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OVERVIEW

BACKGROUND

Clark Atlanta University (CAU) is a single campus institution and does not operate any off-site locations. The University’s 126-acre main campus is located on 223 James P. Brawley Drive about 1.5 miles southwest from the heart of metro downtown Atlanta, Georgia and is accessible from all major arteries – I-20, I-75/I-85, and I-285 of the State and the Hartsfield-Jackson International Airport.

CAU campus is listed as a Historic District on the National Register of Historic Places and contains fourteen mid-nineteenth century buildings and a variety of historic landscapes contributing to the Atlanta University Center Historic District, established in 1976.

CAU is one of five member institutions (Clark Atlanta University; Spelman College; Morehouse College, Morehouse School of Medicine; Interdenominational Theological Center) of the Atlanta University Center Consortium (AUCC) the only Historically Black Consortium of private colleges and universities in the nation. A unique benefit afforded students attending one of the AUCC member institutions is that they may cross register for courses at any of the undergraduate schools in the Center. This arrangement provides an opportunity for formal interactions among the AUCC’s larger student population of approximately 11,000 students.

History
The 2005 CAU Master Plan covers the period from 2005 to 2010. Clark Atlanta University began the development of the 2005 master plan in 2004. The work was guided by the 1998 University adopted Strategic Academic Plan that covered a period from 1999 to 2010. It serves as the philosophical basis for future plan developments of University, (1) overall mission, goals and themes, (2) current and future number of students, faculty and staff population, and (3) significant new initiatives planned which have facilities implications. The 2005 CAU Master Plan was updated in 2011 and focused on the following goals, (1) Form, (2) Function and (3) Economy.

Purpose
The CAU Master Plan establishes priorities for campus development consistent with the University’s Mission, Strategic Plan and other current initiatives. The multi-volume document identifies opportunities where the
University can focus resources to meet future demands on its facilities and resources. The aim of the 2013 CAU Master Plan Update is to serve as a concept plan for future development over the next five years.

The University has completed its strategic planning process which incorporates all academic and support operations. A previous Master Plan was completed in 2005 and updated in 2011. The previous Master Plan provides the framework for development on the campus with policies and statements regarding how the University should be developed and landscaped.

The overall goal of this campus Master Plan update is to assist the University in translating the strategic goals and objectives of the various University units into a physical plan which identifies where the University should be focusing its resources to meet future demands on its facilities and land resources. The Master Plan is a key part of the University’s Capital Budget Request and 10-year Capital Plan that will be submitted to the Southern Association of Colleges and Schools. The Master Plan and its updates are developed every 20 years to demonstrate Best Practices and respond to external and internal agencies, departments, and donor expectations and requirements. The Master Plan will also guide the capital construction on the campus for at least the next ten years. The Master Plan update covers the period from 2013 - 2018.

Scope
The objective of this effort is to do a minor update of the master plan to reflect the impact of recent improvements to the facilities and the assumption that current enrollment and programs are to change in accordance with the strategic plan. In addition, the update records certain related resources that may be of interest to external agencies. This includes:

a. 3.11.1 - The institution exercises appropriate control over all its physical resources. (Control of Physical Resources)
b. 3.11.2 – The institution takes reasonable steps to provide a healthy, safe and secure environment for all members of the campus community (Institutional Environment)
c. 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 (Physical Facilities)
Team
The point of contact for Clark Atlanta University, Ms. Bonita Dukes, provided day-to-day communication and guidance. In addition, the following staff members contributed to this effort:

Mr. Mike Anthony
Ms. Susan Gibson
Mr. Gary Merrow
Mr. Narendra Patel

Sizemore Group provided strategic analysis of data, developed the space needs assessment and provided overall management and documentation.

GOALS
By way of background, the premises and goals of the 2004 Master Plan and the 2010 update were revised as noted below.

• The entering freshmen will have an SAT score of 900 and a High School GPA of 2.25.
• The retention from freshmen to sophomore will shift from the current ratio of 61% to 70% by 2018.
• All freshmen and sophomores are required to live on campus.
• The distribution of undergraduate to graduate will range from 75:25 to 80:20.
• The future number of faculty and staff will reflect current ratio to student.
• The classroom space utilization target for this model is based on an average of 30 hours per week being used for instruction.

The Goals established in the 2004 Master Plan remain mostly unchanged. The new Goals are:

FORM
Freshman and sophomores will live on campus.
Provide a safe environment.
Provide an attractive image.
Identify opportunities for developing a contiguous campus boundary.

