### 3.11.3 Physical facilities

3.11.3 The institution operates and maintains physical facilities, both on and off campus, that appropriately serve the needs of the institution’s educational programs, support services, and other mission-related activities.

#### Judgment of Compliance

In Compliance

#### Narrative

**Overview**

The University ensures it operates and maintains campus facilities, both on-campus and off-campus, that appropriately serve the institution’s educational programs, support services and other mission-related activities. This is accomplished through the following:

- a Board approved campus master plan,
- a comprehensive facilities planning and management program that emphasizes routine and preventative maintenance,
- strategic planning related to capital construction projects and deferred maintenance,
- new construction and renovations to existing facilities,
- an effective energy management program,
- a robust technology infrastructure,
- appropriate library resources, and
- ongoing, critical assessment and monitoring of these activities through internal and external methodologies.

The University of Alabama campus is located in Tuscaloosa, Alabama and serves more than 34,800 students. The University’s total land holdings equate to approximately 1,026 acres and include 300 buildings containing over 13 million gross square feet of space. Of the 300 buildings, 58 are off-campus facilities that are designed to further the university’s mission. The off-campus facilities represent a total of 252,412 gross square feet. These links [1] [2] provide an overview of the campus.

The enclosed link [3] lists on and off campus buildings and also includes the principal usage, age, replacement value, gross assignable square footage, and type of construction. The campus includes 44 dormitories, which are sufficient to provide accommodations for approximately 7,680 beds. Additionally, twenty-five fraternity and 18 sorority houses are located on campus and provides approximately 1,382 beds.
Other Course Delivery Locations

There are three course delivery locations outside of the main campus affiliated with the University’s College of Continuing Studies. These sites are located in Birmingham, Florence and Gadsden, Alabama. Also, one course is routinely delivered each year at the Moundville Archaeological Park, located approximately 14 miles south of the main campus and at the Kentuck Art Center, located in Northport, Alabama.

Birmingham: The Library Information Study (LIS) graduate level courses offered in Birmingham, Alabama are based on student demand and are facilitated through an arrangement with Samford University. The classroom is located in the Main Library on the Samford campus. Samford provides the appropriate classroom space and technology, including internet access, for the courses. Maintenance and operation of the facilities in which these courses are offered is the responsibility of Samford University. Pictures of the classroom space used for the LIS graduate courses are provided. [4] [5].

Florence: The Doctorate of Education Program delivered in cooperation with the University of North Alabama (UNA) in Florence, Alabama emphasizes the application of theory and research to the practice of leadership in P–12 schools and other educational policy arenas. The program consists of 72 credit hours beyond the master’s degree. In addition to core courses, students complete 12 credit hours of research, up to 12 credit hours in the social foundations of education, and 12 credit hours of dissertation research. Classes are scheduled in newly renovated classrooms located in Stevens Hall. Classrooms are designated as Smart classrooms and are equipped with the latest generation desktop computer with internet access, a video/data projector, VHS/DVD players, sounds system for video and personal computer, and a digital document camera. University of Alabama faculty and students involved in classes offered on the UNA campus are assigned a UNA login and have access to all available technology and benefit from the support of the UNA Computer Services Department and Educational Technology Services. In addition, Wi-Fi internet access is available campus-wide. Additional information about the program may be found at: [EdD (UNA Campus).pdf]. Maintenance and operation of the facilities in which the courses are offered is the responsibility of the University of North Alabama. Pictures of the classroom space for this program are provided. [6] [7].

Gadsden: Established in 1946, the Gadsden Center [8] is located in Gadsden, Alabama. The Center serves North Alabama, Northwest Georgia, and southeast Tennessee offerings graduate coursework for credit, noncredit programs for professional development, community development programs, and test services and serves as a liaison to the University’s main campus. Currently the Center offers 13 complete degrees in education with classes offered nights, weekends, and web-assisted formats to accommodate working professionals. The University leases the space for the facility from the City of Gadsden. The City of Gadsden is responsible for all major maintenance and repairs related to the leased premises including the parking lot. The University is responsible for minor maintenance and repairs and those are contracted out to a third-party. Gadsden Center is handicap accessible, with a total of 25,980 gross square feet and 14,996 of net assignable square footage. The average seating capacity for classes is 26 with the largest accommodating 46 and the smallest seating 10. Gadsden is a member of the University of Alabama System’s Intercampus Interactive Telepresence System (IITS)[9], which is a statewide videoconferencing network. IITS connects users to in-state, national and international conferencing, course instruction, research endeavors and meeting participation. The Center has two video conferencing classrooms, one mobile unit for video conferences, one mobile science lab, three computer labs, one mobile laptop lab, wireless capability, and uses the latest Windows operating system and Microsoft Office software.

The Gadsden Center is administratively housed within the University’s College of Continuing Studies. Additional explanation about the Gadsden Center facility, its course offerings, and a copy of the lease agreement are provided [10].
Moundville Archaeological Park: [11] As part of The University of Alabama Museums [12], this property was sold by the Alabama Museum of Natural History to the University in March 1963. The 320 acre park with 28 large earthen mounds borders the Black Warrior River and is considered one of the most significant archaeological sites in the United States. The University also uses the site to deliver the undergraduate course, Anthropology 269 - Field Archaeology, as well as an excavation resource to further graduate studies within the Department of Anthropology. As the University’s FY 2013 Work Order History Report (referenced later in this narrative) demonstrates, the University serves the facilities and grounds maintenance needs for this site. Additionally, in 2010, renovation and expansion of the Jones Archaeological Museum at Moundville was completed. This project served to enhance the museum by modernizing and expanding the facility as well as updating the displays. Projects to refurbish the bath house and campground parking were also completed to facilitate and improve the visiting experience.

