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.

Judgment

☑ Compliant ☐ Non-Compliant ☐ Not Applicable

Narrative

University of South Carolina Columbia Campus- General Introductory Information

The University of South Carolina serves more than 35,000 students at the Columbia campus and nearly 52,000 students system-wide based on 2019-2020 enrollment data. In addition to the Columbia Campus, the system includes the regional Palmetto College campuses that includes four additional regional campuses distributed across the state of South Carolina. With 12.92 million gross square feet in 234 buildings on the Columbia campus and another 594,000 cumulative square feet in 35 buildings on the regional Palmetto College campuses, the institution has considerable physical resources to support our mission and the scope of programs, services and research for a flagship R1 institution. The university ensures that it has the appropriate assets to support the institution through the administration of an effective structured and integrated capital planning process. There are numerous reports that document space assignment.

The Columbia campus is a vibrant composition of historic buildings adapted for contemporary pedagogies and innovative new facilities. Significant square footage has been added to the campus through new facilities in the recent decades to keep pace with growing enrollment and the expectations of college-bound students. Strategies of comprehensive capital renewal have adapted numerous older buildings in a manner that simultaneously addresses infrastructure maintenance needs and incorporates functional upgrades. The campus provides 6.7 million square feet of Education and General (E&G) space. Research is concentrated in three dedicated facilities and is also accommodated throughout the campus to include approximately 680,000 square feet of space FICM-coded for research purposes including some research institutes. A recurring National Science Foundation Survey of Science and Engineering Research Facilities is provided to the NSF to measure research space based on specific criteria.

On-campus Housing provides 6,457 beds situated in all districts of the campus and Housing leases 2,210 beds in nearby private housing developments that are within walking distance of the campus and simulate the on-campus experience with resident advisors and other amenities. A Greek Village provides chapter houses and beds for 774 students. Lastly, Athletic facilities comprising 1.28 million square feet in 32 buildings, many recently constructed, support 21 NCAA athletic teams and 560 student athletes.

An extraordinary number of capital projects completed in the last ten years reflect our commitment to ensuring that university facilities are adequate in quality, scope and condition to support our mission. New construction and expansions and renovation affecting exterior aesthetics, are subject to the university Design Guidelines and review by the Design Review Committee. A Capital Improvement Plan projects capital projects for five years into the future and serves to align funding with campus priorities. These programs are explained in detail later in this report.

In 2020, under the leadership of President Caslen, Strategic Priorities were identified with associated goals, objectives, programs and metrics to address all aspects of the university's ambitions. One priority related to the physical resources states, "Provide campus infrastructure – physical, virtual, capital and administrative – that supports academic excellence and preeminent student life". The stated goal for this priority is to "Provide a physical campus that supports the academic and student life needs of the modern and future university while ensuring the safety of the university community". Objectives include, "Create a system of renovation and construction that meets the modern and future pedagogical, academic and research needs of the university". Various Programs and Metrics will strengthen existing practices to ensure effective utilization of space and routine evaluation of infrastructure needs as a precursor to inclusion in the Capital Improvement Plan.

The university maintains various databases of our physical resources. A high level report, the Functional Summary Report, documents the assignment of net square feet on the Columbia campus according to FICM Space Use Codes (the report also includes circulation and service space to only exclude walls and structural elements from the gross total square feet). Another such comprehensive database is an annually updated Columbia Campus Real Property Management Spreadsheet for all land and buildings on the Columbia campus. Similar, but much shorter, spreadsheets exist for the Palmetto College campuses. Through this inventory, and other facility data, the university tracks data on all owned properties. The spreadsheet is accompanied by reports to justify properties that are vacant, only partialized utilized, or held for a future use. This annual analysis facilitates the evaluation of facilities that are candidates for disposition or demolition. The process to receive permission to demolish a building is controlled by the Office of the State Engineer (OSE). The Facilities Department evaluates the building, justifies the proposed removal, and estimates the cost to demolish as part of the request to the OSE.

Master Planning Process, and University of South Carolina Columbia Campus 2018 Master Plan with Appendices

