

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

SACSCOC Reviewer Comments

Non-Compliance

The institution's response is in violation of the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) policy, "Reports Submitted for SACSCOC Review," by including live links in its response and electronic documentation that is not consistently bookmarked, indexed, searchable, and readable.

The institution serves more than 5,000 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. The institution has 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 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 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 University of South Carolina is comprised of eight university-owned buildings containing 222,948 GSF. Approximate FTE enrollment for fall of 2019 is 846 students. 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 institution stated that it maintains control over and ensures adequate physical facilities and resources at all its campuses and its off-site locations, but additional information and evidence is needed.

The institution has contracted with Sasaki and Associates since 1994 to update the university's Campus Master Plan. The Master Planning process is orchestrated by the institution's architect who 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 emerging content and recommendations of the plan is first reviewed by the institution's architect and subsequently members of the Capital Planning Committee. Once the plan has the endorsement of institution's leadership staff, it is graphically presented to the Board of Trustees before being formally accepted and approved by a Board action.

Most recently, the institution 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 the institution's administration, based on 10 Planning Priorities. The Master Plan considered the implications of enrollment growth based on a predictive growth plan. The 2018 Master Plan concluded that the institution's current and planned facilities are adequate to meet the needs of educational programs and support services considering the institution'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 an undergraduate chemistry lab facility which addressed significant concerns for both the quantity and quality of instructional labs. Attention is now being turned to creating and modernizing 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 institution for growth in accordance with its enrollment plan. The conclusions of the Master Plan are something that it would be helpful to have more information about. How were the conclusions reached regarding adequacy?

The institution described an extensive capital project planning process that considers the academic and administrative units as well as the regional Palmetto College campuses and prioritizes these needs through the work of the Capital Planning Committee. To further ensure the ability to match facility resources with the institution's needs, the Five-Year Capital Improvement Plan outlines the institution'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 institution's capital planning process has a two-fold purpose: 1) to define procedures that systematically set priorities and thoroughly consider the institution'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 institution's capital assets are subject to the institution's Capital Planning Policy.

and are integrated with other institutional strategic planning activities. 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 institution'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 institution'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 institution 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 institution's space and makes recommendations to the President for consideration.

While a great deal of information was presented, the documents did not clearly address how the institution's facilities and resources are adequate, both on and off campus nor how they appropriately serve the needs of the institution's educational programs, support services, and other mission-related activities. The Off-Site Reaffirmation Committee was unable to locate documentation that the physical facilities of the institution are adequate to support the mission of its programs and services. Comparative benchmarking data, surveys from faculty, staff, and students, and/or data comparing facility needs to actual available facilities may be helpful to establish this. This information was also lacking for the institution's off-campus instructional sites. No statements were made as to the extent of deferred maintenance on the campus, nor were documents provided regarding an equipment inventory or disposal policy.

There were numerous links to live websites provided, some documentation was illegible in the format provided and at least two links went to sites that were unrelated to the institution (Camtasia, Adobe Connect).

Campus Response

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 ([Document 01](#)) and associated University of South Carolina Columbia Campus Master Plan 2018 Appendices ([Document 02](#)) 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 updates and amendments in 1997, 2003, 2005, 2007, 2010 and 2018. 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 a01nd 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 Trustees, 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 Planning consultant. 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:

1. Articulate a 2050 Campus Vision
2. Reimagine the South Campus Engineering District
3. Build additional on-campus housing
4. Initiate Health Sciences Campus Planning
5. Connect the campus to the Congaree River
6. Empower the City-University Partnership
7. Anticipate institutional development plan zoning
8. Evaluate 2025 academic and student life needs
9. Reach for Research excellence
10. Invest in the civic realm and public art

In [Appendix A](#), the Master Plan provides case studies and broadly benchmarks USC with the Universities of Washington, Texas and Kentucky comparing enrollment, student/faculty ratios, campus size, growth, and other attributes. The 2018 Master Plan document also reflects upon recent growth on [pages 8-12](#), surveys of current space needs ([see Appendix B \(Document 03\)](#)), 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 Enrollment Growth Assumptions 10-year Horizon which predicts growth from the 2017 undergraduate headcount of 25,556 to 31,556. The Master Plan included a "Classroom and Lab Occupancy and Utilization" analysis, with input from the Registrar's office, to assess needs and present findings and conclusions in Appendix B. Findings and conclusions illustrated in Appendix B related to Space Assessment and Needs are summarized below.

[Findings \(Space Assessment and Needs Analysis from the 2018 Master Plan and Appendix B\):](#)

A. Challenges (Source: Appendix B, [page 3](#))

1. Undergraduate enrollment has grown by more than 23% since the 2010 Master Plan, adding 4,837 students.
2. Classroom space is perceived as nearing capacity especially when an academic building is temporarily removed from the inventory to be renovated.
3. Instructional Labs are operated beyond normal instructional time slots and are some instances undersized.
4. Renovation strategies are needed for inactive space that can be used to address enrollment growth.
5. Note to SACSCOC reviewers: Solutions to these challenges are planned or have been implemented as described below.

B. Methodology for Assessment (Source: Appendix B, [page 4](#))

1. Use the university's inventory to quantify existing classroom and instructional lab space.
2. Survey and analyze current utilization of instructional space. The Master Planning process included analyzing actual classroom utilization data and course scheduling for every classroom on the campus. This information was provided by the university Registrar.
3. Apply national planning guidelines to university data.
4. Project future space needs based on the 10-year enrollment growth target.
5. Review conclusions with the Registrar to ensure their institutional knowledge aligns with the finding of the Master Planning effort.

C. Adequacy of Classroom Space

A summary of findings related to classrooms is described below in items 3 and 4 and concludes there is sufficient classroom space and sufficient shell space that can be upfit for future growth in enrollment. The Master Planner, Sasaki evaluates space utilization and makes recommendations based on Association for Learning Environments guidelines and their own internal metrics that have been developed through benchmarking and decades of higher education planning.

1. The Columbia campus provides 216 General Classrooms (FICM 110), 262 Class Laboratories (FICM 210) and 284 Open Laboratories (FICM 220).
2. Appendix B of the 2018 Master Plan includes 24 pages of graphs and narrative to demonstrate classroom utilization for every classroom with data for occupancy, weekly hours of use and time slots by weekday. ([Refer to pages 6 through 29](#)).
3. The optimized classroom supply and demand graph shows a supply of classrooms that exceeds current demand in all instances except for small 1-20 person classrooms. Findings recommend that scheduling could be optimized if more smaller classrooms were available so that larger classrooms would not be used for smaller classes. (Source: Appendix B, [page 23](#)).
4. An analysis of classroom scheduling has produced an occupation and utilization graph demonstrating that 92% of the classrooms fall within or below the 40-hour standard for maximum weekly utilization hours. Very few classrooms exceed the 85% occupancy standard. (Source: Appendix B, [page 26](#)). This is interpreted as evidence of sufficient classroom space.
5. Adaptive reuse of Close-Hipp and the old Law Center could address future classroom space needs. (Source: Appendix B, [page 5](#)). Note: Subsequent to the 2018 Master Plan, all classrooms in the Close-Hipp Building have been returned to service. The old Law Center, renamed as the Science and Technology Building, contains more than 50,000 gross square feet of shell space that can be upfitted to provide approximately 24 classrooms of small and medium sizes to economically address future enrollment growth.
6. In summary, the 2018 Master Plan states a current classroom need of 15,000 assignable square feet (ASF). This need has been met with renovated and recommissioned classrooms at Close-Hipp. The Master Plan projects a future classroom need for 30,000-45,000 assignable square feet of classroom space. This need will be met with the upfit renovation of the classroom tower in the Science and Technology Building. (Source: Master Plan, [page 18](#) and Appendix B, [page 57](#)).