The Kentuck Art Center: Located in Northport, Alabama, the Center leases space used by the University to deliver the undergraduate course, NEW 473-Social Science II: Globalization, and for kiln space. The University leases the space as is from the Kentuck Museum Association, Inc. The rental fee includes water and incidental use of electricity. In addition to rent, the University pays an electricity fee of $35 for each kiln firing and covers cost of materials used. The University is also required to reimburse the Kentuck Museum Association for any costs associated with cleaning and repairing the premises following its use of the space. A copy of the lease is provided [13].

**Facilities Planning and Management Program**

**University Planning and Design**

The University’s Campus Master Plan [14] serves as a critical element in ensuring that the University’s physical resources appropriately fulfill the needs of its mission of advancing the intellectual and social condition of the State through quality programs of teaching, research, and service. The Plan is designed to help realize one of the University’s four strategic goals - enhancing the university’s learning environment to attract and retain excellent students and is based on guiding principles adopted by the Board of Trustees in 2007 [15], with the first principle stipulating that the primary purpose of the campus is to provide appropriate settings to fulfill the University’s mission of teaching, research, creative activity and services. The Campus Master Plan incorporates the long-term vision for the campus and serves as a guide for the University’s investment in its infrastructure.

The Plan was completed in 2007, and amended and updated in November 2012. Development of the University’s Campus Master Plan was achieved in a collaborative, comprehensive manner with input from administration, faculty, staff, students and alumni. As a result of this collaboration, the plan is considered an endorsement by University constituencies that the institution’s current and planned facilities are appropriate to meet the needs of its mission-related activities.

While extending the philosophy and value system of the University’s 2007 Campus Master Plan, the primary purpose of the 2012 update to the Plan was to incorporate the University’s 2010 purchase of 168 acres of adjoining property (Bryce Hospital), amend it to include a sorority expansion master plan, and proactively address the campus needs of a planned student enrollment of 35,000 as well as being responsive to the faculty and staff required to support those needs. Even with the significant increase in enrollment growth, the plan continues to support the University’s mission by the planned maintenance and enhancement of key structures, extension and replacement of infrastructure; and, as a result of the expanded campus, opportunities for infill of new buildings to serve the growing population.

The Plan specifically asserts the following:

- New academic growth will be accommodated primarily through renovation of existing academic buildings and adaptive use and expansion of other existing facilities.
- Development of on-campus housing will occur through expansion into previously underdeveloped portions of the campus and through infill and replacement of existing residential areas.
- Surface parking will be shifted from interior of campus to perimeter locations, to encourage and support walking, bicycling, and use of the campus transit system, thereby freeing up valuable core location space
for academic and residential facilities.

Ongoing efforts to ensure that the Master Plan continues to meet the needs of the campus constituents involve convening standing Campus Master Plan Committee [16] meetings. Examples of meeting minutes are provided [17]. Any activities that may necessitate an update to the Master Plan will originate through these channels and ultimately be submitted for Board approval as per the Board Rule 415, Section III. A. [18]. Documentation to support Board of Trustee’s approvals for the initial plan, five-year review and update, and the amendment to the Plan are provided [19] [20].

University Planning and Design [University Planning/University Planning.pdf] is responsible for the collaborative planning for the present and future physical campus needs of the University. The department maintains and updates the University’s Campus Master Plan.

**Strategic Planning**

Strategic planning is another essential factor in ensuring operation and maintenance of the University’s physical facilities continues to appropriately serve the needs of its educational programs, support services and other related mission activities. Evidence to support such efforts is contained in several Board of Trustees’ required annual plan submissions, as well as internal reports summarizing the Division of Financial Affairs’ anticipated needs for the Division and the University as a whole in order to continue functionality, expansion, and improvement of the learning environment for the students, faculty and staff.

Development of the plan documents is the culmination of the functions, business processes, discussion, and analysis that occurs as a result of the collaboration between the professionals within Construction Administration, Facilities and Grounds, and University Planning, as well as input from Academics and Student Affairs. These efforts ensure adherence to guiding principles of the Master Plan and responsiveness to the needs of the academic and/or student program. Examples of such planning documents that are used to ensure operation and maintenance of physical resources appropriately serve the University’s needs follow:

The **Annual Capital Development Plan (ACDP)** is required by Board Rule 415, Section III. C. [21] and presented to the Board of Trustees for approval at the September meeting. The Plan includes a list of prioritized capital projects presented in the context of the campus’ annual planning and budgeting process, and outlines how these projects relate to and enhance the University’s programs. The projects are classified by capital category including, but not limited to, education and general, real estate, auxiliary, infrastructure, equipment, Greek housing, and athletics. Additional information includes: a brief description of the project’s scope; preliminary cost estimates for construction/acquisition; projected annual cost for operations and maintenance of the planned space; and anticipated funding sources for the initial capital outlay and the ongoing operating costs. Additionally, the **Five-Year Facilities Development Plan**, as required by Board Rule 415, Section III. B. [22] proposes a list of projects to be completed within a two to five year period along with the projected cost of each, and grouped by capital category as detailed above. This plan serves as a basis for the Annual Capital Development Plan.