To ensure that physical facilities meet both the current and future needs of the university, a comprehensive University of South Carolina Columbia Campus Master Plan and associated University of South Carolina Columbia Campus Master Plan 2018 Appendices are maintained to identify facilities needs and priorities to synchronize physical resource needs with the long-term strategic priorities of the institution. Updates to the Master Plan occur between two and eight years as dictated by campus needs and specific opportunities to improve the physical plant. The university has had a modern Campus Master Plan in place since 1994, with amendments in 1997, 2003, 2005, 2007, 2010. Many of the recommendations of the 2010 Master Plan have been implemented to ensure physical facilities can support campus growth. Strategies noted in the 2010 Master Plan to optimize existing spatial resources served as a catalyst to comprehensively renovate and/or repurpose several academic and residential buildings. This effort had the dual purpose of addressing deferred maintenance and updating facilities across the campus. The university has contracted with Sasaki and Associates since 1994 to update the university's Campus Master Plan. The Master Planning process is orchestrated by the university Architect who, using intimate institutional knowledge, also contributes to the vision and priorities of the plan. Representatives from Sasaki conduct extensive interviews with the President, the Provost, Vice Presidents, Deans, the Capital Planning Committee, the Capital Operations Planning Subcommittee (COPS), the Registrar's Office, Student Government Leadership, the City of Columbia planning officials, and local neighborhood associations to identify the needs of various constituents within and around the campus. The process of information gathering and discussion of needs and opportunities requires several months and can take almost a year. The emerging content and recommendations of the plan is first reviewed by the university Architect and subsequently members of the Capital Planning Committee. Revisions and adjustments are recommended to the Master Planner. Once the plan has the endorsement of university leadership staff, it is graphically presented to the Board of Trustees before being formally accepted and approved by a Board action.

Most recently, the university contracted with Sasaki and Associates in 2017 for a complete review and update to the Columbia Master Plan. Undergraduate enrollment had grown approximately 23% since the previous space needs assessment documented in the 2010 Master Plan. This extensive and comprehensive Master Planning process was completed in 2018, resulting in a plan that provides a current view of the campus and its long-range needs, and reflects priorities established by the Board of Trustees and university Administration, based on 10 Planning Priorities. The 2018 Master Plan document also reflects upon recent growth, surveys current space needs, and plans infrastructure development to create a vision for the next 25-50 years. The Master Plan considered the implications of enrollment growth based on a predictive growth plan. The Master Plan conducted a "Classroom Occupancy and Utilization" analysis with input from the Registrar's office and included as an appendix. The 2018 Master Plan concluded that generally the institution's current and planned facilities are adequate to meet the needs of educational programs and support services in light of the university's mission. The study noted that the 2018 classroom resources are nearing capacity; however, in accordance with the Capital Improvement Plan, classrooms have since been renovated and returned to service in the fall and spring of the 2019/2020 academic year restoring classroom capacity. In 2019, the old Law Center, now known as the Science and Technology Building, was repurposed to become a state-of-the-art undergraduate chemistry lab facility addressing significant concerns for both the quantity and quality of instructional labs. Attention is now being turned to create and modernize instructional Biology Labs. Furthermore, approximately 80,000 GSF of shell space exists in the Science and Technology Building for future renovation and upfitting to support future classroom and lab needs. The 2018 Master Plan concludes that these academic improvements and future expansions prepare the university for growth in accordance with our enrollment plan.

Other specific 2018 Master Plan concerns with planned responses include:

1. The campus provides on-campus residential space for all freshman, but there is limited space for upper classmen who have indicated a desire to remain living on campus after their freshman year. An enormous multi-stage residential development project, Campus Village, is planned to provide 1808 new beds (1545 net beds) by fall of 2022 or 2023. A second and third stage will provide another 1942 new beds (992 net beds) in subsequent years. Also, an expansion is thoroughly planned and shovel-ready for the Honors College Residence Hall to add 144 beds.

2. The quantity and condition of Instructional Science Labs were identified as a concern in the 2010 and 2018 Master Plans. Since 2010, several Biology labs have been created in repurposed areas of the Jones PSC and Sumwalt buildings. More notably, 17 new state-of-the-art instructional chemistry labs were opened in January of 2020 satisfying the need for chemistry for several years. Additional instructional biology labs will be created through staged renovations in the Jones PSC building beginning with four new labs. These planned actions will methodically address the concern for instructional labs for the foreseeable future.

3. Student Union space was identified as a concern in the 2010 and 2018 Master Plans. The university has recently commissioned a national and a local design firm to conduct a broad study of campus options and associated costs to expand Student Union space. The study contemplates the expansion and renovation of the current Student Union. The study is expected to be complete in the summer of 2020.

4. Outdoor Recreation fields are identified as a shortfall in the 2010 and 2018 Master Plans. A project to develop numerous fields has begun design and will be implemented in the next few years on a portion of a 300-acre tract land to be acquired in 2020.

In 2020, a comprehensive Master Utility Plan (MUP) was commissioned and is in progress at the time of this 2021 SACSCOC

report. The MUP will assess the condition of the campus' energy and utility infrastructure to manage risk and plan capital improvements. The MUP will be the foundation for a subsequent strategic effort to form a partnership with an energy provider to enhance the service reliability, maintenance, distribution, and economy of energy into the future.