D. Classroom Enhancement Committee and Faculty Input

1. The university allocates \$1 million dollars annually to upgrade and renovate general classrooms. Renovations include technology upgrades, furniture and equipment replacements, and room finish replacements such as carpet, lighting, paint, and new ceilings.
2. A Classroom Enhancement Committee exists and includes membership from faculty, Department Chairs, the Provost's Office, the Registrar, Information Technology staff, and staff from the Facilities Planning Design and Construction Department.
3. The mission of the Classroom Enhancement Committee is to ensure classrooms operate at maximum effectiveness and fulfill pedagogical needs.
4. Rooms that will receive renovations are determined by:
 - a. Faculty who provide input and concerns to representatives on the committee or respond to surveys.
 - b. Information Technology staff catalog technology assets in each classroom and make recommendations for rooms in need of audio/video equipment upgrades.
 - c. Registrar staff recommend rooms that have higher utilization.
 - d. A shortlist of rooms are evaluated with site assessments and projects are budgeted.
 - e. A final renovation list is determined annually and renovations are implemented over the summer.
5. This is an annualized process and rooms that might not prevail on the final list in one year are likely to be on the final list in the next year.
6. Requests for academic support space can be made by faculty or department staff using the Space Needs Assessment Planning (SNAP) process wherein application forms are submitted to the Planning Design and Construction Department. The forms describe the space request, which are often faculty offices, and are authorized by department chairs or deans. The SNAP Committee meets to evaluate options to satisfy priority space needs and communicates options back to the requesting department.

E. Adequacy of Instructional Lab Space

A summary of findings related to instructional labs is described below. The Master Planner, Sasaki evaluates space utilization and make recommendations based on Association for Learning Environments guidelines and their own internal metrics that have been developed over decades of higher education planning. The SC Commission on Higher Education is also a source of standards for lab planning.

1. Appendix B of the 2018 Master Plan includes 21 pages of graphs and narrative to demonstrate instructional lab utilization for every lab with data for occupancy, weekly hours of use and time slots by weekday. (Refer to Appendix B, [pages 30 through 50](#)).
2. Historically, Biological and Chemistry Science Labs have been operated in excess of national standards of 18-25 hours of utilization per week. Consequently, the university developed a phased plan to address the shortfall. These phases included:
 - a. Incremental creation of five Biology Labs in Sumwalt College and Jones Physical Sciences Center. Status: Complete.
 - b. Adaptive repurposing of the old Law Center to become the Science and Technology Building focusing on the creation of new Chemistry labs. Status: Seventeen state-of-the-art Chemistry Labs completed in 2019 with associated equipment/preparation rooms and shared recitation classrooms.
 - c. Three floors of aged chemistry labs are currently vacated in Jones Physical Science Center since labs have been moved to the Science and Technology Building. New Biology Labs will incrementally replace the aged chemistry labs in Jones PSC. Status: Four new Biology labs will begin construction in the summer of 2021 for fall 2022 occupancy on the first floor. This project will address the shortfall of four Biological Principles Labs to satisfy the current demand. (Source: Appendix B: [page 49](#)- 45% utilization target). Future demand will be met with the upfit renovation of 3-4 additional new Biology Labs on the second floor. (Source: Appendix B: [page 50](#)- Total Current + Future Need = 7 new labs).
 - d. Current Lab utilization for the various lab types is presented on [pages 31-48](#) and summarized in the tables on [pages 49 and 50](#). While disciplines other than Biology and Chemistry also have high utilization, the Provost's Office has focused attention on increasing and improving Biology and Chemistry labs as scheduling other labs has proven manageable.
3. In summary, the 2018 Master Plan states a current lab need of 12 labs/22,000 ASF. This need has been met with recently upfitted chemistry labs at the Science and Technology Building, incremental growth in Biology labs and the additional Biology labs in Jones PSC for fall of 2022. The Master Plan projects a future lab need of 24 labs/44,000 ASF. This need will be met with the upfit renovation of the lab tower in the Science and Technology Center and future upfits in Jones PSC. (Source: Master Plan, [page 18](#) and Appendix B, [page 58](#)).

F. Student Union Space Needs

1. Student Union space was identified as a concern in the 2018 Master Plan ([page 30](#)) based on the size of the current Student Union and the fact that other universities had undertaken recent expansions and renovations of their student unions. USC, with about 7 SF of union space per student in an older building, does not compare favorably to the quality and area of union space per student at other SEC universities. The Council for Advancement of Standards in Higher Education recommends 10 SF per student. Student surveys and a 2018 presentation by the student body president to the trustees also recognized that the growth in enrollment, student organizations, and scheduled events were putting additional stress on the union and students were in favor of expanding student union space ([Document 04](#)).
2. In the meantime, the need for Student Union space has been mitigated by the repurposing of an entire floor in the adjacent Thomas Cooper Library. Books have been moved to an off-site facility and the fourth floor has been repurposed to become an individual, group study, and social space. As circulation is drastically decreasing for most books, moving them to an off-site location is an effective strategy to liberate space in the heart of a campus for repurposing in alignment with prioritized needs. Students who need a book that is cataloged and stored off-site make a request to library staff and the book is promptly retrieved for student pick-up. Enhanced food service has also been provided in the library.

G. Outdoor Recreation Space Needs

1. Currently, the university maintains six recreation fields for intramural and club sports. These fields are located adjacent to the Blatt PE Center, the Strom Thurmond Wellness Center and on land leased from the National Guard.
2. The University of South Carolina is an urban campus and therefore land is extremely costly to acquire and dedicate to new recreation fields. This reality has compelled the university to pursue the acquisition of 298 acres of land only 3 miles from campus with river access. This land will be developed for a new complex of recreation fields.
3. Recreation space needs were evaluated in the 2018 Master Plan to determine both the current needs and future needs in accordance with the enrollment growth plan. Metrics for evaluating recreation field needs are based on National Intramural Recreational Sports Association (NIRSA) guidelines. The master planner, Sasaki, applied NIRSA benchmarking guidelines found on Table 4 Space Planning Guidelines for Outdoor Facilities (Fields and Courts) ([Document 05](#)) and also relied on the knowledge of Student Life staff who know the sports that are popular and unpopular with USC students. Refer to [page 32](#) of the Master Plan. for the summary of outdoor recreation space needs.
4. The university intends to emphasize growth in multi-purpose fields, sand volleyball courts and softball fields. Though the Master Plan also mentions a need for tennis courts, waning student interest in tennis has led us to discard building courts for this sport for the time being. The Master Plan concludes that 8-10 multi-purpose fields, 2 softball fields and 4-4 volleyball courts are needed.
5. The new recreation complex on the river property will be developed in phases. Construction of the first phase, which will meet half of our projected needs, is scheduled to begin in 2022.

H. Student Housing

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. There are currently 6,607 on-campus beds. A

September 2020 Housing Demand Update by Brailsford & Dunlavey projects unmet demand of 4,635 beds in 10 years based on a conservative growth scenario. Every two years, and since 2008, University Housing undertakes a student survey using ACUHO-I/Benchworks Resident Assessment (formerly known as EBI) ([Document 06](#)). Surveys are administered during the Spring semester every other year to all residents in order to gain a better understanding of the resident living/learning experience for that cohort. Results from these surveys are packaged into unit reports which provide decision makers with evidence-based data to create response plans to improve the residence experience for the following year. This summary includes the definitions of the major performance indicators, factor composition, a longitudinal overview (administration years, comparable institutions, national comparison group number, number of resident participants, response rate, overall satisfaction and program effectiveness), and an explanation of results which use a 7-point rating scale. During the alternating years, an in-house created end of the year survey is administered and disseminated utilizing Campus Labs. Survey areas include Factor 4: Facilities, Factor 2: Hall/Apt/Programming, Factor 5: Services Provided, and Factor 7: Room Changes. University Housing responds to the surveys with actions that should improve their services. For an example, Factor 5: Services Provided reflected a history of dissatisfaction with Housing's Wi-Fi infrastructure. University Housing responded by creating and executing a plan to upgrade the Wi-Fi system. The Wi-Fi project began in the Spring of 2020 in preparation for the 2020-2021 cohort. Feedback from residents will be captured in the 2020-2021 data collection timeframe.

2. An enormous multi-stage residential development project, Campus Village, is planned to provide 1808 new beds (1545 net beds) by fall of 2023. A second and third stage, if needed, 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. Housing Master Planning is annually updated to confirm needed quantities of beds and ensure financial stability to operate and maintain the housing assets. The most recent planning study was completed in fall of 2020 and reconfirmed the need to develop the Campus Village project" ([Document 07](#)).

3. The university has been utilizing a strategy of master leases with private student housing developments that occur on the edges of the campus. The leases enable the university to provide on-site residential mentors, on-site food service and operate similarly to on-campus housing. An example of a Housing Master Lease is provided ([Document 08](#)).