Also in accordance with Board Rule 415, Section III.C. [23] and the University’s Deferred Maintenance Policy, [24] a **Deferred Maintenance Plan (DMP)** is prepared on an annual basis covering a five-year period. The DMP supports the University’s ongoing effort to ensure the quality of its facilities with focal points to upgrade all buildings to current life safety standards and insure environmentally stable exterior conditions and interior environments. Projects can range from window replacements; boiler or chiller equipment replacements, new fire alarm systems, and interior finish upgrades. The plan is categorized based on priority and building systems. Building systems are classified as Fire/Life Safety; Health; Accessibility; Exterior; Heating, Ventilating and Air Conditioning (HVAC); Electrical; Interior Finishes; Plumbing; Site; Vertical Transportation and Security Systems. Representatives from primarily three areas: Construction Administration, Facilities and Grounds and Planning and Design meet bi-weekly to access and prioritize deferred maintenance of the Education and General funded items, along with various other issues pertinent to planning, construction and maintenance of facilities and grounds, as well as the supporting business processes [25].
After obtaining necessary university approvals, the Annual Capital Development Plan, Five-Year Facilities Development Plan and Deferred Maintenance Plan are consolidated, along with other related planning documents into one report, i.e., Annual Consolidated Capital Projects and Facilities Report (ACCPFR) [26]. The ACCPFR is submitted annually in June for the Board of Trustees’ initial review and consideration. The report is placed on the September agenda each year for Board’s approval of any stage I (pre-planning program statement, budget, and other planning information) new construction projects included in the ACCPFR. Documentation to support submission of the ACCPFR to the Board of Trustees as well as the Board’s official approval (applicable to Stage I construction projects included therein) is provided [27].

The Growth Plan - Accommodating Potential Enrollment Growth [28] is developed to communicate a framework for the Division of Financial Affairs to meet and support the dynamics of a growing campus and to recognize the challenges and opportunities. This report is updated periodically and distributed to University administration. In anticipation of the University’s continued growth and as necessary for efficient management of its operations, staff proactively address plans to meet defined and projected campus needs across all areas within the Financial Affairs Division, including operation and maintenance of facilities, construction administration, planning, public safety, finance, ancillary services, human resources, auxiliary services and other business activities. The Management and Growth Plan for Utilities and Infrastructure (U&I) [29] is focused on identifying these needs relative to the utilities and infrastructure systems of the campus including electrical distribution, sanitary sewer, storm sewer, thermal energy, energy management (including steam), natural gas and potable water, and the campus road work. The issues and projects addressed are carefully coordinated through the structure and principles provided by the Campus Master Plan and an integrated evaluation model to ensure the most effective execution and to eliminate any potential rework. Plan development is a direct result of the collaboration of the staff in Construction Administration, University Planning and Design, and Facilities and Grounds along with input from the Office of Academic Affairs and Student Affairs. The U&I was updated in 2013 to reflect work accomplished in accordance with the previous plan, the impact of projects that are in planning and development (both short and long term), programmatic considerations, technology changes, emerging opportunities, strategic partner dynamics, funding, and, most importantly for the last update, the impact of the acquisition of Peter Bryce Campus.

The U&I also summarizes current status and provides recommendations for improvement to all major systems in an effort to avoid any disruption in service or negative impact. The U&I covers the electrical distribution, sanitary sewer, storm sewer, thermal energy, energy management (including steam), natural gas, portable water, campus transportation, and pedestrian enhancements. Each system identifies projects required for expansion as the overall growth of the campus is directed by the Campus Master Plan and the Administration. The U&I also identifies the time frames and costs associated with the projects. These projects are then incorporated into the ACDP and/or the DMP.

Facilities and Grounds Operation

A critical component in ensuring the University operates and maintains physical facilities that appropriately serve the needs of its educational programs, support services and mission-related activities is a strong facilities and grounds operation that emphasizes maintenance and preventative maintenance measures of its infrastructure and related equipment. UA’s Facilities and Grounds Operation [30] has approximately 574 employees and is primarily responsible for overseeing and maintaining the University’s facilities and grounds. These functions include the following (additional information can be found in each area below):

- Building Maintenance [31]
- Custodial Services [32]
- Electrical Maintenance [33]
- Elevator Maintenance [34]
- Energy Management [35]
- Grounds Department [36]
- Heating, Ventilation and Air Conditioning (HVAC) Maintenance [37]
Routine and Preventative Maintenance

The UA Facilities and Grounds Operation is responsible for overseeing all routine and preventative maintenance requirements for the UA campus. On-campus maintenance requirements are handled primarily by UA maintenance employees, with assistance from outside contractors as needed. Off-campus maintenance requirements are handled by both UA maintenance employees and outside contractors, dependent on the location and the level of maintenance required at each specific location.

Each department listed above is staffed with a manager and support team that have the specific technical expertise required to successfully operate the department. The manager of each department reports directly to the Executive Director, Facilities and Grounds Operations, who reports directly to the Assistant Vice President, Facilities and Grounds Operations.