University of South Carolina Design Guidelines

University of South Carolina Design Guidelines were developed in 2008 by Sasaki and Associates to set standards for architectural and site design throughout the campus. This guideline establishes prescriptive design parameters for character and scale, space and architectural definitions, and materials for buildings, green and public spaces, and streets and parking. This guideline, which is provided to all architectural and engineering firms that are designing on-campus projects, helps ensure that any changes to physical resources are designed and built in a consistent manner. Projects are reviewed during schematic design and design development by a formal committee composed with trustees, university leadership, City of Columbia planners, and internal and external design professionals. Consequently, development on the campus has proceeded along a path of complimentary design where emphasis is on expanding and perpetuating the fabric of the campus character as opposed to each building taking a self-reverential and autonomous architectural position.

The Columbia campus includes over 50 historic structures that are subject to national historic preservation guidelines and an agreement with the State Historic Preservation Office (SHPO) when maintenance and renovations are contemplated. Protecting this heritage of historic buildings and grounds is considered critical to retaining our unique character and campus legacy. An Annual Historic Building Report is submitted to SHPO that documents planned, ongoing and completed projects that affect our historic buildings.

Many campus projects occur within the City of Columbia "Design Development Overlay District". Consequently, university projects that have exterior design implications are also subject to the City's Design Development Review Committee (DDRC). Since the university sets a high standard for design in our community, projects routinely receive DDRC approval with little commentary or recommended refinements.

Columbia Campus Physical Resource Planning and Capital Project Process

Capital assets are an integral component of the university and are developed and preserved accordingly. To fulfill its mission, the University of South Carolina supports on-going strategic capital investments in academic, research, student life, athletic, housing, parking and other plant facilities using an appropriate mix of funding sources including state appropriations, state institution bonds, revenue bonds, internal reserves, and private giving. The university has a structured and integrated capital project planning process that ensures capital investments reflect the highest institutional priorities and sound financial management practices. The comprehensive capital planning process considers the needs of all academic and administrative units as well as the regional Palmetto College campuses and prioritizes these needs through the work of the Capital Planning Committee, which has broad academic and administrative representation. To further ensure the ability to match facility resources with the university's needs, the Five Year Capital Improvement Plan outlines the university's facilities-related capital renewal and new construction for capital projects in excess of $250,000. Individual work units make their requests for space and renovation needs through the Annual Blueprints for Academic Excellence and Service Excellence as a precursor to review by the Capital Review Committee.

The university's capital planning process has a two-fold purpose: 1) to define procedures that systematically set priorities and thoroughly consider the university's capital needs; and 2) to ensure the appropriate mix of funding sources and provide guidance on the strategic use of debt. All activities related to project approval, new construction, renovation, and major maintenance of the university's capital assets are subject to the FINA 7.00 *Capital Planning Policy*.

In accordance with the Capital Planning Policy, all capital planning activities are overseen by a broadly representative Capital Planning Committee (CPC), and are fully integrated with other university strategic planning activities and is referenced in the University of South Carolina Faculty Manual. The Senior Vice-President for Finance and Administration, the Chief Operating Officer and the Provost, through their roles as chairs of the Capital Planning Committee, are responsible for integrating capital planning throughout the university's strategic planning process. To assist the CPC, the Capital Operations Planning Subcommittee (COPS) has been established and is made up of senior staff members designated by CPC chairs. Capital projects that are forthcoming for approval and implementation are documented in the university's Five Year Capital Improvement Plan which provides fund sources and a construction commencement schedule for every project exceeding $250,000. The Five Year Capital Improvement Plan is developed based on requests from within the university, and presented to the Board of Trustees each year. Projects in the Five Year Capital Improvement Plan are individually approved by the Board and other state regulatory agencies as required at the appropriate time in accordance with the Plan. In addition to the Capital Project approval process, the CPC oversees the allocation of university space and makes recommendations to the President for consideration. University units that have space related needs will submit those requests to the Provost, the university Architect, or the Senior Vice President for Administration and Finance. Depending on the magnitude of the request, the CPC considers each unit's request, consults with the Registrar's office where appropriate, and makes recommendations to the President for changes in the allocation of space in use across the campus. The Capital Planning Process Diagram illustrates how senior leadership influences the Five Year Capital Improvement Plan.

The university considers capital requests as academic and administrative units submit proposals to the Capital Planning Committee during the strategic planning process in the spring of each year. The university ensures that the physical resource needs of every academic, student support, and administrative unit are evaluated and considered. While operating budget requests submitted in the spring are considered by the Board in June of each year, capital projects are considered by the CPC over the course of the summer and fall and presented to the Board for consideration at Buildings and Grounds Committee meetings that occur four times annually. Based on the capital requests, the CPC prioritizes these needs in accordance with structured criteria that consider the project's relationship to the mission of the institution, funding requirements (both construction and incremental operating), consistency with the Campus Master Plan, and available financing options. In addition to projects considered as a part of the Five Year Capital Improvement Plan, interim capital needs of the university are considered by the CPC and/or COPS. In these cases, units submit the proposed project for consideration- often following a feasibility study. The CPC meets on a periodic basis to review the Plan and consider any interim project requests. The meetings of the CPC are coordinated with the meetings of the Board and other regulatory state agencies so that projects can be reviewed and approved as efficiently as possible. Projects considered through this process must have specifically identifiable sources of funds to complete the project prior to being submitted.