FUNCTION
Focus and center attention on the needs of the students.
Support quality of education in the programs determined by the strategic plan.
Keep ratio of undergrad/grad students
Attract non-traditional students (older).
Establish collaborations with local businesses and community.
EXECUTIVE SUMMARY

Grow the Centers of Excellence.
Provide flexible and adaptable environments

ECONOMY
Identify opportunities for collaborations and sharing of resources.
Develop opportunity that secures the expense side of the university’s ledger.
Identify opportunities to increase the revenue side of the university’s ledger.
Focus on Sustainable initiatives as they yield environmental, behavioral, economical, and operational benefits.

TIME
Plan for two phasing increments: 4300 HC students by 2018 and 5000 HC students beyond.

FACTS
As part of the initial review, certain key factors were updated to reflect the 2009-10 conditions. In general, the institution occupies approximately 126 acres just west of Downtown Atlanta and within the boundaries of the Atlanta University Center. This consortium includes other institutions such as Morehouse College, Morehouse School of Medicine, Spelman College, and Interdenominational Theological Center. Several of these institutions share a key resource, the Woodruff Library. CAU’s profile includes:

3,400 +/- HC students (2946 FTE)
654 HC faculty and staff (600 FTE)
2,127 beds (1417 occupied) - two facilities are off line
40 +/- buildings
1,500,000 gross square feet

Following is a map of current conditions.
EXECUTIVE SUMMARY

Renovations recently Completed:

*Instructional:*
- Thayer Hall
- Clement Hall
- Wright Young Hall
- McPheeters-Dennis Hall - PARTIAL

*Residential:*
- Merner Hall
- Pfieffer Hall
- Holmes Hall

*Facilities:*
- Central Plant

**NEEDS**

**Population**
The current and projected population growth is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Fall 2012</th>
<th>2018</th>
<th>Beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Head Count</strong></td>
<td>3,419</td>
<td>4,300</td>
<td>5,000</td>
</tr>
<tr>
<td><strong>FTE</strong></td>
<td>2,946</td>
<td>3,705</td>
<td>4,308</td>
</tr>
<tr>
<td><strong>% HC/EFT</strong></td>
<td>86.2%</td>
<td>86.2%</td>
<td>86.2%</td>
</tr>
<tr>
<td>WSCH Classroom</td>
<td>43,050</td>
<td>54,143</td>
<td>62,957</td>
</tr>
<tr>
<td>WSCH Laboratory</td>
<td>5,500</td>
<td>6,917</td>
<td>8,043</td>
</tr>
</tbody>
</table>

**FACULTY PROJECTION**

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2018</th>
<th>Beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full-Time Faculty</strong></td>
<td>170</td>
<td>214</td>
<td>249</td>
</tr>
<tr>
<td><strong>Part-Time Faculty</strong></td>
<td>75</td>
<td>94</td>
<td>110</td>
</tr>
<tr>
<td><strong>Temporary</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL FACULTY FTE</strong></td>
<td>208</td>
<td>261</td>
<td>303</td>
</tr>
<tr>
<td><strong>TOTAL FACULTY HC</strong></td>
<td>245</td>
<td>308</td>
<td>358</td>
</tr>
</tbody>
</table>

**STAFF PROJECTION**

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2018</th>
<th>Beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full-Time Staff</strong></td>
<td>360</td>
<td>453</td>
<td>526</td>
</tr>
<tr>
<td><strong>Part-Time Staff</strong></td>
<td>33</td>
<td>42</td>
<td>48</td>
</tr>
<tr>
<td><strong>Contract</strong></td>
<td>16</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td><strong>TOTAL STAFF FTE</strong></td>
<td>393</td>
<td>494</td>
<td>574</td>
</tr>
<tr>
<td><strong>TOTAL STAFF HC</strong></td>
<td>409</td>
<td>514</td>
<td>598</td>
</tr>
</tbody>
</table>

**FACULTY & STAFF TOTALS**

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2018</th>
<th>Beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL FTE</strong></td>
<td>600</td>
<td>755</td>
<td>877</td>
</tr>
<tr>
<td><strong>TOTAL HC</strong></td>
<td>654</td>
<td>823</td>
<td>956</td>
</tr>
</tbody>
</table>
Methodology
As with the 2004 Master Plan, the team used the Council of Educational Facility Planners International (CEFPI) guidelines to measure space use. These were first published in 1985. This is a nationally-recognized method that establishes need using the following factors:

- Student enrollment, faculty, staff and weekly student contact hours (WSCH) projections.