UA currently utilizes AssetWorks/AiM Maintenance Management software to help schedule and track maintenance work orders and associated costs. This software is used for routine, preventative and project maintenance work along with other requests for services including logistics, security access, and recycling requests. A UA employee from each campus building is designated as the building representative and serves as the liaison between that specific building and maintenance. The building representative notifies maintenance of any requested maintenance work (or other needed services) pertaining to the building. Routine maintenance requests are made through the UA Customer Service Center, which is operated 24 hours per day, 7 days per week. The Customer Service Center enters the work request into the work order Maintenance Management software, and the information is then transferred electronically to the appropriate department. The department subsequently assigns the work order to an appropriate UA employee, who performs the requested work. The Maintenance Management software compiles the labor and material costs associated with each work order and charges the maintenance related expenses to the correct account number. The Maintenance Management software also provides numerous reporting capabilities, which allow management to track, trend, and analyze maintenance performance. Screen shots of the work order system are provided. Also provided is a summary of all work orders (also includes other non-maintenance related services) completed for the fiscal year ending September 30, 2013. As building numbers are referenced within the report, a key identifying the University building numbers and names is also provided. Surveys are automatically generated from AiM in response to completion of any work order request submission. The survey prompts departments to rate services provided within a range of one (poor) to five (excellent). Services delivered by Facilities and Grounds Operations’ staff were rated an average of 4.72 for FY 2013. A summary of the survey results is provided.

In addition, Custodial Services supervisors and managers conduct daily rounds throughout their assigned buildings to encourage open communication and solicit feedback from the building representatives and other building personnel as a preemptive measure to address any issues before escalation of such occurs.

The UA Facilities and Grounds Operations maintenance department recognizes that reducing equipment failures that negatively impact the campus is critical, and a robust Preventative Maintenance (PM) program is essential to ensure reliable operation of facility related equipment and to reduce overall maintenance repair costs. Each maintenance department shop (Electrical, Plumbing, HVAC, Building Maintenance, Grounds) is responsible for establishing its own PM program. The types of equipment on campus varies significantly, thus each maintenance shop customizes their PM program to meet the specific requirements of the equipment and that of the faculty, staff, and students. Each maintenance department shop identifies the equipment requirements in their area of responsibility and appropriate PM procedures, guidelines, task sheets, and inspection logs are developed and implemented accordingly. All PMs are tracked via the Maintenance Management work order system. The maintenance department continually evaluates and adjusts the PM program to ensure the amount of PM work performed remains at the optimum level required to increase equipment reliability, reduce equipment failures, and reduce maintenance operational costs. The UA Maintenance Department completed 6,359 PM’s at a cost of $1.3 million for FY 2013. A summary report of preventative maintenance work orders (extracted from the total work orders completed) is provided. An example of a preventative maintenance work order for pumps (start to completion) is provided.
Deferred Maintenance

Over the last ten years, the University invested over $68.9 million to address the deferred maintenance backlog in existing facilities. $18,704,009 of this total was invested within the last five fiscal years (FY 2009 through FY 2013). These deferred maintenance projects included upgrades to life safety systems, replacement of roofs, windows, and elevators, upgrades to mechanical and electrical systems as well as addressing other code and modernization improvements as summarized below:

<table>
<thead>
<tr>
<th>GSF</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>874,541</td>
<td>GSF new roof/recoat</td>
</tr>
<tr>
<td>6</td>
<td>New building fire alarms and sprinkler systems</td>
</tr>
<tr>
<td>18</td>
<td>New boilers, chillers, and air handlers</td>
</tr>
<tr>
<td>10</td>
<td>Major elevator modernizations</td>
</tr>
<tr>
<td>2</td>
<td>Buildings with new windows</td>
</tr>
<tr>
<td>1</td>
<td>New back-up generators</td>
</tr>
</tbody>
</table>

In addition, the University removed numerous buildings and structures from the campus inventory which represented facilities that were prohibitively expensive to renovate or the land was required for new and more efficient development. A total of 29 structures have been removed for a total of 766,735 in gross square feet. This resulted in eliminated a total of $61.7 million in deferred maintenance liabilities.

For fiscal year 2014, the University allocated a total of $34.7 million for deferred maintenance, which addresses all campus areas including academic, administrative, auxiliary, including athletic facilities, as well as infrastructure.

New Construction/Renovations

In order to maintain pace with the increasing enrollment, the University has added approximately 3,477,206 in new gross square footage (GSF) since FY 2009. The GSF is a result of both new construction and as a result of renovations to the campus. Of this total, approximately 778,678 GSF was for academic purposes, including classroom and laboratory facilities, food services within academic facilities, and student health services; 1,218,551 GSF was for general residential facilities; and 706,172 GSF was for parking facilities. The following table summarizes the University’s additional gross square footage (by type) as a result of new construction and/or renovations since FY 2009:

<table>
<thead>
<tr>
<th>Category</th>
<th>GSF</th>
<th>Capitalized Cost*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>778,678</td>
<td>$276,871,101.54</td>
</tr>
<tr>
<td>Administrative</td>
<td>46,781</td>
<td>7,604,963.00</td>
</tr>
<tr>
<td>Other</td>
<td>1,109,709</td>
<td>149,428,691.40</td>
</tr>
<tr>
<td>Residential (includes Greek Housing)</td>
<td>1,542,038</td>
<td>245,415,901.53</td>
</tr>
<tr>
<td>Total</td>
<td>3,477,206</td>
<td>$679,320,657.47</td>
</tr>
</tbody>
</table>

* Costs associated with construction in progress projects are not capitalized.