The Five Year Capital Improvement Plan also serves as the basis for the preparation of the State's Comprehensive Permanent Improvement Plan (CPIP), which is due to the Commission on Higher Education (CHE) and the Department of Administration on or about June 15th of each year. CPIP is developed for the upcoming five fiscal years and includes a project description, justification, fund source(s), construction budget and recurring operational expenses for any renovation project in excess of $1 million and any new construction in excess of $500,000.

The Board of Trustees must approve capital projects that exceed $250,000. For renovation projects above $1,000,000 and new construction projects over $500,000, the Commission on Higher Education, the legislature's Joint Bond Review Committee, and the State Fiscal Accountability Authority must grant their approval as part of a two-step process. Phase I of this process authorizes approximately 1.5% of the estimated project budget to be expended for schematic architectural and engineering design to further define project scope, project schedule and budget. Once complete, documents resulting from Phase I are submitted for Phase II approval to the BOT, the CHE and the JBRC/SFAA to authorize the completion of design and construction of the project. Project schedules are considered in the context of the Five Year Capital Improvement Plan and CPIP. Refer to the Permanent Improvement Project Submission Flowchart illustration for a flowchart of the approval process.

Physical Facilities Design, Maintenance, and Operation

The University of South Carolina is committed to operating, maintaining, and continually improving facilities that meet the current and long-term needs of the institution. To do so, physical facilities are operated and maintained through a comprehensive facilities management program. The institution ensures that its facilities serve the needs of the educational and research programs, support services, and other mission-related activities through the use of effective planning processes and programs that regularly consider the needs of the entire campus. Facilities management is centralized at the University of South Carolina Columbia campus with decentralized operations on each of the regional Palmetto College campuses.

The Facilities Management Department is the primary organization responsible for planning, coordinating design and construction, operating, and maintaining the facilities and grounds on the Columbia campus. The mission of the Department is to create and maintain a space for people to learn, live, work, and play. The Department is comprised of four divisions - Facilities Planning, Design and Construction (FPDC), Facilities Services (Operations and Maintenance), Facilities Administration & Finance, and Facilities Procurement. These areas are staffed with professional engineers, architects, craftsmen, technicians, business support staff, and administrative experts.

Facilities Planning, Design and Construction (FPDC) provides the University of South Carolina system-wide project management, programming, planning, design, and construction observation services. Interior design services and landscape architecture services are also managed by this department. The department coordinates campus master planning, capital project approvals with the Board and state regulatory agencies, researches and submits CHE reports, and manages the university system space inventory. Annually, many buildings are surveyed to verify that space is utilized in accordance with granular space data which can be formatted from numerous criterions for use by university leadership to inform planning decisions. FPDC also manages the effort to procure and maintain leases that provide needed space in buildings that the university does not own. Leased space enables the university to nimbly expand and contract as new space needs are identified that cannot be accommodated on campus or to accommodate short term space needs that may be based on a termed grant. Leases are procured in accordance with state regulations, are approved by the Board of Trustees when the lease contract exceeds $250,000, and are documented in a Lease Management Spreadsheet.

Facilities Services (Operations and Maintenance) ensures that the facilities on the Columbia campus are in effective operating conditioned and are maintained to meet the academic and service needs of the campus. Facilities Services manages small improvement projects with in-house construction crews and responds to maintenance service requests. The unit also works to address the deferred maintenance needs of the campus within available funding. The university's extensive energy conservation initiatives and energy management activities are managed through this department, which also is charged with maintaining the appearance of the university grounds. This department is organized into eight primary units to support the facilities across campus:

1. Work Management Services

2. Maintenance Services – electrical, plumbing, welding, roofing, carpentry, painting, locksmith, engine repair, and HVAC support.

3. Landscaping and Waste Management Services

4. Custodial Services

5. Energy Management- EMS crew, high voltage crew, steam crew, utility accounting, project management

6. Utility Plant Operations

7. Building Services- Inhouse remodeling and construction crews

8. Small Business work activity- Directs small projects on the Columbia campus and the regional Palmetto College campuses.

