dean of Student Services, and Recruitment.

• *Leadership Institute.* The USC Salkehatchie Leadership Institute comprises 4,023 sq. ft. This building houses the offices of several service-related organizations, along with the Leadership Center, that provide, create and offer programs that stimulate leadership, community and economic development in Allendale, Bamberg, Barnwell, Colleton and Hampton counties. In addition to the offices of the directors, there is also a classroom for their use.

• *Learning Resource Building.* The Learning Resource Building houses classrooms, a snack room, a conference room, restrooms, faculty offices, and the computer lab. This building constitutes 29,502 sq. ft.

• *Library.* The library provides a wide variety of services. In addition to being able to check out any of more than 57,000 books, patrons have access to more than 18,000 e-books online. Salkehatchie library users can listen to music in the form of records, cassettes, and CD materials or new video, DVDs, and other multimedia and educational materials. They can read more than 150 current magazines and examine local, state, and national newspapers. Patrons have access to online full-text and citation-based resources, can learn to do research, or utilize Internet access for research and investigation. Computers with word processing, spreadsheet, and PowerPoint software are also available.

**Sumter Campus.** USC Aiken offers several completion programs at the University of South Carolina Sumter. USC Sumter was established in 1973 as a regional center of the University of South Carolina Columbia, offering Associate of Arts and Associate in Science degrees. The campus is situated on 50 acres of beautifully landscaped grounds, with eight modern and attractive administrative and academic buildings that offer support for the completion program. Beside classrooms, two notable facilities that provide support to students in the completion programs are:

• Administration Building. The Administrating Building, consisting of 27,977 sq. ft., is one of four buildings original to the campus. The building, situated on Miller Drive, is considered the 'front door' of the campus. The Administration Building houses the offices of the dean; associate dean for academic affairs; assistant dean for University advancement; assistant dean for administrative and financial services; assistant dean for student affairs; director of marketing and public relations; director of admissions, services, and recruitment; admissions; financial aid; records; business; advisement/counseling center; and others. It also has conference rooms and a faculty lounge.

• **Anderson Library.** The Anderson Library of the Sumter campus provides a pleasant setting for faculty and students to read and study. This building

constitutes 50,046 sq. ft. The 90,000-volume collection, housed in the library, is especially selected to assist students in their undergraduate studies. Recreational reading is also provided. The library houses resources in many formats, including books, periodicals on microfilm, cassette lectures, microfilm readers, and a microfiche viewer. Services offered by the library include photocopying, microfilm copying, online indexes, databases, full-text journals, the online catalog, and bibliographic instruction for groups or individuals. The library also contains computer labs and two computer instructional labs. The Computer Services Division is also located in the library. Art displays can be seen in the University Gallery located off the main lobby. The Anderson Library also has private study rooms for students, a conference room, and a lounge area. The rear of the building contains six large classrooms and lobby space for studying.

## **Supporting Documentation**

- 1. USC Aiken Campus Map
- 2. South Carolina Commission on Higher Education Building Data Summary
- 3. South Carolina Commission on Higher Education Facilities Utilization Reports
- 4. University of South Carolina Aiken Campus Master Plan
- 5. USC Aiken's Deferred Maintenance Plan
- 6. <u>Summary List of Deferred Projects</u>
- 7. <u>Comprehensive Permanent Improvement Plan (CPIP)</u>
- 8. <u>Computer Replacement Cycle</u>