A more detailed table of the University’s new gross square footage is also provided. This table includes a new residential facility (Presidential Village Phase 2) that is in construction but is scheduled to open fall 2014 and will house an additional 871 students.
Parking

As stipulated in the Campus Master Plan [14], the University has resolved to shift surface parking from the interior of the campus to perimeter locations, to encourage and support walking, bicycle and transit access and to use valuable core locations for academic and residential facilities. Commuter parking lots are located along the campus perimeter near major roads to ensure convenient access. Structured parking is strategically placed to reduce the need for surface parking. The University is committed to providing safe, convenient non-vehicular circulation infrastructure in combination with transit operations and effective wayfinding strategies to provide effective access alternatives to students, faculty, and staff. To that end, the University created its own transit system, Crimson Ride [47], which currently has a fleet of 26 (40 foot Nova LFS) buses available that are wheelchair accessible and are available to serve students, faculty, staff and campus visitors. The University expects to be in possession of an additional four buses by fall 2014. The University also has access to a total of twenty other-type vans (includes Eldorados, Sprinters, and Goshens) available to serve its transportation needs. The University bus routes [48] are provided and include off-campus routes (with plans to add an additional route in the fall 2014). The University also permits apartment complexes that have their own buses available to transport students, faculty and staff to a designated campus transit hub. University parking zones and maps are provided on the web [49]. A summary of the University’s parking is also provided [50]. An additional 134 parking spaces, near the Presidential Village Phase 2, are scheduled to be made available in the summer 2014. Of the total available spaces, 27 will be for visitors, with the remainder for residents and commuters.

Energy Management

The University demonstrates its commitment to effective energy conservation through its Energy Management Department [35]. Energy Management establishes performance goals annually to reduce the consumption of energy and promote continuous improvement. The current performance goal target is to reduce energy consumption per square foot of campus building space by 2 percent per year through the year 2015. As the University continues to grow and expand each year, the total energy cost will continue to increase; however UA’s overall Kilo British Thermal Unit (KBTU) intensity (energy consumed by a building relative to its size) applicable to electricity, natural gas, water and steam per gross square foot of building space, was reduced by an average of 2.12 percent for the Fiscal Years 2010 through 2013 [51]. The difference between the University consuming energy at its current level versus at the average level of peer universities represents a one-year cost avoidance of more than $7.7 million in FY 2013.

The University of Alabama contracts with Sightlines, LLC. to obtain independent analysis of its campus facilities. In 2012, Sightlines, LLC. ranked the University as the most efficient consumer of energy in its peer universities group, with the University consuming 36% less energy than peer universities. Excerpts from the Sightlines Facilities Management Benchmarking and Analysis Presentations applicable to energy usage are provided for Fiscal Years 2009 through 2013 [52].

Ongoing Resource Assessment and Evaluation by External Parties

Another resource used by University administration to ensure its facilities are appropriately serving the needs of its educational programs, support services and other mission related activities is to actively seek third-party feedback and objective analysis applicable to the condition of its current operations and for planning purposes. This analysis includes consistent measurement protocols and competitive benchmarking with designated peers. The resulting data provides administrators with independent reports of the University’s status and its standing compared to peers and/or industry standards, ultimately translating the decisions and planning efforts currently in place to the consequences or results of such. Examples of where the University actively sought such feedback follows:

Facilities

The University of Alabama contracts with Sightlines, LLC. to obtain independent analysis of its campus facilities. According to Sightlines’ April 10, 2014 FY 2013 Facilities Measurement, Benchmarking and Analysis Presentation [53], core issues identified include the following:
1) Almost 70% of the University’s Education and General (E&G) funded space has been fully renovated or newly constructed in the last 25 years shifting the campus to a younger age profile over its peers.

2) As is the case with most universities, UA has a deferred maintenance backlog; however, with the university’s commitment to earmarking future capital construction funds, the university’s total E&G spending has been above target for each of the past seven years. E&G spending has been evenly distributed between envelope/mechanical and space/programming. In the past eleven years, 57% of E&G total capital dollars have been put into new construction. As a result of the significant investment to-date into new space the campus value has increased while reducing the backlog of deferred maintenance need and increasing facilities quality.

3) The University’s entire campus consumes less total energy than peers in FY13 at a higher unit cost. As a result, millions of dollars are yielded in cost avoidance savings.

4) Operations output is strong with similar staffing levels outperforming peers in each functional area. In-house project work has decreased and proactive planned/preventative maintenance has increased.

5) Maintenance, custodial and grounds workers maintain campus to exemplary appearance standards and inspection scores surpass peers in all areas.

Classroom Space

The University understands that it is critical to measure and analyze enrollment capacity and resource allocation in order to ensure that its classroom resources are appropriate and are being maximized in use. This analysis is accomplished via reports generated from Ad Astra Information Systems’ instructional space scheduling software that the University implemented in 2006. The Office of the University Registrar (reporting to the Office of Academic Affairs) is responsible for monitoring the data generated and distributing reports, upon request, to the Vice Provost for Academic Affairs who in turn disseminates the information to the appropriate parties at the college/school and department levels.

Ad Astra concluded its most recent strategic check-up using fall 2013 data. The PowerPoint presentation summarizing the process and results from the study is provided. This study is a comparison of the University of Alabama and designated peer universities who also use Ad Astra software. Following are key findings from the study:

- Regarding the enrollment ratio, (comparison of actual course enrollment to maximum course enrollment capacity), the University is in the 93rd percentile compared to its peers. This indicates that the University is accurately projecting its course enrollment numbers.

- The University is effectively assigning the number of sections offered per course, and the maximum capacity of those sections. Of courses which had 11 or more sections (English 101, Math 100, etc.), these sections had an enrollment ratio of 96%. Courses which offered only one section had an enrollment ratio of 82%.

- The University’s auditorium/classroom actual seat fill ratio (number of students who registered for the course versus the capacity number of seats available in the room) is in the 88th percentile compared to its peers.

- While auditorium and classroom actual utilization is at 81% capacity during the University’s prime time, there is available capacity to schedule courses beyond prime time.

- The University is in the 49th percentile compared to its peers applicable to standard meeting patterns. The University’s standard meeting pattern for classrooms and auditoriums is Monday through Thursday, 9:00 a.m. to 3:00 p.m.; however, many sections are scheduled during a non-standard off-grid meeting pattern. For example, a Monday only class meeting from 9:00 a.m. to 10:50 a.m., rather than a standard Monday, Wednesday, Friday 50 minute class. This leads to greater availability of classroom and auditorium space on Wednesdays and Fridays.

While the University has experienced unprecedented enrollment growth, the results of the Ad Astra study indicate that the University has adequate resources and is efficiently allocating its existing resources in comparison to its designated peer universities. Conversely, the results also identify opportunities for the University to develop scheduling strategies and policies to ensure optimum resource allocation. To that end, University Administration approved the licensing of
WEN, which is a product offered by Leepfrog Technologies [56]. The University currently uses CourseLeaf Solutions’ Catalog Management System and Course Inventory System. WEN is the third product in the CourseLeaf Suite which will be used in the creation, verification, and publication of class schedules. It allows for front end enforcement of scheduling policies, creates approval workflows through which exceptions to scheduling policies are managed, and through a customization to the software provides SACS regulation enforcement applicable to the physical address requirement for off-campus courses. The University currently requires that a physical address be provided if the class is offered off-campus; however, this technology affords the University a system control to prevent users from being able to finalize off-campus courses within the software unless the physical address is entered. Additionally, this customization will prompt a workflow that will require additional University approvals for off-campus course offerings.

The licensing of this software used in conjunction with other CourseLeaf Suite products and Ad Astra’s room scheduling capabilities is the first step in a strategic proposal to optimize allocation of the University’s instructional space. In the spring 2014, a presentation was made to the President, Provost and Deans outlining the complete scheduling proposal. A copy of the presentation is provided [57].

Student Housing

In the Spring of 2011, the University’s Housing and Residential Communities (reporting to the Division of Student Affairs) [58] engaged Brailsford & Dunlavey (“B&D”) for a Student Housing Master Plan Update (the “Study”) [59]. The Study is an update to a previous Student Housing Master Plan completed in 2005 and later updated in 2006. The purpose of the Study was to evaluate the feasibility of the planned student housing developments as well as the demand for additional projects in the future. B&D’s scope of work included student focus groups, a student survey, off-campus (private-sector) housing market analysis, and a system-wide financial model. Based on the survey analysis, B&D constructed a housing demand model. The model quantifies the demand for the proposed units at specific rental rates in the context of the University’s enrollment figures.

Focus group findings indicated that students were happy with their experience at the University and are glad they made the decision to attend the University of Alabama. Concerns voiced from non-freshmen included the rapid growth of the University and its possible impact on academic quality, and housing and parking availability. Students expressed concerns about rising costs associated with new housing facilities and also expressed preferences regarding privacy related to bedrooms and bathrooms. The University can illustrate its responsiveness to these concerns as evidenced by completion of the Presidential Village I residential facility [60], which was opened in August 2012 and provides housing for up to 971 students. Additionally, Presidential Village II is scheduled to be completed fall 2014 and will house an additional 871 students. Also, since the survey was completed, a new parking deck, Riverside Parking Deck, was approved for construction and is scheduled for completion later in 2014. This parking deck will provide an additional 779 parking spaces.

As the enclosed Housing and Residential Communities Occupancy History Report [60] indicates, as of Fall 2013, 26.04% or 7,667 of the undergraduate student population is living in campus housing. Occupancy is at 96.27 percent of availability. Again, the opening of Presidential Village II will provide an additional housing for up to 971 students.
The Educational Benchmarking, Inc. Satisfaction Survey (EBI) was used annually by the Housing and Residential Communities Department (HRC) to poll student residents for a four year period. A summary of the survey results for the years 2008–09, 2009–10, 2010–11, and 2011–12 is provided. For each administered year, participation in the EBI residence life assessment provides benchmarking opportunities for UA HRC relative to 6 comparable participating institutions. The results of the surveys appear to indicate a strong overall satisfaction with housing facilities at UA as compared to benchmarking institutions [61]. Additionally, over a six year span from 2006 – 2012, all measures related to the physical resources of the University’s housing (satisfaction with: room/floor environment, facilities, services provided, safety and security) are trending upwards over the assessment period.