Maintenance Planning

As on all large public university campuses that maintain hundreds of buildings of widely varying ages, deferred maintenance and capital renewal is an omnipresent concern. Maintenance is prioritized in order of life safety projects first, followed by building envelope integrity, mechanical and electrical infrastructure, accessibility, and interior finishes. Every three years, all Education and General (E&G) buildings in the university system are inspected for 15 major building system categories and 89 subcategories. The surveys are consolidated in a Columbia Campus Building Condition Survey 2017. Surveys are completed for the regional Palmetto College campuses as well. External third party engineering and architectural firms are routinely contracted to perform building condition assessments to assist with identifying and prioritizing maintenance work, and estimating preliminary project budgets. Internal assessments specifically prioritize maintenance for roofs, elevators and mechanical systems. This data informs the "Capital Renewal" section of the Five Year Capital Improvement Plan, which serves as the maintenance plan for capital projects over $250,000. Hundreds of smaller maintenance and preventative maintenance projects occur that are prioritized and informed by the institutional knowledge of maintenance staff and thousands of annual service calls that are routed to the Facilities Management Call Center by the campus community to report specific building concerns. The Five Year Capital Improvement Plan commits funding to deferred maintenance and capital renewal from multiple sources. Primarily, these sources include Institutional Capital Project Funds (ICPF), Institutional Funds from various departments, Capital Reserve Funds (CRF), and Institutional Bonds (debt). Smaller maintenance projects, not included in the Five Year Plan and generally under $100,000 for each project, are funded with an Education and General Maintenance Reserve (E&G MR) account that originates from a student fee specifically collected for maintenance. A recent audit of Education and General (E&G) maintenance spending since fiscal year 2018 and planned expenditures through fiscal year 2022 were cumulatively in excess of $118 million.

Technological Infrastructure (General IT Services and Support)

The university extends beyond its brick and mortar campuses through distance learning and other activities that are remote from the campuses. The university's technology infrastructure is designed and managed to enable the educational mission, first and foremost.The educational success of distance learning and other remote activities—as well as on campus activities— very much depends on the availability of a robust technological infrastructure, which is maintained, staffed, and updated to assure that the technological platform necessary for distance learning and other research, teaching, and service activities is readily available. The Blueprint for Service Excellence developed by the Office of Information Technology is an evolving strategic plan, which focuses on technology availability and service issues. As outlined in the Distance Education 5-year Plan, the Vice Provost and Director of Distance Learning is charged with the data collection, analysis, and action that is reflected in the annually updated Distance Learning Plan as well as bringing together various parties of interest from the Department of Information Technology (DoIT), the Center for Teaching Excellence, the academic units with distance learning offerings, and university administration to assure that high quality courses are provided to distance learning students.

Currently, the primary university-wide technological platforms for distance learning are Blackboard and Adobe Connect/Adobe Presenter. Courses and individual support are provided by staff of the Office of Information Technology and the Center for Teaching Excellence. Individual academic units utilize supplementary technological platforms such as Camtasia and Telepresence to meet their particular distance learning course development and delivery needs.

Many services provided by the Division of Information Technology (DoIT) support teaching and learning, regardless of location, including distance learners (general IT services and support) while others are reasonably focused on on-campus programs. The DoIT, housed on the flagship campus in Columbia, is headed by the Vice President for Information Technology and Chief Information Officer, with IT leadership responsibility across the university's eight campuses, professional schools, and distance learning. Additionally, individual units, including the regional Palmetto College's Lancaster, Salkehatchie, Sumter, and Union campuses, as well as individual colleges and schools in Columbia, provide specialized components of infrastructure and personnel who support their specific needs.

DoIT's Strategic Priorities 2018-2021 aims to "advance the academic and research missions of the university" as its first priority. This includes objectives to collaborate with teaching organizations, improve efficacy of classroom resources, incorporate new tools into learning environments, and expand research and high-performance computing capabilities.

"Enhance the student digital experience" is DoIT's second strategic priority. Chief among its objectives, DoIT seeks to continuously improve the wireless network and establish consistent use of learning tools.

To these ends, DoIT maintains enterprise-wide infrastructure, including learning management system, productivity software, wired and wireless network, a Data Center and a technology assistance areas such as the Carolina Tech Zone and the Service Desk.

Carolina Tech Zone (CTZ)

The CTZ provides hands-on technology support for all students. Located on the Columbia campus, personnel and services are available free-of-charge to any student and include connecting to the network, operating system support, installing software, diagnosing computer problems, removing viruses, providing mobile support and more.

Office 365

The University of South Carolina is a Microsoft Office 365 institution, offering instructors, faculty, and students access to email via Outlook as well as desktop/cloud-based productivity software such as Word, Excel, PowerPoint, and Power BI.

Research Computing

The DoIT Research Computing team directly supports research faculty and staff by enabling the effective use of high-performance technologies that enhance the quality and productivity of research at the University of South Carolina. The team designs, builds, and maintains High Performance Computing (HPC) technologies that consist of HPC Clusters, high performance storage, accelerators, and advanced networking. The current flagship cluster of the university has a total of 14,680 CPU cores and 96 GPUs. The total cluster storage capacity is 1.9 Petabytes. The Research Computing group also maintains several smaller-scale clusters specifically built for teaching and interactive usage.