The analysis of space need is done on a per-function basis (Using the Federal Room Use Code). This covers classrooms, labs, offices, library, etc. spaces, and provides a quantitative analysis of the need, assuming all existing space is up to reasonable industry standards.

Technology
These guidelines allow for calibration that reflects the use of technology. This calibration is in the space factors used or can be incorporated by way of annotating specific policies of the institution.

Library
The Robert W. Woodruff Library constructed in 1982, is designed to serve the instructional, informational and research needs of member institutions in the Atlanta University Center Consortium (AUCC) the only Historically Black Consortium of private colleges and universities in the nation. It should be noted that library / study space was not included in this analysis as the library facility is shared with others.

Space
The space needs generated by these projections are illustrated below on a per function basis. The items in RED illustrate a deficiency. It should be noted this is purely a QUANTITATIVE analysis. These findings were further refined based on a QUALITATIVE assessment of the condition of the facilities.

100 - Classroom
The amount of space needed for classroom is calculated by multiplying the Weekly Student Contact Hours for classroom times a space factor. The space factor considers the average number of hours a week that classrooms are used, an average occupancy of seats and size of seat. The space factor includes configurations that optimize the use of technology. Note this assume ON SITE activity only.
EXECUTIVE SUMMARY

1.03

200 CLASSROOM SPACE

<table>
<thead>
<tr>
<th>Factor ASF/WSC</th>
<th>TOTAL WSCH</th>
<th>Total Off-Site WSCH</th>
<th>TOTAL WSCH</th>
<th>TOTAL ASF</th>
<th>Existing ASF</th>
<th>Surplus / Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FALL 2012</td>
<td>1.03</td>
<td>43,050</td>
<td>0%</td>
<td>43,050</td>
<td>44,342</td>
<td>76,666</td>
</tr>
<tr>
<td>4300</td>
<td>1.03</td>
<td>54,143</td>
<td>0%</td>
<td>54,143</td>
<td>55,767</td>
<td>76,666</td>
</tr>
<tr>
<td>5000</td>
<td>1.03</td>
<td>62,957</td>
<td>0%</td>
<td>62,957</td>
<td>64,846</td>
<td>76,666</td>
</tr>
</tbody>
</table>

200 - Laboratories

The guidelines set by CEFPI outline a range of space and utilization factors based on the nature of the academic program. CAU’s laboratory space ranges between biological and dance labs. Based on this, a space factor of 6 was established.

Space Adjustment - One significant space adjustment was made, not related to renovation but rather to space use: the amount of ‘instructional lab’ was greatly decreased as it was confirmed that the lab space in the Research Center for Science and Technology is hardly available for instructional purposes.

200 LABORATORY SPACE

<table>
<thead>
<tr>
<th>Space Factor ASF/WSC</th>
<th>WSCH</th>
<th>TOTAL ASF</th>
<th>Existing ASF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FALL 2012</td>
<td>6.09</td>
<td>5,500</td>
<td>33,495</td>
</tr>
<tr>
<td>4300</td>
<td>6.09</td>
<td>6,917</td>
<td>42,126</td>
</tr>
<tr>
<td>5000</td>
<td>6.09</td>
<td>8,043</td>
<td>48,984</td>
</tr>
</tbody>
</table>

300 - Office

The CEFPI Guidelines calculates office space based on the existing and projected staff and applying to a detailed breakdown by personnel type or an average square foot per person of 155 sf for office and 10 sf per person for office support. For this study, the average was chosen as the unit of measurement.
## 300 OFFICE SPACE

<table>
<thead>
<tr>
<th>Period</th>
<th>FTE</th>
<th>ASF/FTE</th>
<th>ASF/FTE</th>
<th>TOTAL BASE AREA</th>
<th>Existing ASF</th>
<th>Surplus / Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL 2012</td>
<td>600</td>
<td>93,000</td>
<td>6,000</td>
<td>99,000</td>
<td>160,982</td>
<td>61,982</td>
</tr>
<tr>
<td>4300</td>
<td>755</td>
<td>116,964</td>
<td>7,546</td>
<td>124,510</td>
<td>160,982</td>
<td>36,472</td>
</tr>
<tr>
<td>5000</td>
<td>877</td>
<td>136,005</td>
<td>8,774</td>
<td>144,779</td>
<td>160,982</td>
<td>16,203</td>
</tr>
</tbody>
</table>

## 400 - Library

Library / study space was not included in the calculation as the university shares the use of the Woodruff Library with other members of the AUC Consortium. As part of the agreement CAU allocates resources that support the operation of the library.