I. Space Needs Benchmarking, Surveys and Conclusions

1. Referenced from a 2018 Commission on Higher Education (CHE) report, the University of South Carolina Columbia has 7,694,799 assignable square feet. Based on enrollment of approximately 35,000 students, this allows 220 ASF of space per student. By comparison, in the same report, Clemson University had 4,686,099 assignable square feet. Based on enrollment of approximately 26,400 students, this allows 178 ASF of space per student. Thus, the ASF per student at UofSC is comparable and in excess of our in-state peer.

2. The 2018 Master Plan determined that 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 and growth plan. The study noted, in accordance with the Capital Improvement Plan, classrooms have since been renovated at Close-Hipp 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 at Jones PSC. 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. (Source: Master Plan, [page 18](#)).

Routine Assessment and Evaluation of Space

Facilities staff perform routine inspections of campus buildings to assess several areas of maintenance and operation. Inspections protocols include:

1. Maintenance:

- a. Three Maintenance "zone" supervisors conduct monthly walk-throughs of all academic buildings.
- b. Three other Maintenance "zone" supervisors conduct monthly walk-throughs of all research buildings.
- c. These six supervisors provide data to two maintenance managers.
- d. The Associate Vice President of Facilities Services, and managers conduct semi-annual walk-throughs with the supervisors in May and August.

2. Custodial: Seventeen Custodial supervisors inspect assigned buildings weekly and report issues to management.

3. Landscaping: The Assistant Director for Grounds Management conducts monthly inspections of the landscape and waste receptacles.

4. Space Management: Staff from Facilities Planning Design and Construction generally walks academic and administrative buildings annually to verify room layout and utilization with the space database.

5. Faculty and academic support staff may require new space or modifications to existing space to accommodate new or modified programs. There are two official routes for this need to be communicated to the Facilities Planning Design and Construction Department. One is via SNAP applications as described above in paragraph D.6. A second path, better suited for more strategic space decisions, is through the Capital Operations Planning Subcommittee (COPS). This committee is composed of Associate Vice President-level leadership staff from the Provost's Office, Student Affairs, Facilities, Budget Office, and the Chief Operating Officer. As an example of the process, a faculty member can articulate to a department chair or a dean their desire for new space or modified space related to a new or modified program. If the dean or chair supports the request, they will communicate and justify the need to the Provost's representative on COPS. The representative will present the request to the committee and a decision is recommended to support the need and potential spaces are discussed and later more fully studied for adequacy by Facilities staff. Student Affairs can similarly escalate space needs for housing, student union, and student health center space. The effort is collaborative and COPS is committed to making decisions that are in the best interest of the university.

Deferred Maintenance and Maintenance Planning

The Columbia campus maintains a Master Facilities Priorities and Association of Physical Plant Administrators (APPA) Benchmarking Spreadsheet ([Document 09](#)). APPA is the gathering place for educational facilities professionals, dedicated to the ongoing evolution of the profession. APPA represents more than 18,000 educational facilities professionals from over 1,300 learning institutions worldwide. APPA's community represents the broadest coalition of educational facilities professionals possible, ensuring a diversity of experiences and situations, and availability of best practices." The spreadsheet sets priorities synchronized with Strategic Initiatives and contains APPA benchmarking. 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 maintain building envelope integrity, mechanical and electrical infrastructure, accessibility, and interior finishes. Within these maintenance typologies, priorities are established by notification of concerns from faculty and building users through the FMCNotify system, the routine on-site assessments described above that can include building occupants, and the monitoring of service lives of roofs and mechanical equipment.

Every three years, all Education and General (E&G) buildings in the university system are inspected for 15 major building system categories. The surveys review and rate the condition of the following building systems:

1. Foundation
2. Exterior Wall System
3. Floor System
4. Roof System
5. Interior Wall System
6. Window System
7. Door System
8. Ceiling System
9. Heating System
10. Cooling System
11. Plumbing System
12. Electrical System
13. Elevator System
14. Safety Standards
15. Design Standards

Each of the categories listed above is further broken down into 3-8 subcategories for a total of 89 rated building systems and assemblies. The surveys are consolidated in a Building Condition Survey and are reported to the Commission on Higher Education ([Document 10](#)). The most recent survey was completed in October of 2020. Surveys are similarly completed for the regional Palmetto College campuses as well ([Document 11](#)) The findings of the 2020 report showed modest improvement since 2017 indicating that the amount of capital renewal and deferred maintenance was reduced. The "Total Amount Needed to Address E&G maintenance Needs" can be calculated on a cost per square footage basis as follows:

| Campus | E&G Gross Square Footage Required to be Surveyed | Amount Needed to Address Maintenance Needs | Maintenance Needs cost per GSF |
|---------------------|---|---|---------------------------------------|
| <i>Columbia</i> | 6,095,155 | \$301,444,156 | \$49.46 |
| <i>Lancaster</i> | 293,796 | \$6,851,443 | \$23.32 |
| <i>Salkehatchie</i> | 174,909 | \$5,473,901 | \$31.30 |
| <i>Sumter</i> | 216,089 | \$6,862,582 | \$31.76 |
| <i>Union</i> | 58,955 | \$1,504,673 | \$25.52 |

An analysis of Columbia campus data demonstrates several generalized findings:

1. All nineteenth-century structures have been comprehensively renovated in the last decade for purposes of capital renewal.
2. Significant new construction over the past 20 years is being maintained.
3. The campus has a number of relatively large buildings from the 1960s-1970s with building systems that are at the end of their service life and require comprehensive capital renewal.
4. There are a number of small older buildings, such as houses being used as office space, that have maintenance needs or should be considered for disposal.

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. To further evaluate large older E&G buildings with the most concerning maintenance needs, a more detailed third-party survey was conducted for 10 buildings comprising 1.35 million square feet with an average age of 50-plus years of age for the study group. The findings rated the Facility Condition Needs Index (FCNI) in a range from 0.14 to 0.49. The average FCNI was 0.31 for the study group which falls in the "fair" condition range.

All of the aforementioned 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) provided by the State of South Carolina, 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 Columbia Campus 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. 2025 cumulatively exceed \$159 million ([Document 12](#)).

Adequacy of IT Resources

The technology infrastructure of the university is designed and managed to support the educational and research missions. The core networking structure, the learning management system, technology capabilities within classrooms, and cloud-based platforms such as Office 365 supplement brick and mortar buildings and allow anytime, anywhere teaching and learning.

100 GB Network Core

The university provides a robust core network that allows a variety of platforms and programs to interconnect and exchange information. The core network at the University of South Carolina provides network and internet connectivity to 250 building across the system, to include comprehensive and regional campuses. The university introduced a 100 GB core network in 2018, which is considerably larger than those found at most higher education institutions. The 100 GB core improves network speed, firewall capabilities, and internet connectivity, thus supporting anytime, anywhere instruction.

A major overhaul of the wireless network on the Columbia campus was conducted in the summer of 2020. The upgrade improved performance and reliability, increased efficiency, ensured fewer dropped connections, faster connectivity and better support for learning, teaching and research. Wireless access points on the Columbia campus more than doubled – increasing from 4,050 to 10,500.