Physical Internet Connectivity and Data Center

At&T, CenturyLink, and Segra provide physical connectivity and commodity internet bandwidth. Connectivity is provided between the Columbia campus and the other seven campuses. Distribution connectivity is provided to the university Data Center, with a current distribution to core of 10GE. Future distribution to core and Data Center is planned for 100GE.

Classroom Technologies

 DoIT supports 611 classrooms on the Columbia campus that facilitate traditional on-campus teaching and learning. Ninety-nine of these rooms receive additional support from the college, school, or department in which they are housed to ensure special IT needs are fulfilled to suit the purposes of a specific department. DoIT personnel deploy and maintain projectors, podiums, desktop cameras, audio/speaker systems, and assistive listening technologies as needed across the campus. Technology-enhanced classrooms also include web conferencing capabilities, including multi-way video, audio, content sharing, and recording of sessions that supports both synchronous and asynchronous teaching and learning.

Learning Management System

DoIT supports and administers the learning management system, Blackboard, for the entire university system. The University of South Carolina was a founding partner in the late 1990s as online learning emerged in higher education. Blackboard supports and facilitates both traditional and distance education and may be used as much as desired in a given course at the discretion of the instructor or faculty. Blackboard is the preeminent LMS in higher education, and facilitates activities and interaction such as posting of assignments, course documents, discussion boards, grade center, and literally hundreds of smaller applications that support teaching and learning, known as building blocks and learning technology integrations (LTIs). A few examples include electronic textbooks from multiple publishers, complete with inclusive access, iClicker, remote proctoring of tests and quizzes through ProctorU, and lockdown browser through Respondus to support academic integrity.

In 2012, the University of South Carolina transitioned its Blackboard from on-premise hosting on the Columbia campus to Blackboard's managed hosting service, housed in a secure, high-tier data center that includes redundancies for network, and expert, proven approaches to disaster prevention, disaster recovery, and systems administration. In addition to DoIT personnel, Blackboard provides a Service Delivery Manager who is largely dedicated to the University of South Carolina account. As of November 2019, the university is on Blackboard version 9.1, release Q2 2018 with Cumulative Update 7.

In 2018, the University of South Carolina purchased and successfully deployed Blackboard Ally to provide alternative,

highly accessible formats of course content to assist students with disabilities, including Tagged PDF, HTML, MP3, ePub, and electronic Braille.

Beginning in 2019, the University of South Carolina piloted the use of Blackboard Collaborate to facilitate online learning and to provide virtual classroom space. The seamless integration with Blackboard simplifies the instructors' and students' digital experience, making it unnecessary to acquire a separate license, remember a different set of usernames and passwords, acquire special microphones or webcams, or hunt for links to recordings. Because a Collaborate session is generated within a course, the recording and content become a native course component. Collaborate utilizes high definition (HD) audio and video, leverages any camera and microphone a user may have, and has responsive design so it can be used with any web browser – including tablets and smartphones.

In December 2019, the University of South Carolina will take a major step forward with its LMS. The university will transition to Software-as-a-Service (SaaS) model and adopt Ultra Base Navigation. Moving to SaaS model will ensure the University of South Carolina has access to a monthly cadence of releases for new tools, services, features, bug fixes, and patches through the new cloud-standard "continuous delivery model." This will place the University of South Carolina at the forefront of LMS evolution, ensuring our instructors and learners have access to the latest technologies. Moreover, DoIT will have releases go through a rigorous process of user testing by a team of faculty, instructors, and students, followed by concerted governance decisions about when to make new tools and services available during the academic cycle. Ultra Base Navigation will deliver a fresh user interface, more contemporary design, and new features such a news-feed style Activity Stream to make learners aware of newly posted grades and assignments, a robust calendar with key dates pulled automatically from courses, and responsive design that enables instructors and students to access and use Blackboard on any type of device: computer, tablet, or smartphone.

In the spring term of 2020 the university will pilot the use of Ultra Course View with volunteer faculty and instructors. Ultra Course View revolutionizes the user experience, economizing the tools and features that are automatically included with each course, simplified workflows, and enhanced accessibility (WCAG 2.0) with responsive design. Following this pilot, the university will assess its readiness and timeline to launch the Ultra Course View more broadly.