HRC has performed particularly well in measures related to room/floor environment, which capture on-campus students’ perceptions of their ability to study effectively in their residence; sleep without being interrupted in their residence; degree of privacy in their residence; and the noise levels in their place of residence. For these measures, UA ranked in the top 2 of benchmarked institutions throughout the 2008 – 2012 time period. While measures related to room/floor environment showed consistent attainment, other measures have exhibited less stability while maintaining an upward trend over time. In response to lower EBI scores, HRC has taken specifically policy actions to improve measures related to student feedback, such as increasing the hours at information desks within the residence halls, and adding top-of-the-line security features to newly constructed facilities. (Note: Year 2011–2012 report data is formatted differently due to EBI reporting options. Year 2011–2012 utilizes an online reporting format, while years 2008–09, 2009–10, 2010–11 are formatted for a paper-based report. The questions used to develop the measures are the same for the entire analysis period.) Additional detail about the University’s residential facilities is available at the hyperlink provided.

Athletic Facilities

The Department of Intercollegiate Athletics contracted with Davis Architects to develop an Athletic Facilities Master Plan to guide capital construction. A copy of the April 30, 2013 plan document is provided [62]. Among the Phase I and Phase II athletic facility projects listed was a proposed renovation to the Bryant Hall Academic Center, which was built in 2005 and provides academic resources to UA athletes including tutoring and mentoring services, classrooms, independent study rooms, conference rooms, and state of the art computer labs. The proposed renovation was to develop a career center for University athletes. The renovation was completed fall 2013 with the Career Center serving as an information hub where athletes can wirelessly gather information on various career fields or alumni worldwide who are in the career field of interest. A mock interview office was created where interviews can be recorded and played back. Formation of the accompanying career and leadership program has been in development since spring 2014 with plans to fully implement by this fall. The program is being designed to offer a progressive professional and leadership plan targeted to athletes from freshman through senior year and beyond status. The objective is to equip the student-athletes with the appropriate skill set to become professional, confident, and to thrive in their career of choice.

Other Resources Critical to Appropriately Serving Educational Programs, Support Services and Other Mission-related Activities

Library

The University’s administration understands that its library facilities are paramount to instruction and learning. To that end, the University’s budget model recognizes inflationary cost of increases in materials, including electronic databases and sources, and the purchases of books, serials, and periodicals. Each year, the Dean of University Libraries, analyzes actual costs incurred during the current year, anticipates price increases from major vendors, and prepares a request submitted through appropriate University channels outlining budgetary increase needs for the upcoming year. The chart provided demonstrates the University’s commitment to ensuring its library resources are appropriate to serve educational programs [63].

Technology
Infrastructure

The University’s Office of Information Technology (OIT) maintains a comprehensive campus infrastructure currently spanning 179 on-campus buildings. Off-campus facilities are connected to the campus network using a third-party service provider, Comcast. OIT provides wired and wireless networking services and telecommunications service to the broader campus community. It includes Virtual Private Network (VPN) services supporting secure remote access to the campus computing environment. The University offers online and distance education programs, Bama by Distance, through the College of Continuing Studies. The distance education components are supported by a combination of on-campus and third-party hosted platforms and services. The College of Continuing Studies, Instructional Technology and Faculty Services Department, is responsible for handling support issues related to course design and usage. The primary distance education platform is provided by Blackboard, Inc., with its infrastructure managed and maintained by Blackboard. On-site support for Blackboard, Inc. as well as other tools that support the University’s distance learning program is provided by the Center for Instructional Technology (CIT).

Technology Routine and Preventative Maintenance

OIT and the CIT maintain schedules for equipment refresh and perform routine maintenance activities as part of the normal operational duties and as required for the infrastructure they support. The campus network infrastructure refresh and deferred maintenance backlog is expected to be completed within the next five years through a combination of deferred maintenance funding and central UA funding earmarked for technology for the last five years, and effective FY 2014, $10 million in bonds. Software maintenance is managed though automated tools and is kept current to ensure information security and operational stability.

System redundancy for the University’s network and Banner Enterprise Resource Planning System is the responsibility of OIT. To that end, OIT established a secure colocation facility in Atlanta, Georgia to provide continuity of operations. Foundation network, security, storage and messaging services have been implemented and tested in this facility. Testing, referred to as failover, was performed at the colocation site in May 2013. Failover entailed switching from using the primary network, servers and critical applications such as Banner ERP used at Gadsden and Tuscaloosa, Alabama to the colocation facility’s replicated network, servers and applications in Atlanta, Georgia. Failover was conducted for one week’s time and was successful in performing all functions and processes. Failover is routinely performed on an annual basis.

Strategic Planning and Work Plans

The University’s Office of Information Technology (OIT) and the Center for Instructional Technology (CIT) develop strategic and annual work plans. These plans are reviewed and updated annually. They are presented to and reviewed by campus leadership. They include components related to:

- Technology infrastructure: data centers, network and telecommunications cable plant;
- Platforms: wired and wireless networking, systems, storage, and telecommunications;
- Continuity of operations, data backup and archival, and disaster recovery;
- Information security, risk management, compliance management and policies;
- Enterprise software and database management;
- Classroom technology;
- Emergency services technology;
- Project and project portfolio management; and
- IT financial management: software license management and compliance, and budget management.
OIT’s most recent annual work plan is provided [70]. Each of the universities within The University of Alabama System were requested to send abbreviated presentations summarizing status of technology operations to the University of Alabama System Office. This information was then forwarded to the Board of Trustees’ member designated for technology issues oversight in November 2013. The UA IT presentation is provided [71].