## 500 - Special Use

### Athletic or Physical Education

CEFPI Guidelines address indoor recreational, physical education, and athletic spaces under the 520 category. The Guidelines provide a minimum core space regardless of the size of the campus. The following estimates for building-related recreational space take into account the core requirement of 20,000 ASF plus the number of students above the core of 1,000 students by 5 ASF.

### BUILDING-RELATED ATHLETIC/P.E. SPACE

<table>
<thead>
<tr>
<th>Period</th>
<th>Base Area ASF</th>
<th># of FTE over 1,000</th>
<th>1,000 x 5 ASF</th>
<th>Spectator Seating</th>
<th>BASE AREA</th>
<th>Existing ASF</th>
<th>Surplus / Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL 2012</td>
<td>20,000</td>
<td>1,946</td>
<td>9,730</td>
<td>2,500</td>
<td>32,230</td>
<td>17,967</td>
<td>-14,263</td>
</tr>
<tr>
<td>4300</td>
<td>20,000</td>
<td>2,705</td>
<td>13,526</td>
<td>2,500</td>
<td>36,026</td>
<td>17,967</td>
<td>-18,059</td>
</tr>
<tr>
<td>5000</td>
<td>20,000</td>
<td>3,308</td>
<td>16,541</td>
<td>2,500</td>
<td>39,041</td>
<td>17,967</td>
<td>-21,074</td>
</tr>
</tbody>
</table>

* * Existing ASF = Sum of all spaces under 515,520, 523 + 525 incl. spectator seating

## Media

CEFPI recommends a core space of 9,800 ASF for a base count of 4,000 FTE students.

### 530/535 AUDIO/VISUAL SPACE

<table>
<thead>
<tr>
<th>Period</th>
<th>Base Area ASF</th>
<th># of FTE over 4,000*</th>
<th>TOTAL SPACE</th>
<th>Existing ASF</th>
<th>Surplus / Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL 2012</td>
<td>9,800</td>
<td>(359)</td>
<td>9,441</td>
<td>1,000</td>
<td>-8,441</td>
</tr>
<tr>
<td>4300</td>
<td>9,800</td>
<td>476</td>
<td>10,276</td>
<td>1,000</td>
<td>-9,276</td>
</tr>
<tr>
<td>5000</td>
<td>9,800</td>
<td>1,139</td>
<td>10,939</td>
<td>1,000</td>
<td>-9,939</td>
</tr>
</tbody>
</table>

## Greenhouse

The CEFPI guidelines allow 3 ASF per total FTE for the base number in this category. (An additional 25 ASF per
FTE within selected disciplines may be added if necessary.

<table>
<thead>
<tr>
<th>580 GREENHOUSE SPACE</th>
<th>FTE Students</th>
<th>ASF/FTE Student</th>
<th>SPACE NEEDS</th>
<th>Existing ASF</th>
<th>Surplus / Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW PRIORITY for CAU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FALL 2012</td>
<td>2,946</td>
<td>3.00</td>
<td>8,838</td>
<td>1,200</td>
<td>-7,638</td>
</tr>
<tr>
<td>4300</td>
<td>3,705</td>
<td>3.00</td>
<td>11,115</td>
<td>1,200</td>
<td>-9,915</td>
</tr>
<tr>
<td>5000</td>
<td>4,308</td>
<td>3.00</td>
<td>12,925</td>
<td>1,200</td>
<td>-11,725</td>
</tr>
</tbody>
</table>

600 - General Use

Assembly Exhibition (610 - 625)

CEFPI allows an “enhanced core” space of 16,000 ASF for a college of 5,000 or less FTE. An additional 6,450 ASF can be added once college reaches 5,000 FTE. The formula allows for 5 ASF per FTE over 5000.

<table>
<thead>
<tr>
<th>610/620 ASSEMBLY/EXHIBITION SPACE</th>
<th>Base Area ASF</th>
<th>over 5,000 @6</th>
<th>SPACE NEEDS</th>
<th>Existing ASF</th>
<th>Surplus / Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FALL 2012</td>
<td>16,000</td>
<td>(12,324)</td>
<td>16,000</td>
<td>34,236</td>
<td>18,236</td>
</tr>
<tr>
<td>4300</td>
<td>16,000</td>
<td>(7,769)</td>
<td>16,000</td>
<td>34,236</td>
<td>18,236</td>
</tr>
<tr>
<td>5000</td>
<td>16,000</td>
<td>(4,150)</td>
<td>16,000</td>
<td>34,236</td>
<td>18,236</td>
</tr>
</tbody>
</table>

Food Service (630, 635)

CEFPI provides a guideline that takes into consideration serving and food preparation and allows for calibration of the seating based on the amount of population served, the turn over rate per meal and the seating type.