Enterprise Risk Management

As a state entity, the university is required by law to purchase property insurance coverage (building and contents, automobile, data processing, inland marine, ocean marine, and aircraft/drone) through the SC Insurance Reserve Fund (IRF). Building values and coverage levels are determined by appraisals conducted by the IRF. The university has implemented a comprehensive Enterprise Risk Management (ERM) and Insurance program which incorporates the fundamentals of risk identification, risk assessment, risk treatment, risk monitoring and risk review. Currently, the Columbia campus has established an ERM process using the guidance of International Standards Organization (ISO) 31000-2018 "Risk Management - Principals and Guidelines". ISO provides principles, framework, and process for managing any form of risk in a systematic, transparent and credible manner. The ERM and Insurance program is committed to: preventing adverse claim experience through training, education, and inspection; advising and assisting university managers in identifying potential risks and losses; advising and assisting university managers in implementing controls to mitigate risks; and monitoring established risk controls and treatment. The university mitigates the financial consequences of physical, human, and financial loss by purchasing insurance through the State Budget and Control Board Office of the Insurance Reserve Fund (IRF). As needed, the IRF policies are supplemented by the purchase of policies through the private insurance market. Several sections of the South Carolina Code of Laws authorize and require the State Budget and Control Board, through the IRF, to provide insurance to governmental entities. These statutes in turn require most state entities to purchase insurance through the IRF.

The university has a Risk Management Officer and a department that monitors and maintains an overview of the facilities and other risk matters through an Enterprise Risk Management System. A Risk Management Spreadsheets evaluates risks associated with the management of Facilities and sets forth safeguards to mitigate this risk. The department ensures that the University of South Carolina maintains the proper state mandated coverage using insurance products for a variety of insurable risk items. Facilities coordinates with the Risk Management officer to include insuring new facilities, coordinating construction liability policies, loss of facilities that is expected to result in a claim, and numerous other matters.

Internal Audit

The Office of Audit and Compliance occasionally performs routine audits that involve Facilities practices to verify processes exist to reduce risk to physical resources and they make recommendations when they believe additional processes could further safeguard the university. Refer to the Audit Report for Capital Maintenance from 2017. In this case, the report recommended condition assessments of buildings which was accomplished in 2018 when assessments reviewed 10 E&G buildings comprising 1,351,838 gross square feet. These buildings are being evaluated for renovation and funding sources are being determined.

Regional Palmetto College Campuses

The goal of the regional Palmetto College campuses is to make a University of South Carolina college education convenient and accessible to everyone. This is accomplished through online learning programs and two-year campuses throughout the state that let students start their education wherever they are, without having to relocate or commute.

University of South Carolina Lancaster

The University of South Carolina Lancaster campus is comprised of nine buildings containing 301,741 GSF. Of these nine buildings, four buildings are owned by the university, (141,036 cumulative GSF), and five other buildings are leased, (160,705 cumulative GSF). Approximate FTE enrollment for fall of 2019 is 1097 students. The University of South Carolina Lancaster maintains control over all physical assets in accordance with University of South Carolina Policies & Procedures. The responsibility for establishing a system of internal controls for safeguarding the physical plant is vested with the Campus Dean. The Dean may delegate some aspects of authority to implement procedures but retains ultimate responsibility. The Lancaster campus Facilities Management conducts annual physical inventories of capital assets in accordance with university policy and reports its findings to University of South Carolina Consolidated Services. The University of South Carolina Lancaster Archivist has physical control of Native American Pottery Collections and archival materials. Annual physical inventories will be conducted on these newly acquired collections. Building access and key control is under the authority of Facilities Management. The University of South Carolina Lancaster Business Office monitors adherence to university policies and procedures and follows generally accepted accounting principles in recording asset activity. The Business Manager works through the University of South Carolina Risk Management Office and maintains insurance coverage through the South Carolina Insurance Reserve Fund. The University of South Carolina Lancaster Law Enforcement and Security Office provides night watchmen to safeguard university property, checking that all doors are secured after hours and monitoring activity on or near the campus. That Office also coordinates with the local law enforcement to provide additional oversight of activities after hours. The University of South Carolina Office of Internal Audit conducts periodic audits of the campus and includes the safeguarding of assets in its review of the campus. Up-to-date records are maintained on physical inventories and are available for inspection.The University of South Carolina Lancaster Business Office has well qualified staff to monitor adherence to internal controls and the safeguarding of assets.

University of South Carolina Salkehatchie

The University of South Carolina Salkehatchie campus is comprised of 23 buildings containing 203,404 GSF. Of these 23 buildings, 18 buildings are owned by the university, (167,551 cumulative GSF), and five other buildings are leased, (35,853 cumulative GSF). Approximate FTE enrollment for fall of 2019 is 636 students. The University of South Carolina Salkehatchie has two campuses, one in Allendale and a second campus in Walterboro. The physical resources of the University of South Carolina Salkehatchie are handled through the Business Office and the office of the Facilities/Maintenance Director. The Facilities/Maintenance Director ensures that the maintenance and development of the physical and environmental facilities of the university will result in a high quality environment for students, faculty, staff and visitors in performing the university's mission. The Salkehatchie campus conducts a physical inventory each year, and the results are kept on file within respective department areas such as maintenance and information technology. Duplicate copies of the inventory are maintained within the dean's office. In order to reduce exposure to risk, the University of South Carolina Salkehatchie coordinates with the University of South Carolina Risk Management Department in Columbia to ensure proper insurance levels of coverage on all physical assets are maintained and updated. There are periodic Internal Audits of the physical resources that are reported to the University of South Carolina Board of Trustees. There is a standard BUSF 5.00 *Inventory Accountability Policy* for all University of South Carolina divisions. The Director of Finance prepares an annual Budget that is submitted for approval to the University of South Carolina Board of Trustees. The Director of Finance also submits an annual CPIP (Comprehensive Permanent Improvement Plan) to the South Carolina Commission on Higher Education (CHE). CPIP priorities are then ranked by CHE for project completion and budget allocations.