Feedback

The University conveys the importance of technology to its learning environment by formation of a standing University Information Technology Committee [72] whose duties include:

1) Actively participating in forming an engaging, proactive information technology vision for the University,

2) Facilitating communication to/from faculty, staff, students, and other IT Governance committees and OIT on information technology issues,

3) Providing feedback and input on information technology initiatives on campus,

4) Studying, reviewing, and recommending to the Provost/Executive Vice President and the Vice Provost for Information Technology policies and implementation plans related to information technology on the campus with particular attention given to the instructional and research needs of faculty, staff, and students.

The committee reports through the University’s Vice Provost for Technology and consists of nine faculty members, five professional staff members, three students (2 undergraduate, 1 graduate) from diverse academic divisions, a Faculty Senate representative, a Professional Staff Assembly representative, and an Office/Clerical/Technical Staff Assembly representative. Minutes from three committee meetings are provided [73].

CIT also solicits feedback regarding technology services through several means including facilitating several group forums for the discussion of technology issues and the dissemination of technology-related plans and information. These forums meet on a regular basis and include input from faculty, staff, and students. Student feedback currently filters through monthly meetings with college-level stakeholders. Comments are also invited through the organizational web pages, through general campus publications, and through occasional surveys. A summary of the feedback gained as a result of these forums is provided [74].

Supporting Documents

1. campus map (PDF)
2. web tour (PDF)
3. building inventory (PDF)
4. Birmingham-Samford University-Pictures (PDF)
5. Birmingham Samford University-Pictures (PDF)
6. Florence_University of North Alabama_Pictures (PDF)
7. Florence_University of North Alabama_Pictures (PDF)
8. Gadsden Center (PDF)
9. University of Alabama System’s Intercampus Interactive Telepresence System (IITS) (PDF)
10. Lease Agreement (PDF)
11. Moundville Archaeological Park (PDF)
12. UA Museums (PDF)
13. Kentuck Art Center Assn. Lease (PDF)
14. Campus Master Plan (PDF)
15. Master Plan Guiding Principles (PDF)
16. Campus Master Plan Committee (PDF)
17. Campus Master Plan Committee Minutes (PDF)
18. Board Rule 415, Section III. A. (PDF)
19. Campus Master Plan BOT Approval (PDF)
20. Campus Master Plan Update and Amendment BOT Approval (PDF)
21. Board Rule 415 Section III C (PDF)
22. Board Rule 415 Section III-B (PDF)
23. Board Rule 415 Section III C-Deferred Maintenance Plan (PDF)
24. Deferred Maintenance Plan Policy (PDF)
25. Deferred Maintenance Biweekly Meeting Sample (PDF)
26. ACCPRFR Report (PDF)
27. Support Documentation for ACCPFR (PDF)
28. Growth Plan (PDF)
29. Growth Plan for U&I (PDF)
30. Facilities and Grounds Operations (PDF)
31. Building Maintenance (PDF)
32. Custodial Services (PDF)
33. Electrical Maintenance Shop (PDF)
34. Elevator Maintenance Shop (PDF)
35. Energy Management Department (PDF)
36. Grounds Department (PDF)
37. HVAC Maintenance Shop (PDF)
38. Plumbing Maintenance (PDF)
39. Work Order System Screen Shots (PDF)
40. Summary of Work Orders Completed - FY 2013 (PDF)
41. Key for Building Names (PDF)
42. Work Order Customer Satisfaction Survey (PDF)
43. Preventative Maintenance WorkOrders FY 2013 (PDF)
44. Preventative Maintenance Work Order Example (PDF)
45. Deferred Maintenance Allocation (PDF)
46. Summary Gross Square Footage Added_FY 2009 Forward (PDF)
47. Crimson Ride (PDF)
48. Crimson Ride Routes (PDF)
49. Parking Map (PDF)
50. Parking Summary (PDF)
51. Utility Cost Report 2010 - 2013 (PDF)
52. Sightlines Peer vs UA 2009 to 2013 (PDF)
53. FY2013 Sightlines ROPA Alabama Final Presentation (PDF)
54. University Registrar (PDF)
55. Ad Astra Strategic Check-Up Presentation (PDF)
56. WEN Signed Proposal (PDF)
57. Scheduling Recommendation Presentation (PDF)
58. Housing & Residential Communities (PDF)
59. Brailsford and Dunalavey Student Housing Master Plan Update (PDF)
60. Housing and Residential Communities Occupancy History Report (PDF)
61. Education Benchmarking Inc. Student Satisfaction Surveys (PDF)
62. Athletics Facilities Master Plan Guide (PDF)
63. Library Budget Summary (PDF)
64. OIT - The University of Alabama (PDF)
65. BamabyDistance (PDF)
66. Instructional Technology and Academic Services (PDF)
67. OIT Schedule for Equipment Refresh (PDF)
68. Technology Infrastructure Funding (PDF)
69. Technology Infrastructure Bond (PDF)
70. OIT Annual Work Plan 2012–2013 (PDF)
71. OIT Presentation to UA System Office (PDF)
72. Information Technology Committee (PDF)
73. IT Committee Meeting Minutes: Examples (PDF)
74. CIT Examples Stakeholder Feedback (PDF)