Blackboard Learning Management System

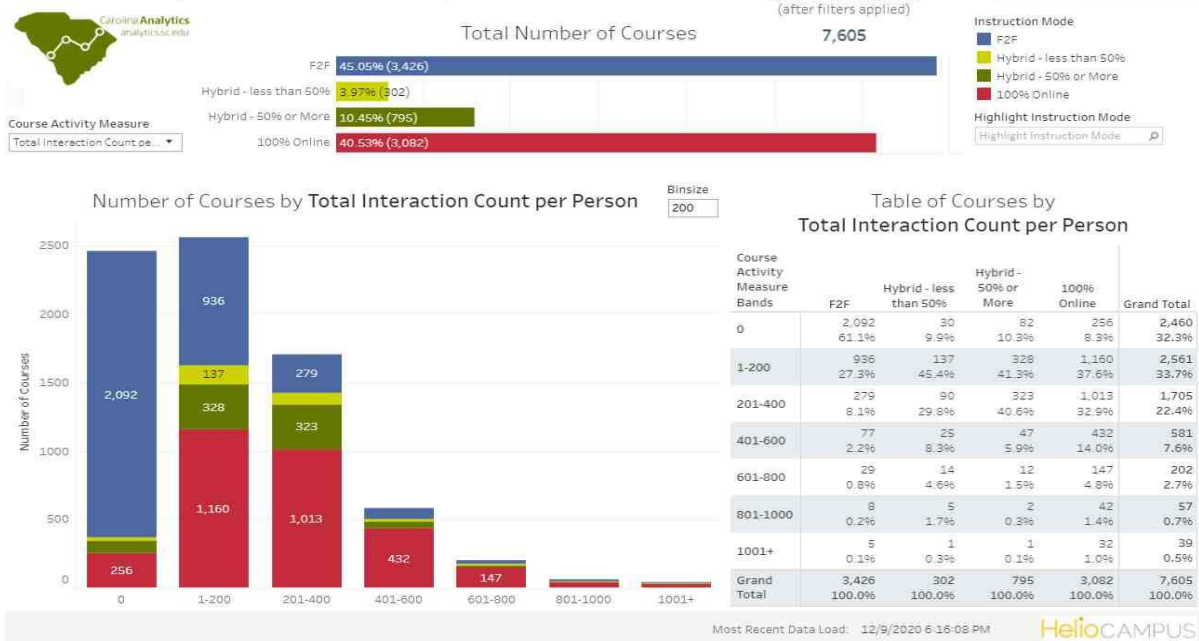
The Division of Information Technology supports and administers Blackboard, the learning management system (LMS), for the entire university system. Blackboard supports and facilitates both traditional and distance education. It is the preeminent LMS in higher education, and facilitates activities and interaction between students and instructors. In 2018, the university purchased and successfully deployed Blackboard Ally to provide alternative, highly accessible formats of course content to assist students with disabilities. In 2018, Blackboard Collaborate was introduced, providing virtual meeting space to facilitate online learning. In 2019, UofSC moved to the Software as a Service model for Blackboard, ensuring continuous delivery of upgrades, enhancements, and security patches, eliminating the need to take the system offline for maintenance. The availability of Blackboard to students and instructors provides virtual learning spaces in addition to physical classrooms.

In response to COVID-19, UofSC developed groundbreaking data insight capabilities into LMS usage. The following table summarizes use in major academic terms for the most recent four years for the Columbia, Lancaster, Salkehatchie, Sumter, and Union campuses. (Data for Fall 2020 remains in progress at the time of this report.)

| Fall Term Comparisons | Fall 2020 | Fall 2019 | Fall 2018 | Fall 2017 |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|
| Total Course Sections | 7,605 | 7,700 | 7,331 | 7,744 |
| ... with Bb activity | 88.0% | 87.4% | 72.5% | 56.0% |
| ... using Collaborate | 59.0% | 23.1% | 30.5% | 1.0% |
| Spring Term Comparisons | Spring 2020 | Spring 2019 | Spring 2018 | Spring 2017 |
| Total Course Sections | 7,271 | 6,843 | 7,216 | 7,256 |
| ... with Bb activity | 87.9% | 76.5% | 58.6% | 41.7% |
| ... using Collaborate | 44.3% | 25.6% | 14.9% | 0.3% |

Figure 1 LMS Activity by Instruction Mode, based on Interaction Count per Student - Fall 2020

LMS ACTIVITY | Instruction Mode Comparison



Equipment- Policies, Procedures, Inventory and Disposal

Under UofSC policy capitalized assets must be acquired through standard procurement policies managed by the Office of Procurement. Capitalized assets are defined as furniture, fixtures and equipment that has a value of \$5,000 or greater and having a useful life over 2 years must be inventoried each year. All inventoried assets are tracked in an Asset Management System to capture historical information and for periodic review, inventory counts and reporting. The Asset Management System also tracks these capitalized inventoried assets location and disposal.

In compliance with state law and university policy, The Controller's Office with the Consolidated Services Office manages and maintains the detailed inventory of equipment and property for all university departments. They ensure that all surplus items are accounted for, allocated to departments and/or disposed of properly. These two offices maintain control of UofSC equipment and property with an established process for ensuring current inventory or allowing for disposition. Consolidated Services is responsible for receiving and warehousing equipment and material considered surplus by university departments. These items are offered to other university departments that may have an official need for them. Items deemed of no value by the State of South Carolina Surplus Property Office may be disposed of in accordance with the South Carolina Consolidated Procurement code through the State Surplus Property Office. Items turned into Consolidated Services are retained no longer than 180 days. Items that are not used by the university are sent to the State of South Carolina Surplus Property Warehouse for final disposition.

Equipment is acquired and disposed based upon preset policies and procedures based upon adequate control and monitoring steps and outlined in general by the following steps:

- Section 1-49.4 of the Code of Laws of South Carolina makes the heads of state agencies and institutions responsible for personal property under their supervision and requires that such property, except for expendables, be inventoried annually.
- Personal property for the purpose of inventory control is defined as furniture, fixtures and equipment that has a value of \$5,000.00 or greater and each having a useful life of over two years.
- All items meeting these criteria will be tagged and inventoried.
- Consolidated Services and each department at the University of South Carolina is required to take a yearly inventory of the property in its possession.
- University of South Carolina Internal Audit supervises, examines and inspects Consolidated Services' inventory, and a detailed listing of the inventory is sent to Internal Audit. This list includes quantity, nomenclature, unit cost and total value. The value of inventory is derived from this report.
- Items that are on a department's active inventory that are lost, missing or stolen require approval through the Office of the President before they can be removed from inventory.
- The University Police Department must first be notified by the department of any items that are lost, missing or stolen.
- After the University Police Department investigation, the department missing the property must complete an Inventory Form for deletion request and forward it to the System Vice President for Law Enforcement and Safety.
- That office will take any action required and forward the Inventory Form #8 to the Office of the Vice President for Business and Finance for action.
- The Director of Law Enforcement and Safety will notify Consolidated Services of the Vice President's decision. Consolidated Services will, in turn, notify the department.
- Consolidated Services will spot check departments of randomly selected items of equipment by computer during the year on an unannounced basis.
- The department's spot inventory list is turned into Consolidated Services and any corrections are entered into the computer to update the inventory records.
- A list of discrepancies, if any, is compiled and sent to the department head for action to be taken and must be returned to Consolidated Services within 30 days.
- Any items which are lost, missing or stolen must be reported to the System Vice President for Law Enforcement and Safety for removal from the department's inventory.
- If the discrepancy list is not returned within 30 days, Consolidated Services will notify the Director of Purchasing who will, in turn, notify the Vice President for Business and Finance concerning additional steps to be taken in the matter.

- Any items that are discovered lost, missing or stolen on day-to-day operations must be immediately reported to the University Police Department.
- Any piece of equipment requiring decommissioning related to safety and or regulatory matters is decommissioned under the review of the Environmental Health and Safety Office and then follows the standard policies and procedures for disposal as other equipment.

On the Palmetto College Campuses:

- Consolidated Services maintains inventory records for all system campuses on items valued at or above \$5,000.00.
- Purchase orders received that pertain to regional campuses are assigned UofSC decal numbers.
- These purchase orders are used to prepare an Inventory Form, Equipment Numbering Receipt or Inventory Property Report.
- The Inventory Property Report lists all purchase orders, item numbers, descriptions, UofSC decal numbers, room and building number that pertain to the regional campus.
- The regional campus will then complete the form with any additional information such as added description, model number, serial number, building number and room number where equipment is located.
- The Inventory Form, or Inventory Property Report, is then returned to Consolidated Services, and the regional campus inventory records are updated.

Off-Campus Sites that serve the needs of the Institution

The information presented below describes physical resources at recently added off-campus instructional sites approved to offer 50% or more of a degree program. These sites were selected as a sample because they represent common types of off-campus instructional sites that support dual enrollment education, special student populations, joint degree programs, and professional programs, and are indicative of oversight strategies and evaluation methods used across all off-campus instructional sites.

Hamad Bin Khalifa University, Qatar (Joint Degree)

This site is home to a joint degree program (MS in Exercise Science) offered between Hama Kin Khalifa University and the University of South Carolina Columbia. The program's target audience are students seeking careers in Qatar's growing sports-centered industry, and enrollment hovers around ten students each term. The facilities capacity at HBKU exceeds the need of current total enrollment.