University of South Carolina Sumter

The University of South Carolina Sumter campus is comprised of eight university-owned buildings containing 222,948 GSF. Approximate FTE enrollment for fall of 2019 is 846 students. The physical resources of the University of South Carolina Sumter are handled through the Business Office and the office of the Facilities/Maintenance Director. The Facilities/Maintenance Director ensures that the maintenance and development of the physical and environmental facilities of the university will result in a high quality environment for students, faculty, staff and visitors in performing the university's mission. The Sumter campus conducts a physical inventory each year, and the results are kept on file within respective department areas such as maintenance and information technology. Duplicate copies of the inventory are maintained within the Dean's Office. In order to reduce exposure to risk, University of South Carolina Sumter coordinates with the University of South Carolina Risk Management Department in Columbia to ensure proper insurance levels of coverage on all physical assets are maintained and updated. There are periodic Internal Audits of the physical resources that are reported to the University of South Carolina Board of Trustees. There is a standard BUSF 5.00 *Inventory Accountability Policy* for all University of South Carolina divisions. The Director of Finance prepares an annual Budget that is submitted for approval to the University of South Carolina Board of Trustees. The Director of Finance also submits an annual CPIP (Comprehensive Permanent Improvement Plan) to the South Carolina Commission on Higher Education (CHE). CPIP priorities are then ranked by CHE for project completion and budget allocations.

University of South Carolina Union

The University of South Carolina Union campus is comprised of eight buildings containing 71,899 GSF. Of these eight buildings, 5 buildings are owned by the university, (62,486 cumulative GSF), and three other buildings are leased, (9,413 cumulative GSF). Approximate FTE enrollment for fall of 2019 is 687 students. The University of South Carolina Union has two campuses, the primary campus is in Union and a satellite campus is in Laurens. The physical resources of the Union campus are handled through the Business Office. The Facilities/Maintenance Director and staff, under the leadership of the

Business Manager, ensures that the maintenance and development of the physical and environmental facilities of the university will result in a high quality environment for students, faculty, staff and visitors in performing the university's mission. There are periodic Internal Audits of the physical resources that are reported to the University of South Carolina Board of Trustees. There is a standard BUSF 5.00 *Inventory Accountability Policy* for all University of South Carolina divisions. The Business Manager prepares an annual budget that is submitted for approval to the University of South Carolina Board of Trustees. The Business Manager also submits an annual CPIP (Comprehensive Permanent Improvement Plan) to the South Carolina Commission on Higher Education (CHE). CPIP priorities are then ranked by CHE for project completion and budget allocations. Maintenance services are provided through an in-house work force and selective contract services for roof repair, elevator maintenance, fire alarm systems, building environments controls and automatic door maintenance.

Sources

- Adobe Connect
- Adobe Presenter
- Audit & Advisory Services
- Audit Report for Capital Maintenance
- BUSF 5.00 Property Accountability
- Blackboard
- Budget Office
- CHE_Building_Data_Summary_for_USC_SYSTEM_2015
- Camtasia
- Capital Planning Approval Process
- Capital Planning Policy 7.00
- Center for Teaching Excellence
- Columbia Campus 2019 CPIP
- Columbia Campus Building Condition Survey 2017
- Columbia Campus Real Property Management 2019
- Consolidated Services
- Distributed Learning Report
- DoIT Blueprint 2018
- FINA 7.00 Capital Planning Policy
- Five Year Capital Improvement Plan
- Function Summary Report_26MAY20
- IT Strategic Priorities 2018-2021
- Lancaster Facilities Management
- Law Enforcement and Security
- Lease Management Spreadsheet
- Native American Studies Center
- Office of Information Technology
- Permanent Improvement Project Submission Process
- Risk Management
- Risk Management Spreadsheets
- Risk Management and Insurance
- Telepresence
- USC Annual Historic Building Report FY2019-20
- USC Columbia Campus Master Plan 2018
- USC Columbia Campus Master Plan 2018 Appendicies
- USC Design Guidelines
- USCL Business Office
- University Policies