<table>
<thead>
<tr>
<th>630/635 FOOD SPACE</th>
<th>Seating /Serving</th>
<th>Preparation n</th>
<th>SPACE NEEDS</th>
<th>Existing ASF</th>
<th>Surplus / Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period</td>
<td>22</td>
<td>0.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FALL 2012</td>
<td>9,887</td>
<td>3.955</td>
<td>13,842</td>
<td>17,620</td>
<td>3,778</td>
</tr>
<tr>
<td>4300</td>
<td>12,434</td>
<td>4.974</td>
<td>17,408</td>
<td>17,620</td>
<td>212</td>
</tr>
<tr>
<td>5000</td>
<td>14,459</td>
<td>5.783</td>
<td>20,242</td>
<td>17,620</td>
<td>-2,622</td>
</tr>
</tbody>
</table>
Lounge, Merchandising, Student Services - SUMMARY
The chart below summarizes the COMBINED need for lounge and merchandising plus student services. Below it is the detailed breakdown for each.

<table>
<thead>
<tr>
<th>Period</th>
<th>Base Area of Lounge &amp; Merchandising</th>
<th>Base Area of Student Services</th>
<th>TOTAL BASE AREA ASF</th>
<th>Existing ASF</th>
<th>Surplus / Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL 2012</td>
<td>3,546</td>
<td>26,514</td>
<td>30,060</td>
<td>31,901</td>
<td>1,841</td>
</tr>
<tr>
<td>4300</td>
<td>4,460</td>
<td>33,346</td>
<td>37,806</td>
<td>31,901</td>
<td>-5,905</td>
</tr>
<tr>
<td>5000</td>
<td>5,186</td>
<td>38,774</td>
<td>43,960</td>
<td>31,901</td>
<td>-12,059</td>
</tr>
</tbody>
</table>

Lounge and Merchandising (650/660)
According to CEFPI the Lounge and Merchandising space is calculated by adding the total number of classroom and laboratory student stations with the total employees and multiplying by one assignable square feet.

<table>
<thead>
<tr>
<th>Period</th>
<th>Total # of Student Stations</th>
<th>Total Non-Dept Staff @ 1 ASF</th>
<th>BASE AREA ASF</th>
<th>Existing ASF</th>
<th>Surplus / Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL 2012</td>
<td>2,946</td>
<td>600</td>
<td>3,546</td>
<td>25,345</td>
<td>21,799</td>
</tr>
<tr>
<td>4300</td>
<td>3,705</td>
<td>755</td>
<td>4,460</td>
<td>25,345</td>
<td>20,885</td>
</tr>
<tr>
<td>5000</td>
<td>4,308</td>
<td>877</td>
<td>5,186</td>
<td>25,345</td>
<td>20,159</td>
</tr>
</tbody>
</table>

Student Services (670-690)
According to CEFPI this category includes recreational rooms (670), meeting rooms (680), and locker areas (690) that are located in a student union facility.

<table>
<thead>
<tr>
<th>Period</th>
<th>Student Enrollment</th>
<th>BASE AREA</th>
<th>Existing ASF</th>
<th>Surplus / Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL 2012</td>
<td>2,946</td>
<td>26,514</td>
<td>6,556</td>
<td>-19,956</td>
</tr>
<tr>
<td>4300</td>
<td>3,705</td>
<td>33,346</td>
<td>6,556</td>
<td>-26,790</td>
</tr>
<tr>
<td>5000</td>
<td>4,308</td>
<td>38,774</td>
<td>6,556</td>
<td>-32,218</td>
</tr>
</tbody>
</table>

DATA PROCESSING (710)
CEFPI recommends a core space of 4,500 sq ft for campuses up to 5,000 FTE students.
Shop and Storage Space (720)
CEFPI develops shops and storage as a percentage of all other spaces to be maintained. The formula includes the total of room types 100 through 715, plus 800’s and 900’s, times eight percent, to arrive at an assignable square footage for shops and storage. Depending on the university’s long term policy regarding hard copy versus electronic storage, this guideline may be decreased.