A commitment has been made by both universities and at all levels of the university to support the joint program. Visits and regular communication will be made by both university administrators and faculty to monitor and evaluate aspects of the program, including the facilities and resources. The program is part of the Arnold School of Public Health's Council (CEPH) on Education for Public Health, which includes an evaluation of physical resources. CEPH requires reaccreditation every seven years. Student evaluations are also collected, and the program directors at the two universities will evaluate this feedback to ensure that the student experience in each of the courses is maximized.

Education City in Al Rayyan City on the outskirts of Doha, Qatar, occupies approximately 5.4 square miles and houses educational facilities that include the College of Health and Life Sciences housed in the Liberal Arts and Sciences (LAS) building on the main campus. This building houses 7 different classrooms available to students in this new joint master's program including one computer laboratory with 40 networked PCs running Windows with full Microsoft Office Suite. There are two projectors at the front of the laboratory along with a smart podium which allows instructors to use the local computer or to connect a laptop (Windows or Apple). All other classrooms include a dry/erase board, smart podium with computer and projector, and connections to allow instructors to use their own laptops. The other 6 classrooms house (7, 25, 25, 25, 25, and 40 students). Additional state-of-the-art facilities at HBKU include learning spaces, computer labs, digital media production facilities, an assistive technology area, as well as a writing center.

Fort Jackson Education Services Center (Special Student Populations)

At the Fort Jackson Education Services Center, Palmetto College Columbia offers instruction, courses, programs, and services designed for military personnel and their dependents. These are typically students who may not have access to one of the four regional Palmetto College campuses but who need courses at convenient sites, times, or in flexible formats compatible with work schedules and other obligations. Because of the transitory nature of the target population, student enrollment varies from term to term.

The Fort Jackson Program is housed in the Fort Jackson Education Services Center (4600 Strom Thurmond Boulevard) with adequate physical resources to accommodate room for growth. Oversight of the AA/AS program, resources, and facilities offered at the Fort Jackson Education Services Center is provided by the designated Program Director, in conjunction with the Executive Director of Military Programs & Strategies and the Dean of Palmetto College Columbia. Student are surveyed regarding facilities are part of the course evaluation process, which addresses topics such a adequacy of facilities, adequacy of library resources, and technology.

Courses offered at the Fort Jackson Education Services Center include Human Anatomy & Physiology (and associated labs), introductory Computer Science courses, and introductory courses in the social sciences and humanities. The Center has allocated five classrooms for use by on-site courses offered by the University. Each classroom is equipped with sufficient technology to facilitate instruction with minimal to no additional equipment requirements.

The computer laboratory is open between 7:30am-midnight, except when class is in session. Students also have access to 29

computers in the library, as well as two computers available in the Student Services Office.

The biology laboratory has four large rectangular tables that house three sinks at each table. There are two chairs located on both sides of the sink. Each table can accommodate six people, with a total room capacity of 24. There are end caps located at the end of each table that are used to house materials. Each student station has electrical outlets, faucets, and a sink. There are also small storage openings beneath each sink that can be used to house materials. The laboratory is also equipped with one chemical hood and one environmental chamber. Smaller equipment included hotplates and 25 compound microscopes. Safety equipment included in the laboratory is a safety shower with drain access on the floor, eyewash station, fire extinguisher, fire blanket, and a first aid station.

There are two large storage rooms inside the laboratory. Each storage has large doors that can be locked from the outside. The teacher's podium and desk are located at the front of the room. The lab is equipped with an overhead projector, one white board, and one projector screen that is installed into the ceiling.

Ridge View High School (Dual Enrollment Education)

The Ridge View site is in an existing Richland Two School District high school used to provide dual enrollment opportunities to area students. Courses are offered through the Sumter campus. Sumter's Director of Educational Partnerships works in tandem with the Ridge View High School administration and the local program coordinator to provide all necessary administrative oversight. Student are surveyed regarding facilities are part of the course evaluation process, which addresses topics such as adequacy of facilities, adequacy of library resources, and technology.

Courses offered at this site include 100- and 200-level Biology courses, an introductory Physics course, and a variety of introductory social science, humanities, and math courses. The district has allocated a sufficient number of classrooms to accommodate university courses. Each classroom is equipped with sufficient technology to facilitate instruction.

The laboratory has three large benches, each with 8 stations on either side (4 on left and 4 on the right), separated by a sink trough and tall shelving. This allowed for a total of 24 students (8 x 3) in the lab. The endcaps of each bench also had a large sink with faucet. Each student station had access to gas lines, electric outlets, faucets, and sink. Each bench had storage cabinets beneath the bench.

There is adequate cabinet space in the room, where glassware and other necessities were stored. The room provides a lab bench where a demonstration experiment could be done by the course instructor. This bench also had a separate sink with faucet, gas and electrical outlets. The lab is equipped with an overhead projector, Smartboard and 2 whiteboards. Additional equipment includes 2 chemical hoods, one Microsphere hood, one environmental chamber, a PCR machine, microbalance, smaller balances (6), incubator, autoclave, and hotplates. In addition, students had access to 30 compound microscopes.

Safety equipment includes a safety shower with drain access on the floor, eye-wash station, fire blanket, fire extinguisher, and a first-aid station.

Darla Moore School of Business PMBA Program Sites (Special Student Populations)

Courses at these sites are largely geared toward eligible active duty Marines, other government employees, and their families. The PMBA offers a part-time MBA Program to working professionals. Courses are offered in blended learning formats: regional classrooms, on-demand course capture in real time and delay, and daylong immersions on the Columbia campus. Course offerings include Accounting, Finance, Economics, Leadership and Organizational Behavior, and Management; these courses do not require any specialized equipment, although video conferencing equipment is available in all locations to provide real time communication with the professors in the Moore School classrooms during class time.

The Managing Director will visit the locations every one to two months. In addition, the PMBA Program surveys all students at least 3 times during their tenure in the program (once toward the start of their studies, one toward the middle, and one at graduation). These surveys provide the opportunity for students to evaluate the services and operations at their site. Students can also report any problems on an ongoing basis to any of the 5 full-time PMBA staff or the Faculty Director.

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Parris Island

The Marine Corps Recruitment Depot provides an office and classroom, Monday through Thursday from 5:00 pm to 9:00 pm, in the Voluntary Education workspaces. Video conferencing equipment is available in the classroom and provides real time communication with the professors in the Moore School classrooms during class time as well as to the other PMBA sites. The classroom contains a Polycom RealPresence Group 500 system (video conference codec), two 65" monitors, 2 ceiling microphones, and an Eagle Eye IV camera. The sites have the capacity to receive interactive instruction for one class each evening, M-TH. The site manager/coordinator is responsible for ensuring coverage for class times.

Marine Corps Air Station

The Marine Corps Air Station provides an office and classroom, Monday through Thursday from 5:00 pm to 9:00 pm, in the Voluntary Education workspaces. The classroom has video conferencing equipment installed and offers real time

communication between the other PMBA sites as well as the Moore School classrooms where the PMBA professors are teaching. The classroom technology equipment consists of a Polycom RealPresence Group 500 video conference codec, two 65" monitors, 2 ceiling microphones, and an Eagle Eye camera. The site manager/coordinator is responsible for ensuring coverage for class times.

School of Medicine: Greenville (Professional Programs)

The medical education building was constructed on the Prisma Health Greenville Memorial Hospital Campus in 2011 for the primary purpose of housing the MD program. The education building was designed to accommodate the full complement of students at 100 +/- 10% per year. The School matriculated its inaugural class in the fall of 2012 and received full accreditation from Liaison Committee on Medical Education (LCME) in the fall of 2015. The MD program has not exceeded enrollment targets.

An operating agreement exists between UofSC School of Medicine Greenville and the health system partner, Prisma Health. This agreement states that Prisma Health will make available to UofSC for use as the site of UofSC School of Medicine Greenville fully equipped and functional education space, office space, student space and research space. Student space includes access to lounges, call rooms, study rooms, locked personal storage and work rooms near vicinity to clinical learning facilities. The assistant dean for finance and operations and the facilities manager have overall responsibility for the management, scheduling and coordination of classroom space within the Medical Education Building. The facilities manager reports to the assistant dean for finance and operations. The dean gives the medical education program priority for space in all scheduling decisions.

The School of Medicine Greenville continuously monitors the appropriateness and sufficiency of physical resources through student surveys. This is done on an annual basis through the Graduation Questionnaire (GQ), internal Program to Date Survey (PTD), and prior to each LCME accreditation cycle through the Independent Student Analysis (ISA). Students can also provide feedback through course evaluation surveys and directly to any faculty or member of administration.

Technological Infrastructure

Based on student feedback in our annual Program to Date (PTD) student survey, wireless access points and other network infrastructure have been upgraded and the bandwidth of the internet connections has been increased by 500% over the past two years to address reported delays. The school monitors student satisfaction with IT resources through responses to the Graduation Questionnaire (GQ), the annual Program to Date Survey (PTD) and Independent Student Analysis (ISA). Metrics are tracked as part of the school's continuous quality improvement system. The ISA student survey reflects high levels of satisfaction with the IT resources available to medical students.

The School received an Apple Distinguished School designation, which was awarded in October 2019 based on our intentional integration of technology to augment learning and innovation. Due to the investment in technology and innovation, the School successfully and seamlessly transitioned the curriculum delivery to a virtual environment in March 2020 in response to the COVID-19 pandemic.

Teaching Space- Clinical

In the summer of 2019, based on student feedback from end of course evaluation, the teaching rounds space for Internal Medicine in the Prisma Health Greenville Memorial Hospital campus was refreshed and expanded.

Research Space

As part of the School's 2017 strategic planning process, a strategic priority to enhance research opportunities for faculty and students interested in pursuit of dry bench research was developed. One tactic to address this priority, two separate 400 square-foot spaces were developed within the School's Medical Education Building, dedicated to faculty dry research space. These areas now house 3-D printing technology, scanners, virtual reality equipment, and advanced computing technology. In addition, two recording studios have been added in the Medical Education Building. All these additions were made to help advance faculty scholarship and teaching innovation.

School of Medicine: Florence Regional Campus Facilities (Professional Programs)

An assessment of the physical resources was part of the accreditation document submitted in December 2013 to the LCME (Liaison Committee on Medical Education). (Document attached) The SOM- Columbia has an assistant dean for medical student education – Florence who is on-site to monitor physical resources. In addition the Association of American Medical Colleges (AAMC) puts out a survey to graduating medical students each spring. The GQ (Graduation Questionnaire) is broken down by campus and includes questions concerning physical resources which is provided each fall to the SOM – Columbia administration. The two hospitals and Francis Marion University have their own accrediting bodies which ensure the facilities are properly and routinely maintained. The technological infrastructure is more than sufficient with state-of-the-art teleconferencing between the two campuses and IT support provided by both USC SOM and Francis Marion University.

Luther F. Carter Health Sciences Facility

The Carter Center is a 52,000 square foot health education center that opened in 2016. It houses the Office of Medical Student Education – Florence for the USC SOM as well as the Physician Assistant and Nurse Practitioner programs for Francis Marion University. The state-of-the-art facility includes a 150 seat auditorium as well as classrooms, labs, and conference rooms. The location is 4822 E. Palmetto Street, Florence, SC 29506.

McLeod Regional Medical Center

As an inpatient site for the Florence Regional campus, McLeod Regional Medical Center provides study space, conference space and adequate computer access to facilitate learning on core rotations in Florence. There is a Health Sciences Library that serves McLeod Health which is physically located in the Family Medicine Center adjacent to the hospital. Students also have access to the USC SOM Library electronic resources via the Internet. Medical students have access to a lounge area

with sofas, chairs, TV and computers. Lockers are available and there is an adjacent call room which is secured by an access code.

MUSC Health – Florence (formerly Carolinas Hospital System)

MUSC Florence is an additional inpatient facility for core clinical rotations in Florence. There is adequate access to technology for inpatient care and self-learning. Study areas and conference rooms are also available for students and for didactics. Although, this campus does not include a library, our students always have remote access to the medical library resources at the USC SOM.

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. Space use is tracked in reports that are published by the SC Commission on Higher Education which enables the Palmetto Colleges to compare data. Space data is also captured and published in the Integrated Postsecondary Education Data System (IPEDS) Data Feedback reports. IPEDS is a system of survey components that collects data from about 6400 institutions that provide postsecondary education across the United States. The data provides institutions a context for examining comparative data with peers.

University of South Carolina Lancaster

Space Assessment and Needs Analysis

The University of South Carolina Lancaster evaluates its current and future facility needs on an ongoing basis, using the USC Lancaster 2020 Master Plan Update ([Document 13](#)) as a guide in determining campus growth and measuring physical resource needs with long-term strategic objectives. The 2020 Master Plan Update assessed the accomplishments from the 2008 USC Lancaster Master Plan Report and created a new vision for years ahead. Both the 2008 report and 2020 update were created by an external consulting firm specializing in planning, architecture, design and special projects in higher education. The 2020 Master Plan Update process involved interviewing USC Lancaster stakeholder groups to understand campus and community needs. Receiving input from various constituencies helped substantiate the foundation of the update and provided a basis for prioritization. A summary of strategies includes:

1. Increase pedestrian safety with traffic calming and traffic avoidance measures.
2. Beautify the campus and make “places” for students to enjoy including a campus green.
3. Promote the brand and image with signage and messaging.
4. Create an Indian Land Advisory Group and develop a strategic academic presence.
5. Renovate Starr Hall

Instructional Space

The “USC Lancaster Classroom Utilization” attachment ([Document 14](#)) details the classroom utilization of each classroom based on available class times and available class seats. The campus is successfully managing classroom space and has the capacity to increase course offerings as enrollment grows. The Lancaster campus provides 42 General Classrooms (FICM 110), 16 Class Laboratories (FICM 210) and 2 Open Laboratories (FICM 220). As the table below indicates, USC Lancaster is only using 56% of their classroom capacity indicating that there is capacity for growth in enrollment. Administrative staff believes that there is capacity for enrollment to grow 25-30% before classroom capacity would be challenged. Even greater growth is believed possible with maximizing the planning and programming of classroom space.

2019-20 Lancaster Classroom Capacity

| Semester | Seat Scheduling Capacity (cumulative total of classroom seats x time slots) | Seats Required by Enrollment (seats occupied based on enrollment schedule) | % of Occupied Seats based on student class schedules |
|-----------------|--|---|---|
| Fall 2019 | 7,632 | 4,383 | 57.43% |
| Spring 2020 | 7,162 | 3,919 | 54.72% |
| Total | 14,794 | 8,302 | 56.12% |

Instructional Lab Space

To accommodate course demand a physics lab was renovated in Fall 2019 to expand instruction to chemistry and physics. All lab spaces on campus have the capacity to increase course offerings as enrollment grows. Labs are equipped with hoods, sinks and

water, air and gas services. Additionally, there are seven computer labs.

Student Union Space

Student Union space was determined to be adequate based on interviews with students during the master planning process. However, added amenities such as food service may expand or repurpose some space on campus. There are also public spaces in other campus facilities where students tend to congregate which may help fill the need for this category. For instance, the lobby/gallery area in Bradley is fairly large and there is a student food pantry in Founders Hall with additional space for seating. Students use the picnic shelter near the trailhead for different things as well. The student center will receive a refresh in Spring 2021 as part of the Starr Hall renovation project.

Recreation Space Needs

USC Lancaster partners with the YMCA to operate the Gregory Health & Wellness Center (currently branded as the Gregory Family YMCA). Full-time students receive a YMCA membership each semester with access to fitness and weight training equipment, racquetball courts, fitness classes, and a pool for lap and recreational swimming. There are six tennis courts on campus and a single-track nature trail.

Student Housing Needs

Student housing needs are met through multiple private student housing developments and the college makes referrals to housing to assist parents and students. Several of the properties are adjacent to campus and within walking distance. Other housing opportunities are available but require more transportation to and from campus.

Deferred Maintenance and Maintenance Planning

From a ground level and local campus perspective, individual facility assessments are conducted annually with deferred maintenance priorities given to projects that address safety, security and resource serviceability/adequacy. Specific deferred maintenance needs and projects establish a list of priorities which is submitted annually to the USC Budget Office. Maintenance funds are received from the State of South Carolina, the Education Foundation of USC Lancaster, the Lancaster County Commission for Higher Education, combined with internally budgeted maintenance funds.