Residential Space (900)
CAU currently has the following residential halls available for occupancy. In summary, using only those facilities that are currently open, the institution has capacity to accommodate another 710 students.
Executive Summary

Clark Atlanta University
Strategic Master Plan - Update

### Projecting into the Future

Assuming the same ratio of students are housed on campus in the same type of units, the projected number of beds needed is shown below. In essence, no beds need to be added, however, the university will be at full capacity.

This assessment could change should the university decide to either change the ratio of students enrolled to those housed on campus or change the mix of housing types they offer.

---

<table>
<thead>
<tr>
<th>Students Enrolled</th>
<th>% Housed</th>
<th>Total Occupancy</th>
<th>Total Capacity</th>
<th>% Occupied</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,419</td>
<td>41.44%</td>
<td>1,417</td>
<td>2,127</td>
<td>67%</td>
</tr>
<tr>
<td>4,300</td>
<td>41.86%</td>
<td>1,800</td>
<td>2,127</td>
<td>85%</td>
</tr>
<tr>
<td>5,000</td>
<td>41.00%</td>
<td>2,050</td>
<td>2,127</td>
<td>96%</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Hall</th>
<th>Total Occupancy</th>
<th>Total Capacity</th>
<th>% Occupied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beckwith</td>
<td>102</td>
<td>285</td>
<td>36%</td>
</tr>
<tr>
<td>Heritage</td>
<td>263</td>
<td>456</td>
<td>58%</td>
</tr>
<tr>
<td>Holmes</td>
<td>69</td>
<td>112</td>
<td>62%</td>
</tr>
<tr>
<td>Merner</td>
<td>80</td>
<td>112</td>
<td>71%</td>
</tr>
<tr>
<td>Pfeiffer</td>
<td>58</td>
<td>118</td>
<td>49%</td>
</tr>
<tr>
<td>New Brawley</td>
<td>434</td>
<td>466</td>
<td>93%</td>
</tr>
<tr>
<td>CAU Suites</td>
<td>411</td>
<td>578</td>
<td>71%</td>
</tr>
<tr>
<td>Total Active</td>
<td>1,417</td>
<td>2,127</td>
<td>67%</td>
</tr>
</tbody>
</table>

OFF LINE
- Bumstead: 148, 0%
- Ware: 162, 0%
Parking
Currently the university has approximately 1400 parking spaces on campus and has access to an additional (approximately) 700 spaces on street. No need for additional on campus parking is anticipated in the foreseeable future.

Infrastructure
As part of the projects CAU implemented in the last eight years, the most significant infrastructure project was the renovation of the Central Plant. This included replacing all the equipment and provided a new distribution system. It has enabled CAU to realize energy efficiencies and to increase the building area served. The current set up, shared with Spelman College and Morehouse College is nearing its capacity. Therefore, one strategic decision that remains to be made is whether the university will continue to grow the concept of central plant(s).

Site Improvements
The university will continue to monitor and prioritize the need to implement site improvements such as repair of existing walks, parking, additional signage, hardscape, landscape and the addition of new gateways or entrances.

The quantitative analysis indicated that the following Academic and Support Spaces are below standard. This list is ranked by priority:

- Student Services
- Audiovisual
- Data
- Athletic / PE / Recreation
- Greenhouse
- Support – shop, storage

A further analysis of the data was done to reflect the fact that a few facilities, as a whole, do not meet reasonable building condition (quality of space) standards. When that space is taken ‘off’ line and is not available, the total need increases as follows:

- **Park Street Church** – Total of 17,600 ASF:
  - 2,000 in classroom, 6,000 in lab, 3,000 in office, 6,000 in assembly and exhibition

CAU may address this need by either renovating the existing or building a new facility to house the programs in it plus Mass Media (currently in Woodruff Library). If new
construction is elected, the university will then determine what is the best disposition for Park Street Church.

- **Henderson Gym** – Total of 35,000 ASF:
  3,600 in classroom, 900 in lab, 4,000 in office, 18,000 in athletic/rec, 4,000 in student areas, 4,000 in support

**OTHER MINOR CAPITAL PRIORITIES:**

Kresge Hall - 19,312 GSF
Knowles Hall - 10,312 GSF
Faculty Row Housing - 17 units at approximately 1100 GSF /ea.
Harkness Hall - 23,216 GSF
Beckwith Residence Hall 65,447 GSF
Panther Stadium - 29,551 GSF
Bumstead / Ware Residence Hall - 93,150 GSF
PHYSICAL PLAN
Several strategic options were discussed, specifically:

1. Renovate Existing Facilities
2. New Construction on Current Property
3. Acquisition and Disposition

Recommendations / Next Steps
- Finalize Capital Priorities
- Consider a more detailed update of individual components of the original master plan: FCA, Space Inventory, Site Inventory
APPENDIX

CEFPI

Sample reference of the CEFPI formulas used to measure space needs.