Since 2014, \$7,648,868 has been received from the State of South Carolina to be used exclusively for deferred maintenance. The Lancaster County Commission for Higher Education has provided annual maintenance and operations support to the campus general fund from county tax millage revenue per the table below.

| Fiscal Year | Amount |
|--------------------|---------------|
| 2016 | 900,000.00 |
| 2017 | 900,000.00 |
| 2018 | 900,000.00 |
| 2019 | 1,000,000.00 |
| 2020 | 1,388,000.00 |

The campus has seen an improvement in deferred maintenance since 2017 as a result of this funding. The current value of deferred maintenance per the 2020 Building Condition Survey is \$23.32 per gross square foot of E&G space.

University of South Carolina Salkehatchie

Space Assessment and Needs Analysis

The 2019 IPEDS report demonstrates that USC Salkehatchie has expenditures per FTE enrollment that exceed the average of 47 other institutions in a comparison group in areas of Student Services, and Other Core Expenses. Expenditures in Instruction, Academic Support and Institutional Support are somewhat below the average expenditures. Master plans for the Allendale and Walterboro locations ([Document 15](#)) were updated in 2018.

For the Walterboro campus, the current buildings are expected to remain and the Student Commons and Conference Center to be fully renovated to provide additional classroom space and meeting space. The campus is currently able to meet the demand for classroom spaces and the campus is working on designs for the renovation project. The campus has secured partial support for the full renovation and is seeking additional funding. The campus is monitoring for additional growth needs. The long-range master plan

identifies locations for up to three additional buildings on the campus' current land. Currently, campus space is adequate and renovations are focused on ensuring that the facilities remain in serviceable condition.

For the Allendale campus, the buildings currently in use will continue to be utilized. In 2019, the decision was made to demolish three small houses that were previously used for office space. Those with offices in those buildings were moved to suitable locations on campus. The long-range plan identifies locations for up to seven additional academic-related buildings and three additional housing facilities on the campus' current land. Campus administration is monitoring the need for additional buildings but at this time, based on adequacy of classroom space and enrollment, no new construction is deemed necessary.

Classrooms

The current classrooms are in good working order. The Salkehatchie campus provides 17 General Classrooms (FICM 110), 9 Class Laboratories (FICM 210) and 10 Open Laboratories (FICM 220). As the table below indicates, USC Salkehatchie is only using 52% of their classroom capacity. Since an ideal utilization is typically 85%, the data indicates that there is capacity for growth in enrollment with the current classroom space.

2019-20 Salkehatchie Classroom Capacity

| Semester | Seat Scheduling Capacity (cumulative total of classroom seats x time slots) | Seats Required by Enrollment (seats occupied based on enrollment schedule) | % of Occupied Seats based on student class schedules |
|-----------------|--|---|---|
| Fall 2019 | 5,402 | 2,733 | 50.59% |
| Spring 2020 | 4,388 | 2,404 | 54.79% |
| Total | 9,790 | 5,137 | 52.47% |

Faculty and staff report problems via emails to the Finance Director and/or the Maintenance Manager. Students can report problems through an anonymous email option on the campus' website. Complaints are tracked and can be communicated about facilities or any other concerns via this system. Complaints from faculty and students are minimal and typically require minor repair or replacements. The classrooms have standard furnishings and equipment. If repairs or replacements are necessary, the issue is reported to maintenance and handled appropriately. Maintenance staff are in every classroom at least once daily and report concerns to their supervisor. The rooms are equipped with varying levels of technology and support is provided by our campus IT department and/or the Palmetto College IT department. With changing technology, needs for equipment upgrades occur approximately every 3 to 5 years for computers and 6 to 8 years for more sophisticated technology. The campus received grant funding from UDSA Rural Development Distance Learning and Telemedicine Grant Program in 2018 to upgrade the distance-learning equipment in four classrooms (two in Allendale and two in Walterboro). Another award through this program is forthcoming and will provide for additional upgrades to distance learning equipment as well as in classroom technology. Classrooms have been equipped with webcams and microphones which enables the faculty member to record lectures for students. Additionally, the campus received funding through the Savannah River Site Community Reuse Organization for Workforce Opportunities in Regional Careers, which is supported by Department of Energy, Office of Environmental Management, and National Nuclear Security Administration. The funding helped provide an upgrade to the distance learning equipment in the Allendale engineering computer lab in 2018 and 3D printers for use in the engineering courses in 2019.

Laboratory Facilities

There is a chemistry lab and biology lab at each campus. The labs are stocked with the equipment, as deemed necessary by faculty, for experiments and demonstrations. Faculty make purchase requests through the Business Office as necessary. In 2018, the campus received funding from Savannah River Nuclear Solutions to purchase 25 new microscopes for the biology lab. Equipment is inspected periodically and any work done at that time as necessary. Over the course of 2016 through 2017, the campus received funding from multiple sources to install and outfit a high-definition nursing simulation lab with two manikins one of which can simulate giving birth. The contributions came from the county and local medical center as well as foundations. Since then, additional funding has been provided to add a Promethean board and a child mannequin to the space.

Deferred Maintenance and Maintenance Planning

The campus maintains a Renovation Reserve fund and a Maintenance Projects fund to be used for deferred maintenance projects. The campus maintains a list of items that need to be done with priority ranking. As funding is available or need arises, the list of projects is evaluated, initiated, and completed. The Western Carolina Higher Education Commission (WCHEC) received county appropriations and, in some cases, grant funding on behalf of the Salkehatchie campus. The WCHEC uses these funds to support campus' buildings and land. The WCHEC owns most of Salkehatchie's buildings and the surrounding land. The WCHEC budget pays for building insurance, as well as supplies for maintenance and other special projects such as the demolition of the three buildings in Allendale that is forthcoming.

Since 2014, the State of South Carolina has provided funding for deferred maintenance. The campus has seen an improvement in deferred maintenance since 2017 as a result of this funding. The current value of deferred maintenance per the 2020 Building Condition Survey is \$31.30 per gross square foot of E&G space.

University of South Carolina Sumter

Space Assessment and Needs Analysis

The 2019 IPEDS report demonstrates that USC Sumter has expenditures per FTE enrollment that exceed the average of 47 other institutions in a comparison group in areas of Instruction, Research, Academic Support, Institutional Support, Student Services, and Other Core Expenses. The classroom capacity at USC Sumter is adequate for our academic needs and to permit a healthy learning environment. The Sumter campus provides 22 General Classrooms (FICM 110), 13 Class Laboratories (FICM 210) and 2 Open Laboratories (FICM 220). Classroom capacity and utilization is monitored each semester when the course schedule is entered into Banner. As the table below indicates, USC Sumter is only using 62% of their classroom capacity indicating that there is capacity for growth in enrollment. Since an ideal utilization is typically 85%, the data indicates that there is capacity for growth in enrollment with the current classroom space.

2019-20 Sumter Classroom Capacity

| Semester | Seat Scheduling Capacity | Seats Required by Enrollment | % of Occupied Seats |
|-------------|--|---|----------------------------------|
| | (cumulative total of classroom seats x time slots) | (seats occupied based on enrollment schedule) | based on student class schedules |
| Fall 2019 | 6,451 | 3,875 | 60.07% |
| Spring 2020 | 4,941 | 3,142 | 63.59% |
| Total | 11,392 | 7,017 | 61.60% |

The condition of instructional labs in the Science Building have been a concern for some time. This is being resolved with a recent renovation (completed) and a forthcoming renovation which will complete the renovation of the Science Building in 2022. Use of the renovated Chemistry Labs in 2020 was compromised by to the pandemic. Therefore, we do not have hard data on the impact of the improvements, but the anecdotal data we have indicates that the labs were much more efficient, enjoyable and comfortable. Early indications are that students are responding very favorably. The renovated facility appears to be important for student and faculty recruitment also.

Deferred Maintenance and Maintenance Planning

Most of the buildings on our campus were constructed in the late 1960s. Some buildings were added or modified in the early 1980s. Because of the age of our campus' facilities, there is an ongoing log of deferred maintenance. We address these needs with a long-term capital improvement plan. Most recently we renovated a significant portion of our science building and replaced the roof. This renovation included the new chemistry lab. USC Sumter receives funding from the County to fund preventative and deferred maintenance. State funding for the \$4.5 million renovation of the remaining part of the building has been approved, and that project is in the design stage. Additional capital improvements such as HVAC upgrades of the student union building and parking lot upgrades are in progress and funds for these projects have been reserved. Other approved and forthcoming capital improvements include roof replacement of the Student Union Building, window replacement for the A&L Building, exterior repairs to the Williams-Brice-Edwards Administration Building, and roof replacement for the Business Administration (Classroom) Building.

The campus has seen an improvement in deferred maintenance since 2017 and improvements will continue as described above. The current value of deferred maintenance per the 2020 Building Condition Survey is \$31.76 per gross square foot of E&G space.

University of South Carolina Union

Space Assessment and Needs Analysis

The 2019 IPEDS report demonstrates that USC Union has expenditures per FTE enrollment that exceed the average of 47 other institutions in a comparison group in areas of Student Services, and Other Core Expenses. Expenditures in Academic Support and Instruction nearly match the average of the other institutions. Union has been adding space through a lease and buildings that have been acquired by the local Commission and made available for use by the USC Union campus. A recent [Course Survey \(Document 16\)](#) that polled nine considerations related to campus satisfaction. Results showed a good average satisfaction level of 3.75 on a scale of 1 to 5. Results for satisfaction of overall educational experience at USC Union to be 3.7 on a 4-point scale.

Classroom Space

The campus is successfully managing classroom space and has the capacity to increase course offerings as enrollment grows. The Union campus provides 14 General Classrooms (FICM 110), 3 Class Laboratories (FICM 210) and 1 Open Laboratory (FICM 220). As the table below indicates, USC Union is only using 62% of their existing, and soon to be expanded, classroom capacity indicating that there is capacity for growth in enrollment. Since an ideal utilization is typically 85%, the data indicates that there is capacity for growth in enrollment with the current classroom space.

2019-20 Union Classroom Capacity

| Semester | Seat Scheduling Capacity (cumulative total of classroom seats x time slots) | Seats Required by Enrollment (seats occupied based on enrollment schedule) | % of Occupied Seats based on student class schedules |
|-----------------|--|---|---|
| Fall 2019 | 4,543 | 2,795 | 61.52% |
| Spring 2020 | 4,201 | 2,570 | 61.18% |
| Total | 8,744 | 5,365 | 61.36% |

In Fall 2020, USC Union began a facility project utilizing state appropriations to convert the former Library space into 4 new classrooms, further enhancing available classroom facilities. The new spaces will be more program/discipline-specific rather than general purpose classrooms. The converted library space has been designed and equipped to better facilitate teaching & learning in language courses and will allow the instructional area to be reconfigured for group learning activities. Current general purpose classrooms cannot provide the flexibility of this new space. With the addition of a new Student Services Building in the Fall of 2020, former office space has been repurposed, which will also free up space for additional Fine Arts classrooms in the Founders House. The new Fine Arts classrooms will allow space for hands on learning in Art classes such as printmaking, painting, drawing, etc. that cannot be accomplished in the current general purpose classrooms due to ventilation and space limitations.

Instructional Lab Space: Instructional lab space needs are being met for the Union Campus. In Fall 2019 USC Union added virtual science labs to its instructional lab space. This innovative project utilizes virtual reality equipment and software to teach science labs in a space that did not have to be outfitted as a standard wet lab would need to be. The materials traditionally used in the "physical labs" for anatomy and physiology BIOL 243L AND 244L (the only virtual lab at this time) were moved to the virtual lab. This includes plastic models, additional new microscopes, bones from the human skeleton, and diagnostic equipment. By having the physical objects in the lab as well as the virtual lessons displayed on the student computers and wall monitors, the students get the same exposure to the course materials they previously had in the physical labs, plus the additional virtual experience. To further enhance instructional lab space, the campus has an ongoing facility project which will add Nursing lab classrooms as well as general purpose science labs and lab prep areas. Phase 1 of the project is expected to be completed prior to the start of Fall 2021, with Phase 2 beginning shortly after that.

Student Union Space

In 2015 the campus opened a new Bookstore and Student Activity Center which provides Student Union space. The following year a student courtyard adjacent to the Bookstore/Student Activity Center was completed which provides outdoor space with landscaping, lighting, pergolas, tables, and seating. Recent course surveys from Fall 2020 showed that there was a satisfaction level of 3.63 on a 4-point scale for the Campus Bookstore.

Recreation Space

The Union campus maintains three athletic fields, one multi-purpose gymnasium and an E-Gaming room. The campus uses these facilities to offer NJCAA athletics in Softball, Baseball, & Men's Soccer; Club Sports in Volleyball, Rifle Team, and E-Gaming; and intramural sports and other University sponsored recreation events. Adjacent to the multi-purpose gymnasium is a large green space known as Patron's Park that is utilized for student recreational activities. A recent course survey from Fall 2020 showed that there was a satisfaction level of 3.62 on a 4-point scale for student activities.

Student Housing

The student housing needs of the Union Campus students are met through 3 private student housing developments. One property is adjacent to the campus, a second property is less than 2 blocks from campus and located on the City of Union's historic Main Street District, and the third property is located within a mile of the campus. Additionally, student housing needs are met through individual private owners who work with our Admissions, Athletic, and Academic Affairs, and Marketing & Public Relations offices to connect with students looking for housing. The majority (if not all) of the Union students in student housing are in an athletic program. The Athletic Director and coaches make sure that each student in their program who needs housing has a spot for the semester. Prior to construction of the student housing developments, the developers met with Campus Administration and the local Commission to discuss potential needs of the students and the campus.

Deferred Maintenance and Maintenance Planning

Addressing deferred maintenance needs has been a top priority in recent years for the Union Campus. In addition to state appropriations earmarked for critical care & maintenance, the campus utilizes funding from the Union/Laurens Commission on Higher Education, general operating revenue, and renovation reserve funds to meet many of its deferred maintenance needs.

The Union Laurens Commission for Higher Education was established to provide facilities for Higher Education for Union & Laurens counties. It provides its land and buildings to USC Union at no cost. During the year ended June 30, 2020, the Commission made grants to USC Union totaling \$273,507 for campus projects, maintenance, rental of facilities, community service and institutional


















support. Several major projects funded by the Commission include the construction and renovation of a new Student Services Building which was completed in August 2020; installation of a new HVAC unit in the Founders House; installation of a new full system HVAC controller in the Main Building; wrought iron fencing added throughout campus; and a new roof on the Nursing building. Routine items covered by the Commission are elevator maintenance and repairs, fire alarm monitoring, general HVAC maintenance and repairs, small plumbing repairs, and minor electrical work.

General campus operating revenue has also been used to supplement funding for deferred maintenance projects. Examples of such projects include landscaping improvements and maintenance; interior plaster and painting repairs; carpeting and HVAC replacement; Truluck Gymnasium roof repairs, field upgrades for baseball, softball, and soccer; and parking lot repairs.

Maintenance reserve funds that are derived from student tuition revenue have been used for the installation of 2 new HVAC units in the Truluck gymnasium; carpeting and painting in the Academic Affairs Office, mold remediation and sheetrock repairs; and exterior stucco and concrete repairs.

The current value of deferred maintenance per the 2020 Building Condition Survey is \$25.52 per gross square foot of E&G space.

Sources

-  13.7 Physical Resources
-  Document 01_Master Plan Columbia
-  Document 02_Master Plan Columbia Appendices FULL
-  Document 03_Appendix B ONLY
-  Document 04_Student Union Survey
-  Document 05_NIRSA Outdoor Rec Field Guidelines
-  Document 06_ACUHO Benchworks Summary
-  Document 07_USC Housing Demand Update
-  Document 08_USC and Park Place Lease Example
-  Document 09_APPA Benchmarking Spreadsheet
-  Document 10_Columbia Building Condition Survey
-  Document 11_Palmetto College Building Condition Survey
-  Document 12_Maintenance Expenditures Table
-  Document 13_Lancaster Master Plan Update
-  Document 14_Lancaster Classroom Utilization
-  Document 15_Salkehatchie Master Plan Update
-  Document 16_USC Union Course Survey Results