Classroom Space Factors
Seminar:
30 ASF/(30 hrs. x 62.5% occupancy) = 1.6
Classroom:
25 ASF/(30 hrs. x 62.5% occupancy) = 1.33
Lecture:
15 ASF/(30 hrs. x 65% occupancy) = 0.769

Instructional Laboratory Space Factors
Biological Sciences:
50 to 65 ASF/(22 hrs. x 80% occupancy) = 2.8 to 3.7
Education:
35 to 40 ASF/(22 hrs. x 80% occupancy) = 1.98 to 2.27
Dance:
100 to 150 ASF/(22 hrs. x 80% occupancy) = 5.68 to 8.5
Resources related to (3.11.1) - The institution exercises appropriate control over all its physical resources.
   a. Internal Audit and Risk Management Reports - Office of Finance and Business
   b. Management Letters - OPAR
   c. Documentation of regular physical inventory (this may be a part of the main document) - See space inventory in this document.
   d. Policies related to purchasing, including recording, tracking and disposal of assets - Office of Finance and Business
   e. Links to planning and control documents - OPAR

Resources related to 3.11. 2 - The institution takes reasonable steps to provide a healthy, safe and secure environment for all members of the campus community.
   f. Evidence institutional staff can carry out the safety, security and health plans of the institution. - FEMA training certification and related information available from Public Safety
   g. Current safety, emergency, disaster plan - Office of Compliance
   h. Emergency procedures - Office of Compliance
   i. Inspection reports (Health, safety, etc.) - Office of Compliance
   j. Evacuation plans - Faculty / Staff Policy Handbook
   k. Evidence of Compliance with environmental and occupational regulations - - Office of Compliance
   l. Policies and training regarding harassment, hazardous materials, etc. - Office of Compliance

Resources related to 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.
   m. Plan for routine preventative and deferred maintenance - see enclosed methodology
   n. Facilities satisfaction survey - Available from DTZ
   o. Most recent capital budget - Available from Facilities
   p. Evidence that institution has facilities that adequately support the mission of the institution - See content of this master plan update.
   q. Video or walking tour of the institution’s facilities
   r. Facilities master plan including campus map - See content of master plan update.
Plan for Routine Preventative Maintenance of CAU Facility Assets:

DTZ’s approach to establishing day-to-day operations for the CAU site is a two-fold approach. We established initial maintenance program efforts on industry standard preventive maintenance (PM) efforts largely based on manufacturers recommended PM requirements. The majority of operations and maintenance (O&M) program effectiveness are judged by the quality of their PM efforts as identified by the condition of their equipment and the thoroughness of their PM Work Plans. PM program efforts are based on the assumption of a cause-and-effect relationship between scheduled maintenance and systems or equipment reliability. The assumptions are, since all equipment and their parts age and wear-out, the reliability of the equipment is related to operating age. Hence, the frequency of equipment attention in the form of overhaul, component replacement, and calibration efforts would help reduce the likelihood of failure. The only problem is determining the point in the equipment’s lifecycle when these efforts assure reliable operation and potentially extend the equipment’s lifecycle.

During the equipment’s warranty period, steps are performed based on manufacturer’s recommendations to ensure the equipment stays under warranty. The program DTZ is transitioning to is one based on Reliability-Centered Maintenance (RCM) concepts which utilizes an optimum mix of reactive, time- or interval-based, condition-based, and proactive maintenance practices. The strategy is to establish a percentage of effort towards each of the maintenance practices to ensure the most fiduciary expenditure of resources (labor and material) while minimizing the effect of downtime to the operational mission of the facility. The difficulty in establishing the RCM concept is determining and justifying the expenditures for some of the PdM and Condition Based Maintenance (CbM) processes and selling the concept that some of the equipment should be allowed to “run to fail.” The basic application of each strategy is shown in Fig. 1.

![Fig. 1. Components of a RCM Program.](image)

PM programs, as stated earlier, assume failure of equipment or components can be determined statistically and efforts can be accomplished “just-in-time” to prevent failure. Examples are replacement of filters on an air handler unit or changing oil on a compressor on a timed basis. PM efforts are still the prevalent program in most facilities.
management organizations, but not with DTZ. We will utilize the building management systems (BMS) installed throughout the CAU complex to data mine, allowing for the identification of precursors of failure and equipment operating conditions with a higher reliability allowing maintenance personnel to schedule appropriate repairs in a more timely manner than possible with traditional PM programs. Other predictive efforts (PdM) recommended will be rounds (nothing beats the eyes and ears of a seasoned maintenance mechanic), and as financially justified ultrasonic, thermographic analysis, etc., to provide cost effective methods for PdM programs and ensuring uptime of systems.

The final, and sometimes least understood component of a RCM program is “run-to-failure.” In systems or components where no failure consequences in terms of mission, environmental impact, safety, security, or lifecycle cost exist, maintenance should simply not be performed.

The first key to a successful O&M program is an equipment inventory, which DTZ is continuously updating. The next key component is to base proactive efforts on Priority Levels. The groundwork for this level is based first on the code “shall”, then “should”, then all others based on the defined / applied priority levels.

Plan for Addressing Capital Renewal / Deferred Capital Renewal / Plant Adaptation of CAU Facility Assets:

DTZ supports the Clark Atlanta’s capital and deferred renewal maintenance efforts through the execution of an on-going Facility Condition Analysis macro version. The Facility Condition Assessment (FCA) is a thorough analysis of each campus facility. As the properties are inspected DTZ identifies short term (immediate to three years) and longer term (four to ten years) Capital Renewal, Deferred Capital Renewal, and Facility Adaptation projects. The focus of the inspection determines what needs to be renewed, repaired, or altered. DTZ’s focus with our FCA efforts is to provide you with a complete, detailed plan of action for renewing CAUs physical plant. It identifies and addresses code upgrade issues and facility use changes, along with the more mundane lifecycle renewal needs. A complete Life Cycle Model (LCM) can be provided for each building but is outside the scope of the basic FCA. This FCA effort is based on actual conditions at each individual facility and allows for detailed customization based on the local environment.

The following 10 systems/components are evaluated:

- Accessibility (ADA)
- Electrical Systems
- Exterior Structure/Roof Systems
- Fire/Life Safety
- Health/Food Service/Hazardous Materials
- Heating, Ventilating, and Air Conditioning Systems
- Interior/Finish Systems
- Plumbing Systems
- Site-immediately surrounding the building
- Vertical Transportation (elevators, chair lifts)
The project Category Codes are broken down as follows:

**Example: Category Code = EL5A where:**
- EL = System Description
- 5 = Component Description
- A = Element Description

Each deficiency identified as a project will fall within one of these types of systems. In addition, each project will be given a classification and a priority class.

The project classifications are:
- Capital Renewal – Major repairs or the replacement/rebuilding of major facility components (e.g. roof replacement at the end of its normal useful life is capital repair; roof replacement several years after its normal useful life is deferred renewal.)
- Deferred Capital Renewal – Major overhaul, repairs, or replacement of systems or components not accomplished as a part of normal maintenance or capital repair that have accumulated to the point facility deterioration has or soon will impair the proper functioning of the facility.
- Plant Adaptation– Work required to adapt the facility to the evolving needs of the institution and/or to changing standards. These are expenses in addition to normal maintenance. Examples include improvements due to adoption of modern technology and compliance with changing building, life safety, or accessibility codes.

DTZ recommends and will identify proposed projects using one of the following five priority classifications:
- Priority 1: currently critical (year 1)
- Priority 2: potentially critical (year 2)
- Priority 3: necessary, not yet critical (years 3 – 5)
- Priority 4: recommended (years 6 – 10)
- Priority 5: does not meet current codes/standards, but is exempt because it met the codes at the time of construction. If substantial work is undertaken, some existing conditions may need to be corrected.

Based on a visual inspection (non-destructive in nature), repair costs are developed for each deficiency. The cost of replacing each facility will also be estimated based on the cost to demolish, prepare the site for construction, and reconstruct a similar facility under today’s standards, without Architectural embellishment. We will utilize RS Means ¾ Costs for facility types as our baseline, localized for the Atlanta market. This established a Facility Replacement Cost to be utilized for the FCNI calculation.

Using this data, a Facility Condition Needs Index (FCNI) can be computed.

\[
\text{FCNI} = \frac{\text{Deferred Maintenance} + \text{Capital Renewal} + \text{Plant Adaption}}{\text{Facility Replacement Cost}}
\]
The index, which can also be calculated for groups of buildings or the entire campus, will allow for relative comparisons of conditions between different buildings or groups. The index provides the following scale for understanding a building's needs: