



# **Facilities Master Plan**

**July, 2016** 

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### BOWIE STATE UNIVERSITY

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### **Table of Contents**

- i Introduction
- ii Acknowledgements
- 1. Executive Summary
- 2. Overview of the University Introduction History and Character Strategic Plan Mission Vision Core Values Institutional Goals Academic Programs Governance and Organization Faculty and Staff Enrollment Facilities

#### 3. Space Needs

Introduction Summary of Key Findings Existing Space Demand Against Existing Space Quantitative Indicators of Space Need Qualitative Indicators of Space Need

#### 4. The Campus Today

- A. Facilities: Buildings
- B. Site Infrastructure
- C. Technology
- D. Site Analysis
- E. Transportation

#### 5. Proposed Campus Development

- A. Recommendations, Proposed Capital Projects
- B. Site Infrastructure
- C. Technology
- D. Sustainability
- E. Design Guidelines
- F. Campus Planning and Implementation

## INTRODUCTION

This Facilities Master Plan establishes a framework for the physical growth and change that can be anticipated for Bowie State University. Examining current and future facilities needs and informed by enrollment projections, it establishes space needs by discipline. Capital projects are identified as short (0-5 years), medium (5-10 years) or long term (10-20 years) projects; some may be undertaken as funds become available and as influenced by University System of Maryland policy. For each major project that proceeds, the master plan will need to be followed by programming, design, and construction, unless programming or design have been undertaken already. The master plan does not attempt to design projects, but it does provide a site development plan for the Bowie campus, identifying locations and establishing relationships of major components.

The Master Plan should be regarded as a working document, which will need to be periodically reviewed and updated; it is recommended that the update should occur by or before 2021. An early event such as availability of funding for a major project, may suggest an earlier update. As a 10-year master plan, the space needs are projected 10 years from the most recent Fall semester for which data is available, which is 2014. The nominal planning horizon used in this report is 2026, 10 years from this report year.

This report is both a master plan and facilities assessment. The facilities assessment component provides a current inventory and evaluation for the site infrastructure, buildings, and building systems for the Bowie State campus. This provides the foundation for the evaluation, both quantitatively and qualitatively, of the facilities and for recommendations for improvements to the site and buildings.

Previous Campus Master Plans included the following:

- 1971 Campus Development Plan, by Caudill Rowlett Scott / Gaudreau
- 1990-2000 Campus Development Plan, by Ingraham Planning Associates/Consultants for Facility Long Range Planning
- 1996 Campus Development Plan, by Johnson Johnson & Roy / Linhart Consulting
- 2002-2012 Facilities Master Plan by Kling Lindquist / Robert J. Esposito
- 2012-2022 Facilities Master Plan by Hord Coplan Macht, Inc.

Because of inevitable unforeseen changes in programs, priorities, policies, and funding, this Facilities Master Plan should be viewed as a fluid document that is a conceptual tool and guide for making decisions regarding Bowie State University's physical resources. This document integrates academic and physical planning on a campus-wide basis; as facility and site development needs change or are newly identified, they must be incorporated into subsequent plan updates.

The planning process for development of this Facilities Master Plan, based first on precepts established by the Bowie State University Strategic Plan, results in a long-range planning document that addresses a broad range of subjects:

- Application of the University's vision, mission, functional and instructional program emphases, and organizational structure to the master plan.
- Description of the students in terms of credit participation and choice of academic programs.
- Academic programs and projections of institutional growth.
- Inventory of existing facilities and patterns of physical development.
- Identification of projects that are needed to support the programs, personnel, and students of the University for the next ten years.

The information contained in this Facilities Master Plan serves various purposes. It provides the University a written reference that can be used to facilitate communication within the BSU community and with

representatives of local and state review agencies. This document provides the rationale for physical improvements and serves as the basis for long-range capital development. Inventory data concerning the existing facilities are collected and presented. Alternative actions to deliver improved educational facilities are presented. Recommendations are provided for renovation, replacement, and/or new construction as necessary, and priorities are suggested for the recommended facilities actions. In brief, this document examines the inventory of existing facilities and physical resources, identifies current and future facility needs of Bowie State University, and then provides a framework for achieving the required additional facilities.

#### PLANNING OBJECTIVES

- Provide settings to best fulfill the mission and vision of the University
- Support the University's Strategic Plan
- Make learning, visiting and working on campus a positive experience
- Provide settings to facilitate learning
- Respect the traditions of Bowie State University
- Provide for orderly growth and flexibility in future expansion
- Establish priorities and sequence of development of capital projects
- Reinforce the University's sustainability goals
- Respect and safeguard the natural environment
- Mitigate and, where possible, eliminate pedestrian-vehicle conflicts
- Establish clear identity of the campus and building entrances
- Create memorable spaces
- Enhance accessibility
- Inform State and local agencies & governments and leadership staff of the positive aspects and needs
  of the University

### THE PLANNING PROCESS

The Master Plan was developed during the 10 month period from July, 2015 – May, 2016. Information gathering began with the University providing information on the facilities, institutional history, enrollment, programs and operations. Serving as the basis for current and future space needs, the enrollment and projected enrollment were established by the University, incorporating MHEC projections and planned program expansion, which further increased the projected enrollment. Using MHEC formulae, space needs were determined and allocated according to HEGIS code. Interviews, focus groups, open "town hall" meetings and workshops were conducted with students, staff, faculty, the University leadership, County representatives, and the steering committee for the master plan.

Parallel to these efforts, the buildings were documented photographically and with floor plans of each existing building where plans were available. Relevant reports, including but not limited to the 2009 Climate Action Plan, 2009 Bowie State MARC Station Sector Plan and Proposed SMA, 2012 ADA Transition Plan, Academic Plan 2010-2015, 2010-2015 BSU Enrollment Management Plan BSU Brand Guidelines, BSU Graduate School Strategic Plan 2012-2017, BSU Strategic Plan 2013-2018, University System of Maryland 2020 Strategic Plan, 2011 Middle States Commission on Higher Education Evaluation, USM Board of Regents Focus Areas (including Community Participation, Plan Maryland and Sustainability), and the BSU 2014 Fact Book were examined and considered with the consultant team's more current evaluations. Site conditions were evaluated in the same way. The consultants visited the campus on several occasions and assessed the condition of all buildings and the site. Combining considerations of formula-driven space

needs calculations, as well as qualitative factors, the consultant team and University developed a list of recommended capital projects. Alternative site development plans were developed to accommodate capital projects, including renovations and proposed new construction. In addition, the consultant team reviewed the significant impact and relationship of the proposed town center immediately west of the campus. A preferred plan was selected and refined, ultimately becoming the selected development plan for this report.

#### ORGANIZATION OF THE REPORT

Chapter 1Executive SummaryChapter 2Overview of the UniversityChapter 3Space NeedsChapter 4The Campus TodayChapter 5Proposed Campus Development

## ACKNOWLEDGEMENTS

Any project such as this requires a great deal of help from a large number of people. We conducted twenty interviews with several members of the University community, including representatives of the administration, faculty, staff, students, the BSU Alumni Association, and County planners. All had helpful opinions and information to share. The President of the University, Dr. Mickey Burnim, and members of the Facilities Master Plan Committee have contributed their time, knowledge of the University, and thoughtful comments on the University's needs. In addition, representatives of Prince Georges County / Maryland National Park and Planning Commission shared their perspectives with University officials and the consultant team in support of the planning process. In particular, a core committee consisting of Dr. Karl Brockenbrough, Vice President, Administration and Finance, Darryl Williford, Director, Facilities Management, John Hammond, Senior Project Manager and University Architect, and Michael Harris, Capital Projects Manager, provided important data, timely decisions, and wise guidance to the benefit of the consultant team and to the betterment of the Facilities Master Plan.

The University's Facilities Master Plan Committee consisted of the following persons and groups:

#### MASTER PLAN STEERING COMMITTEE

Anthony Nelson Artie Travis Cassandra Robinson Clyde Doughty **Cosmas Nwokeafor** Darryl Williford **Denise Ward** Elizabeth Hewlett George Acquaah **Guy-Alain Amoussou** Jerome Schiele Jerry Isaac John Hammond Karen Johnson Shaheed Karl Brockenbrough Marian Rucker-Shamu Marsha Swindell Michael Harris Michael Lyles Patricia Westerman Richard Lucas, III Rhonda Jeter **Robinson Frederick** Rushern Baker Tammi L. Thomas Wayne Rose Weldon Jackson William Nathan

#### UNIVERSITY SHARED GOVERNANCE REPRESENTATION

Student Government Association Graduate Student Association Faculty Senate Staff Council

#### INTERNAL RESOURCE GROUP

Darryl Williford John Hammond Gayle Fink

#### EXTERNAL RESOURCE GROUP

Maryland National Capital Parks and Planning Commission BSU Alumni Association BSU Foundation Maryland Center at BSU

The Consultant Team, led by Hord Coplan Macht, Inc., included the following firms and persons:

Hord Coplan Macht, Inc. Architects, Planners Paul Lund Bruce Manger Matthew Fitzsimmons Julie Higgins Bin Liu Facilities Planning Associates Facility Planner Rich Watkins Al Robinson Carroll Engineering, Inc. Civil Engineers David McMillion speXsys, Inc. Special Systems Consultant Jeff Cohen

Chapter 1 Executive Summary

## **EXECUTIVE SUMMARY**

## INTRODUCTION

#### SNAPSHOT IN TIME

This Facilities Master Plan (the "Plan") addresses the accomplishments, needs and aspirations of Bowie State University (BSU) at a time when the University is poised to continue its track towards first rate facilities, accommodating BSU's program offerings and the aspirations of its students. The Plan acknowledges the fiscal realities of 2016 capital planning while keeping the needs of the institution as paramount, within the long range vision. The Plan embraces the University's pride in its history, programs, and campus and lays out a roadmap for development which, if fully implemented, will provide the facilities necessary to satisfy the needs of a modern, comprehensive university. Major drivers influencing this plan include the following:

- Academics
- Costs and Economics
- Quality of Life
- Legacy

Major considerations included the following:

- Institutional objectives and values
- The student experience
- The campus and campus environment

#### PURPOSE

The Plan was undertaken to establish a framework for the physical growth and change that can be anticipated for Bowie State University over the next ten years. It establishes projected enrollment growth and space needs. Several capital projects are identified and others are suggested. For each major project the master plan will need to be followed by programming, design and construction. The master plan does not attempt to design projects but it does provide a campus development plan which suggests locations for specific projects and organizes them within the boundaries of the current campus.

#### METHODOLOGY

The team has:

- Used existing information to create the base site plan.
- Gathered and evaluated the significant statistics of the University, including population trends, enrollment characteristics and trends, academic programs, and space inventory.
- Reviewed the University's Mission, Vision, and Strategic Plan in relation to the setting that they provide for the Facilities Master Plan. In addition, the team reviewed numerous documents related to the academic programs, facilities, operations and planning for the University.
- Canvassed a wide range of internal and external constituencies in a series of twenty interviews and focus groups.
- Performed walk-through surveys of existing buildings to gain a sense of their character and condition. This was coupled with data from the University as well as observations of the campus.
- Tabulated and organized by HEGIS code each space, compared the existing to the State allowances, and noted deficiencies.
- Evaluated the existing buildings and site to determine the suitability of the facilities for existing and future needs of the University.

Proposed and evaluated several campus development schemes, consolidating and distilling the most beneficial • elements from each into a cohesive campus plan.



## **Existing Campus**

SCALE: 1"=200'

## OVERVIEW

Bowie State University (BSU or Bowie) is a nationally accredited four-year Master's (Comprehensive) University (Master's/L) by Carnegie classification. Established in 1865, BSU is the oldest of the four Historically Black Institutions (HBIs) of higher education in the State of Maryland and the fifth oldest in the nation. Offering 41 bachelor's and master's degree programs, two doctoral, and 17 graduate and advanced certification programs with a focus on computer science, information technology, business, nursing, natural sciences, and education, BSU is one of 12 degree-granting institutions in the University System of Maryland (USM), the state's public higher education system. USM comprises 12 institutions, two regional higher education centers, and a system office. Having evolved from a normal school into a comprehensive university, Bowie State University serves a historically and predominantly African American student population, providing educational opportunities that will enable students to function in a highly technological and interdependent world. The university continues to honor its heritage of providing access to higher education for under-represented populations, with a commitment to reach a diverse student population.

Bowie State University is also a leader in the infusion of technology into the curriculum while maintaining its role as an institution grounded in the liberal arts, and produces graduates who are leaders among their peers in a global community, who think critically, who value diversity, and who are committed to high moral standards. Bowie remains a leader in the graduation of African Americans in teacher education and technological fields.

Bowie State University is in a rural setting centrally located on a scenic and serene wooded tract next to the City of Bowie, between the metropolitan areas of Baltimore (25 miles), Washington D.C. (17 miles), and Annapolis (15 miles). The campus is about five miles east of Greenbelt and Lanham, and seven miles north of the Capital Beltway (95) at the New Carrollton exit at Route 450. The Baltimore-Washington Parkway is less than five miles west of the university if using either the Greenbelt Route 193 exit or the Laurel Route 197 exit. Route 197 brings motorists within 200 yards of the campus. The Baltimore-Washington-Annapolis triangle serves as a center of international, national, and regional business, government and technology. Located within close proximity to each of these urban hubs, BSU has on-campus access to the MARC train and Metrobus making it accessible by public transportation.

#### HISTORY AND CHARACTER

Bowie State University is an outgrowth of the first school opened in Baltimore, Maryland, on January 9, 1865, by the Baltimore Association for the Moral and Educational Improvement of Colored People, which was organized on November 28, 1864, to engage in its self-appointed mission on a statewide basis. Designated School #1, the first elementary level classes were held in the African Baptist Church, located on the corner of Calvert and Saratoga Streets in Baltimore. In the same building as School #1, the first normal school classes were added in 1866 to train Negro teachers. In 1867 the normal school moved to a renovated building of the Friends Meeting House at the corner of Saratoga N.W. and Courtland Streets.

On April 8, 1908, at the request of the Baltimore Normal School, which desired permanent status and funding as an institution for the education of Negro teachers, the State Legislature authorized its board of Education to assume control of the school. The same law re-designated the institution as Normal School No.3. Subsequently, the institution was physically relocated to a 187-acre tract in Prince George's County. By 1914, it had become known as the Maryland Normal and Industrial School at Bowie. A two-year professional curriculum in Teacher Education, which started in 1925 with the approval of the State Board of Education, was expanded to four years in 1935, and the school was renamed the Maryland Teachers College at Bowie. The institution established programs to train teachers for junior high schools in 1951. Ten years later, permission was granted to implement a more comprehensive teach-training program for secondary education. In 1963, a liberal arts program was established and the name of the institution was changed to Bowie State College. In 1970, Bowie State College was authorized to grant the Master of Education which was its first graduate degree. On July 1, 1988, Bowie State College officially became Bowie State University, a change reflecting significant growth in the Institution's programs, enrollment, and service to the area. On

that same day, the university also became one of 11 constituent institution of the newly formed University System of Maryland.

In fall 1992, Bowie State University took a distinctive step into the international market by becoming the first Historically Black University in the nation to expand its satellite and continuing education programs overseas eventually offering graduate programs in Management Information Systems and Administrative management to military personnel stationed in Europe and Asia. In spring 1994, The Maryland Higher Education Commission approved a new mission for Bowie State University, reaffirming its heritage and special commitment to the African American community and identifying a special focus on computer and technology applications, as well as an enhanced role as a teaching institution.

In 2005, one of the nation's fastest college supercomputers was built by university faculty and students and placed in service. Also in 2005, Bowie State University graduated its first class of doctoral candidates who earned a Doctorate of Education in education leadership (EdD) and its first class of four-year nursing students from the School of Professional Studies. The Doctoral Degree in Computer Science was approved and classed began in fall 2006. Since the 2011 Facilities Master Plan, the University has seen the completion of two significant building projects: 1) a 123,000 square foot Fine and Performing Arts Center and a 95,500 square foot Student Center, providing enhanced spaces, equipment, and amenities to serve the BSU students. Bowie State University continues to position itself to meet the challenges of the 21st Century by continuing to build systems of academic and institutional excellence.

#### MISSION, VISION, CORE VALUES AND INSTITUTIONAL GOALS

Bowie State University's *Strategic Plan 2013-2018* reinforces its commitment to the University's mission, vision, core values and institutional goals by incorporating them into the document's foundation.

**Mission Statement** Bowie State University empowers a diverse population of students from Maryland, the nation, and the world to reach their full potential through its high-quality, liberal-arts-based bachelor's, master's, and doctoral programs. The University provides a nurturing environment distinguished by a culture of success that supports students in completing their course of study. As Maryland's first historically black university, Bowie State inspires and prepares ethical and socially responsible leaders who can think critically, discover knowledge, commit to lifelong learning, value diversity, and function effectively in a highly technical and dynamic global community.

**Vision Statement** Bowie State University's quintessential priority is academic excellence. This refers to the educational achievements of our students, including their intellectual growth, and the scholarly and pedagogical achievements of our faculty members. Bowie State University will be widely recognized as one of the nation's best public comprehensive universities. Bowie State's ability to increase its national stature will depend in part on its ability to enhance its graduation rate, the reputation of its faculty, and the excellence of its undergraduate and graduate programs.

#### **Core Values**

- Excellence: Bowie State University expects students, faculty, staff and administrators to demonstrate outstanding levels of performance by fostering a stimulating learning and work environment.
- Civility: Bowie State University cultivates an environment in which the interaction between individuals is one that is inherently imbued with value, respect, and appreciation.
- Integrity: Bowie State University students, faculty, staff, administrators and the larger community demonstrate high ethical standards in their interactions with one another.
- Diversity: Bowie State University nurtures an awareness of, and sensitivity toward, differences of race, gender, ethnicity, national origin, culture, sexual orientation, religion, age, and disability
- Accountability: Bowie State University expects each member of the University community to be responsible and accountable for the outcomes of one's efforts and actions.

#### Institutional Goals

- Goal 1: Deliver high quality academic programs and relevant co-curricular experiences.
- Goal 2: Develop and implement programs and services that promote access, affordability, and completion for a diverse student body with an emphasis on underserved populations.
- Goal 3: Conduct and sustain academic transformation initiatives to improve student success and promote greater faculty collaboration
- Goal 4: Develop a comprehensive model of regional, national, and global engagement to address societal needs.
- Goal 5: Advance the overall effective and efficient use of resources and identify new revenue sources to support the university's core mission.
- Goal 6: Define and communicate the University's distinctive identity and value proposition.

#### ACADEMIC PROGRAMS

Academic programs are designed to prepare students for immediate employment or graduate studies. The institution's state-of-the-art information infrastructure, facilities, research laboratories, and technology-enabled interactive classrooms provide businesses and government with excellent opportunities for new partnerships and collaborative projects of mutual benefits. In partnership with the University of Maryland University College, Bowie State University became the first historically black university to include overseas studies. It was also the first university in the nation to offer a bachelor's degree in pedagogy and the first in Maryland to offer an undergraduate degree in bioinformatics. The University is nationally, regionally, and state accredited or certified entities:

#### National Accreditation

Association of Collegiate Business Schools and Programs Computing Science Accreditation Board National Council for the Accreditation of Teacher Education National Council on Social Work Education National League for Nursing

#### **Regional Accreditation**

Maryland State Board of Nursing Maryland State Department of Education Middle States Association of Colleges and Schools

#### **GOVERNANCE AND ORGANIZATION**

The University System of Maryland's (USM) 17-member Board of Regents is the governing authority for Bowie State University. Appointed by the governor, the board has oversight over USM's institutions, centers, and institutes and is responsible for setting policy for the institutions within the system as well as for selecting their presidents. Each president, along with their designees, is responsible for the institution's day-to-day governance and operation. Thus, the president has overall operational authority and responsibility for the University and as such, exercises general supervision of all departments. The president shares administrative responsibility with five vice-presidents and an executive vice-president who also serves as general counsel, each with a broad range of responsibilities. Rounding out the President's Cabinet is a director of university relations and marketing, a director of athletics, and a chief of staff to the president.. Students, faculty, and staff also participate in the governance of the University through standing and ad hoc committees.

#### FACULTY AND STAFF

During the academic year 2014-2015, Bowie State University employed 225 full-time faculty and 370 full-time staff. In addition, 207 part-time faculty and 56 part-time staff were employed. In addition to faculty, approximately 27 graduate assistants obtain valuable academic or research experience while making progress towards a graduate degree.

#### CURRENT ENROLLMENT

Fall 2014 enrollment at Bowie State University was 5,695 students. A total of 68,641 credit hours were generated by 3969 full-time day equivalent students (FTDE). The majority (84%) of Bowie's enrollment is concentrated on campus during the day.

#### CAMPUS FACILITIES

At the beginning of the base year for this *Facilities Master Plan* (fall 2014), the facilities inventory at Bowie's campus includes 24 buildings totaling approximately 1,433,500 gross square feet (GSF) that contain approximately 600,100 net assignable square feet (NASF) of non-residential space. A new 149,000 GSF Center for Natural Science, Mathematics and Nursing is currently under construction and due to be completed in 2017.

## MAJOR FACTORS INFLUENCING THE PLAN

Several issues and factors influenced the Plan. Together, these drivers have molded the current state of the University and frame the opportunities to advance the cause of its students throughout the ten-year planning horizon of the Plan and beyond:

#### INSTITUTIONAL OBJECTIVES AND VALUES

- Mission. Key components of the Mission affecting the Plan include: serving a diverse population, providing
  an environment that supports and nurtures students in their pursuit of a BSU education, and inspiring those
  students to think critically, discover knowledge, commit to lifelong learning, value diversity, and function
  effectively in a highly technical and dynamic global community. The University's facilities must be
  developed and maintained to achieve these important aspects of its Mission.
- Vision. Looking forward, the Facilities Master Plan provides the framework to provide the appropriate learning environment to support the principles of the Vision, including serving a diverse population, fostering a success-driven culture that advances student learning, developing innovative facilities that inspire innovative thinking, reinforcing brand recognition, operating efficiently and effectively, and supporting the faculty in their endeavors.
- Strategic Plan. The Plan has been developed to support each of the Goals of the Strategic Plan.
  - o Goal 1: Deliver high quality academic programs and relevant co-curricular experiences.
  - Goal 2: Develop and implement programs and services that promote access, affordability, and completion for a diverse student body with an emphasis on underserved populations.
  - Goal 3: Conduct and sustain academic transformation initiatives to improve student success and promote greater faculty collaboration.
  - Goal 4: Develop a comprehensive model of regional, national, and global engagement to address societal needs.
  - Goal 5: Advance the overall effective and efficient use of resources and identify new revenue sources to support the University's core mission.

• Goal 6: Define and communicate the University's distinctive identity and value proposition. It is critical that the living, learning, and social environment that the University provides for its students – undergraduate, graduate, full time, part time, residential and commuter – is one that is dynamic, nurturing, innovative, stable, sufficient, appropriate, and dependable in order to facilitate the learning experience and support the goals of the Strategic Plan.

#### THE STUDENT EXPERIENCE

- Enrollment. Like many other higher education institutions, BSU's enrollment has been relatively unchanged since the 2011 Facilities Master Plan, rising about 1.4% from Fall 2009 to Fall 2014. Prior to those years, enrollment increase 18% from Fall 1999 to Fall 2009. While the University has seen significant growth in recent decades, the levelling-off of the enrollment, hovering between 5,600 and 5,700 students, has slowed its progress towards a stable level of approximately 7,000 students, both a goal of the University and a level which the facilities proposed in this plan will support.
- Success, Retention, Graduation. A priority of the Bowie State University leadership and cornerstones of the Strategic Plan, and the Facilities Master Plan, the importance of student success and improving retention and graduation rates cannot be emphasized enough. Indeed, they are mutually inter-connected with successful enrollment, student housing, academic offerings, and activities for the Bowie State students. While lagging behind public universities, BSU's graduation rates are about one-third higher than the average of Maryland HBCUs. Both need significant improvement.
- Housing. Currently, about one fourth of all students live on campus. The principle reason that the
  University offers on-campus student housing is to provide a sense of community and to support academic
  achievement goals. Off-campus options are very limited, not affordable for most students, and are not close
  to the campus. The University has proposed providing 900 more beds in new residence halls, consistent
  with the student housing projects incorporated into this plan. Increasing the student housing to
  approximately 2200 beds will significantly improve the quality of life experience and critical mass of students
  staying on campus during times when commuting students are not there nights and weekends.
- Academic Offerings. Several strong undergraduate and graduate academic programs continue to attract students to the University, including: computer science, business, counseling and psychology, natural science, history and government, nursing, communications, and digital arts. These programs reflect the varied and extensive choices that students can pursue successfully during their time at BSU. The new Fine and Performing Arts Center (FPAC), the Center for Natural Science, Mathematics, and Nursing currently under construction, and the proposed Humanities Building(s) and Library renovation have improved and will significantly advance the quality of the University's facilities to accommodate all academic programs.
- Activities. Also important to the quality of university life experience at BSU, several choices of student activities are offered, including student associations, student government, Greek societies, entertainment, recreation, fitness, intramurals and sports. Recent new facilities and renovation projects (FPAC, student center and James fitness center) have vastly improved recreation, entertainment and food service options for students. More and improved facilities are still needed, both indoors and outside, primarily to provide more and better settings for recreation and intramural activities.. The proposed campus development plan incorporates major renovations and expansions to the James and McKeldin gyms, also recommending a new field house for indoor sports and recreation. In addition, the campus setting immediately adjacent to the Patuxent Wildlife Refuge affords opportunities to enjoy and learn from experiences in that more natural environment.



#### THE CAMPUS AND CAMPUS ENVIRONMENT

- Setting. Located in the Washington, DC / Baltimore / Annapolis triangle, BSU is convenient to all three population centers and surrounding areas. The primary center for services is the City of Bowie, about three miles from the campus. Despite its proximity to these cities and especially to Bowie, the campus is relatively isolated and, consequently needs to provide goods and services to its residential students to a larger extent than at universities more convenient to similar services. A proposed 219 acre mixed-use development initiated by Prince Georges County and part of the MARC Station Sector Plan is planned for the area west of the campus flanking the Amtrak right-of-way. If and once developed, the new town center will provide housing, commercial and possibly institutional facilities complementing and convenient to those on the BSU campus.
- Aging, Inadequate Facilities. BSU has made major strides in the past 16 years in building several new academic and academic support buildings, including the Center for Learning and Technology, Computer Science Building, Center for Business and Graduate Studies, Fine & Performing Arts Center, Student Center, and, currently under construction, the Center for Natural Sciences, Mathematics and Nursing. However, several older buildings require major upgrades or need to be replaced. Not including the historic Goodloe House (off-campus), 14 buildings totaling about 713,000 square feet (50% of the built gross area) are between 39 and 95 years old, averaging 52 years. Nearly all of these buildings have never been comprehensively renovated (top-to-bottom). Except for Alex Haley and Christa McAuliffe, the other five residence halls are over 50 years old. Older buildings with good potential for extended life are recommended to remain and to be renovated (Library, Administration, Robinson, James and McKeldin gyms, and the Holmes and Tubman residence halls). Others are either scheduled for demolition (Crawford Science), have been previously recommended for demolition (MLK, Towers residence hall, Maintenance, Central Steam Plant), or are now recommended for demolition in this plan (Kennard Student Housing and Goodloe apartments).
- Transportation, MARC Station. While the overwhelming majority of students, staff, faculty and visitors get to and from the campus by private vehicles, public transportation options afford attractive alternatives. A major asset for the University, the MARC station is a regular stop for all Penn Line commuter trains between Baltimore and Washington. Now operating 7 days a week, the MARC train provides rapid transit for students, faculty, staff and visitors to the campus. In addition, the campus is served by Washington Metro system bus lines, effectively providing a minor transportation hub with the MARC train. In 2016, Zip Car also extended its network to the campus.
- **Campus Organization**. The campus generally falls into four loosely assembled zones, including academic, administrative/support, residential, and athletics/recreation. The proposed plan better defines and articulates these zones.
- Sustainability. Building on the 2009 Climate Action Plan, the University established a Climate Commitment Coordinating Committee ("C4"), adding a yearly sustainability fee to other student fees, Earth Week activities, expanded recycling, solar energy charging tables, developed a Green Ambassador student group, entered into a food recovery partnership with Thompson Hospitality (the campus food service vendor), and other sustainability partnerships with Verizon, Johnson Controls, Toyota Green Initiative, and ABM Janitorial Services, and was recognized by the Building Green Initiative as a top ten greenest HBCUs nationally. In addition, all new buildings and major renovations are required to achieve at least a Silver LEED rating.
- Technology. The University has made significant improvements to its technology infrastructure and equipment in the last 10 years, yet still needs to do more to catch up with competing higher education institutions. All classrooms now have at least some permanent learning technology (some had none as of the 2011 Facilities Master Plan). Newer buildings such as FPAC and the Student Union are very well fitted out with current technology, and the new Natural Science building will provide even more. Some classrooms and laboratories are not connected to the BSU network and therefore not to external services / the internet. Few learning spaces offer connectivity to students' own devices to be integrated into learning experiences. Wireless access is now more extensive but students commented that service is not good.

Residence halls offer very little connectivity, either hard-wired or wireless. The campus data center resides in the Marshall Library; as the only data center, there is no redundancy, and a second center should be considered.



## SPACE NEEDS

Growth of existing programs and the establishment of new programs suggest significant growth in enrollment and a need for specific, specialized facilities. This demand is considered in subsequent sections to identify space needs and suggest future physical development. The need for facilities should also be viewed in the context of how the process of learning may evolve over time.

#### SUMMARY OF KEY FINDINGS

Space deficits in all but three major room use categories are suggested when Maryland space planning guidelines formulae are applied to Bowie State University's projected (2024) space inventory. Anticipated student population increases from fall 2015 through fall 2024 and anticipated impact on campus inventory as the result of the following programmed building projects: Natural Science/Nursing/Math Building, Humanities Building, Residence Hall, Public Safety and Communications Complex, Fitness and Recreation Center, Facilities Maintenance Procurement Complex, and Thurgood Marshall Academic Commons, as well as demolition of Crawford Science Building, Wiseman Centre, Goodloe Apartments and the Maintenance Building, will have a significant impact on institutional space needs at Bowie State University. BSU currently has an overall space deficit of approximately 7,000 net assignable square feet (NASF) when Maryland guidelines are applied to existing space. By the year 2024, Bowie's campus is projected to have a space surplus of approximately 41,200 NASF.



#### Academic Space

Academic Space includes the space categories of Classroom, Class Laboratory, Open Laboratory, Research Laboratory, and Physical Education. These categories also include the service spaces that directly support the core spaces. Guideline application to academic space inventories suggests a current deficit of 13,755 NASF. Guideline application suggests a projected deficit of 10,496 NASF in 2024.

#### Academic Support Space

Academic Support Spaces includes the core and support space in the categories of Office, Study, Media Production, Assembly, Exhibition, Lounge (Non-Auxiliary), Central Computer/Telecommunications, Physical Plant, and Health Care. Guideline application to academic support space inventories suggests a current surplus of 6,880 NASF. Guideline application suggests a projected surplus of 51,695 NASF of Academic Support Space in 2024.

#### Other Classified Space (Ad-Hoc)

Other Classified or Ad-Hoc Space, comprising 302,417 NASF and representing 33.8% of BSU's existing inventory, are not addressed by Maryland's space planning guidelines. These are either specialized spaces for which need is based entirely on programmatic requirements which vary by institution or auxiliary enterprises which are not state-funded. For these ad-hoc categories of spaces, existing space is the guideline.

#### **Unclassified Space**

Unclassified Space reflects categories that are either available for assignment, but unassigned at the time of the inventory or spaces that are being occupied by entities other than the University and are not available for University use. BSU assigns two space categories to this group: 72,676 NASF that is inactive (fall 2014) and 3,000 NASF being used by other organizations. Unclassified Space is also excluded from this analysis.

#### Conclusions

Space deficits in all major HEGIS room use categories except Laboratory, Office, and General Use is suggested when Maryland space planning guidelines formulae are applied to Bowie State University's projected (2024) space inventory. In total, approximately 41,000 net assignable square feet of surplus space is suggested by applying space planning guidelines to target year inventories. This total is exclusive of auxiliary enterprise or other types of facilities that are not state-supported.

#### Summary of Computed Space Allowances

		Base Year (Fall 2014)				Projected Year (Fall 2024)		
	Use	Inventory	Guideline	Surplus /	2015-2024	Inventory	Guideline	Surplus /
Space Use Category	Code	NASF	NASF	(Deficit)	Net Change <sup>a</sup>	NASF	NASF	(Deficit)
Academic Space								
Classroom	110	55,329	70,164	-14,835	1,352	56,681	81,365	-24,684
Class Laboratory	210	78,920	60,626	18,294	22,582	101,502	67,576	33,926
Open Laboratory	220	14,633	16,669	-2,036	3,490	18,123	20,458	-2,335
Research Laboratory	250	5,478	5,925	-447	9,058	14,536	9,555	4,981
Physical Education	520	60,636	75,367	-14,731	660	61,296	83,680	-22,384
Sub-Total: Academic Space		214,996	228,751	-13,755	37,142	252,138	262,634	-10,496
Academic Support Space								
Academic Support Space Office	300	140,048	113,402	26,646	44,304	184,352	134,523	49,829
Study	400	60,681	84,354	-23,673	44,304 20,939	81,620	134,523	-23,059
Study Media Production	400 530	7,782		Sector Se	20,939 586			
			7,938	-156		8,368	9,742 21 742	-1,374
Assembly	610 620	52,052	29,938	22,114	9,719	61,771	31,742	30,029
Exhibition	620	3,968	3,969	-1	6,772	10,740	4,871	5,869
Lounge (Non-Auxiliary)	650 740	9,783	15,092	-5,309	-70	9,713	17,188	-7,475
Central Computer/Telecommunications	710	2,553	2,500	53	1,412	3,965	3,353	612
Physical Plant	720-760	24,367	37,170	-12,803	7,317	31,684	41,442	-9,758
Health Care	800	1,600	1,591	9	7,283	8,883	1,861	7,022
Sub-Total: Academic Support Space		302,834	295,954	6,880	98,262	401,096	349,401	51,695
Other Classified Space (Ad-Hoc: Not incl			234	and the second second second second				
Armory	510	0	0	0	100		100	0
Spectator Seating	523	3,920	3,920	0	0	3,920	3,920	0
Clinic	540	0	0	0	0	0	0	0
Demonstration	550	1,444	1,444	0	1,630	3,074	3,074	0
Field Building	560	118	118	0	0	118	118	0
Animal Quarters	570	0	0	0	0	0	0	0
Greenhouse	580	1,330	1,330	0	670	2,000	2,000	0
Other (All Purpose)	590	0	0	0	1,010	1,010	1,010	0
Food Facility	630	27,488	27,488	0	-17,066	10,422	10,422	0
Day Care	640	0	0	0	200	200	200	0
Merchandising	660	5,946	5,946	0	-3,373	2,573	2,573	0
Recreation	670	4,809	4,809	0	3,250	8,059	8,059	0
Meeting Room	680	2,454	2,454	0	13,445	15,899	15,899	0
Hazardous Waste Storage	770	0	0	0	500	500	500	0
Residential Facilities	900	254,908	254,908	0	54,379	309,287	309,287	0
Sub-Total: Other Classified Space (Ad	-Hoc)	302,417	302,417	0	54,745	357,162	357,162	0
Unclassified Space								
Inactive Area	050	72,676	72,676	0	-18,584	54,092	54,092	0
Other Organizations	090	3,000	3,000	ů O	-3,000	01,002	01,002	Ő
Sub-Total: Unclassified Space		75,676	75,676	0	-21,584	54,092	54,092	0
Dennie Chate Hainensite Comment		007.000	000 700	C 075	100 000	1.004.400	1 022 200	41 100
Bowie State University Campus Totals		895,923	902,798	-6,875	168,565	1,064,488	1,023,289	41,199

2015-2024 Net Changes: Programmed NASE for the Center for Natural Science, Mathematics and Nursing, Humanities Building, new Residence Hall, Public Safety and Communications Complex, Fitness and Recreation Center, Facilities Maintenance Procurement Complex, and Thurgood Marshall Academic Commons

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Communications Complex, Fitness and Recreation Center, Facilities Maintenance Procurement Complex, and Thurgood Marshall Academic Commons <sup>a</sup> 2015-2024 Deletions: NASE for planned demolition of Crawford Science Building, Wiseman Centre, Martin Luther King Communication and Arts Center

2015-2024 Deletions: NASF for planned demolition of Crawford Science Building, Wiseman Centre, Martin Luther King Communication and Arts Center, Goodloe Apartments, and Maintenance Building

The majority of the inactive area represents Wiseman Centre which was vacated upon completion of the Student Center and prior to demolition at the time of this inventory.

#### QUALITATIVE INDICATORS OF SPACE NEED

Responses to new ways of learning and emerging technologies in just the last ten to fifteen years have affected not only the need for more space, but also the need for different kinds of spaces. Students are demanding greater flexibility in what, where and when they learn, and new technologies are enabling more mobile and distributed learning anywhere on campus. For example, increased emphasis on group / collaborative informal learning requires more group study spaces. The learning landscape is constantly and dramatically changing in terms of the ways by which people learn and the technologies that can facilitate the learning process. Bowie State needs the flexibility and responsiveness required to ensure that its teaching and learning infrastructure is sufficient and appropriate to accommodate emerging technology and functional requirements of an interdisciplinary approach to higher education. Additional or re-focused services may from time to time be required; and with them, the obligation to adjust the physical plant accordingly.

#### Instructional Functions

- There are insufficient numbers of classrooms on campus.
- Many classrooms and some laboratories lack contemporary technology. The need exists for technologyenhanced instructional spaces that empower faculty and students to benefit from the use of virtual learning experiences that enhance student engagement.
- There are classrooms with accessibility issues. In addition to being extremely small, several classrooms were built with cast-in-place risers, severely limiting access (for able and disabled persons alike) and flexibility. Classrooms exist with recessed entrances and steep design limiting wheelchair access to the top rows only.
- There is a need for highly flexible, multi-functional instructional spaces, now and in the future. Migration to
  teaching more disciplines in computer labs has created rooms that are inflexible. Permanent furniture, hardware
  and wiring installations have made it difficult to rearrange classrooms to suit varied needs in different courses or
  even in the same course. There is a need for some "quick response capability" to take advantage of emergent
  opportunities to respond rapidly to business needs particularly in Continuing Education environments.
- There is insufficient laboratory storage in general.
- There are no learning lab and inadequate interview, observation, and child development spaces for education students.
- ROTC facilities, housed in James Physical Education Complex, are inappropriate for their functions. There are no dedicated spaces for indoor drills.
- Functions that should be co-located are often separated and distributed throughout the campus. There is a need for physical proximity with respect to spaces within the various colleges.
- It is not uncommon to find instruction being conducted in spaces considered inappropriate for the discipline.
- There appear to be instances of territoriality with respect to computer class laboratories. Although this
  phenomenon speaks mainly to operations and policy, it does have an adverse impact on utilization of
  instructional resources.

#### Instructional Support Functions

- Marshall Library is not only archaic, but is also dysfunctional due to insufficient and inappropriate spaces for modern-day reading/study, processing operations, offices, archives, instructional resource functions and general storage. A major redistribution of space is needed to address deficiencies in study spaces, computer stations and processing areas.
- The University has few facilities for adjunct faculty to work and communicate before and after classes. Not only is there a need for appropriate settings outside the classroom for student/faculty interaction, but also a need for spaces that allow for seamless integration of adjunct faculty into departmental frameworks.
- There are no adequate commons areas or large professional development areas for faculty. There is a need for modern facilities that address faculty development needs.
- There are no facilities that cater to the unique needs of doctoral students.
- There is a need for more group study rooms. There are a minimal number of group or collaborative learning environments on campus. Lack of rooms for group study means noisy students are often a disturbance to

others. There is a need for available study rooms where small groups could meet, either as spontaneous groupings or scheduled study circles. Students can be found studying in groups in major circulation corridors. There are no adequate spaces for quiet study.

- There is a need for an enhanced and consolidated presence of academic support services. Current functions including the writing center, tutoring, testing are scattered over campus.
- Students have expressed need for more academic support services spaces.

#### **Student Services Functions**

- There is a need for personal fitness "Wellness" facilities that involve only individual participation. Students perceive that there are no fitness facilities for students other than athletes.
- There are no dedicated space for recreation fitness and nutrition programs.
- There is generally insufficient and inadequate informal social spaces such as student lounge spaces, meeting spaces, and recreational areas. There is a need for student areas that allow for individual study and group learning, like coffeehouses, cyber café and Starbucks libraries.
- There is a particular need for commuter lounges and other spaces that allow commuting students to experience the culture of the campus. There is a need for more spaces with docking stations for personal laptops.
- There are no concessions to support major events held at the Field House.
- There are insufficient resource rooms and/or activity spaces in the physical education buildings.
- James Physical Education complex has insufficient locker rooms in support of athletic teams. Other conditions that plague this over 40-year-old facility include inadequate athletic training rooms, no meeting or conference rooms, no academic development rooms, no video center and little to no storage.
- Health care facilities are insufficient for the number of students currently or are anticipated to live on campus.
- There is the need for facilities and spaces that address the needs of students with families. There is a need for married and family housing. There is a particular need for residential and day-care facilities that cater to issues of single-parent families. There is a need to provide children's space in the library to accommodate children from families on campus and from the community who come into the library with parents.

### Institutional Support Functions

- Lack of storage space is a significant problem throughout the campus buildings resulting in inappropriate storage of records, furniture and equipment, books, academic and administrative supplies, and custodial supplies.
- Although there is a current overall surplus in space classified as "Office," some individuals are cramped into areas that were designed as closets, storage spaces and alcoves with no air circulation in order to be located near their departments and others in their work teams. Creating office space for new personnel is extremely difficult.
- Trades shops in the Maintenance Building are inappropriately sized for their intended functions.
- There is insufficient space for physical plant operations such as; maintenance shops, storage, and central services functions.
- The current dysfunctional space housing the Bowie State University Department of Public Safety (McKeldin Gymnasium) is not readily susceptible to renovation.
- There are insufficient numbers of convenient small conference spaces and meeting rooms. Often meetings take place in classrooms or other spaces that are inappropriate for such activities.
- Facilities for counseling, human resources and other areas that need confidential spaces are insufficient and inadequate.
- There are insufficient numbers of break rooms and social spaces for staff and faculty.

#### **Outdoor Functions**

- For a campus the size of Bowie State, few leisure and activity spaces exist for students and others.
- With the exception of the fraternity and sorority spaces, few outdoor seating and gathering opportunities exist.
- Fields are not dedicated for recreational and intramural use. These usually take place on residence hall lawns.
- Some parking lots are often full and commuters report having some difficulty finding parking. There is insufficient parking for students around the residence halls.

## BUILDINGS

The campus facilities inventory includes 24 buildings that contain approximately 1,433,500 gross square feet (GSF) of space. An additional 149,000 square foot Center for Natural Science is currently under construction, due to be completed in 2017. The University classifies these buildings into two categories: State supported and non-state supported (auxiliary). Buildings on campus date from 1916 (Harriet Tubman Residence Hall) to the new Student Center. Fourteen buildings are over 39 years old, averaging 52 years, and most have never had a comprehensive (top-to-bottom) renovation. Parking lots accommodate approximately 2,150 cars. Athletic fields occupy 20 acres at the north end of campus. In addition to three buildings, athletic facilities include a competition football field with bleachers, running track, two practice fields, one softball field, 6 tennis courts, and two outdoor basketball courts.

The major campus buildings are built of durable materials such as concrete, masonry, and steel. Architectural styles are varied, ranging from traditional/Georgian (older residence halls), heavy modern (various buildings built in the 1960's and 1970's), contemporary (recent 15 years), and traditional modern (Christa McAuliffe). Primary issues with older buildings are related to inadequate space, changing needs, and the wearing out of significant building systems. A detailed or comprehensive survey of each structure may be necessary for any buildings scheduled for renovation or demolition. Descriptions in this report are based on building visits and information furnished by the University.

Academic, Administration and Auxiliary Buildings, at approximately 1,033,000 square feet, represent by far most of the square footage of all campus buildings. Included are the following facilities:

- Center for Learning and Technology. Health Sciences needs larger classrooms and labs. Teacher Education programs need more specialized learning and demonstration spaces.
- Thurgood Marshall Library. An aging facility built in 1977, not functioning as a 21<sup>st</sup> century learning center. Functions not directly related to the library's mission are located in the building.
- Center for Business & Graduate Studies. Generally works well. Instructional spaces are relatively up-to-date.
- Henry Administration Building. Interior "atrium" space not used and inefficient. Circulation inefficient. Opportunity to capture space in renovation. Some HVAC distribution issues.
- MLK Communication Arts Center. An aging facility built in 1973, structural deterioration, building systems failures, tight floor-to-floor height, too-small classrooms. Recommended for demolition.
- Charlotte Robinson Hall. Original lab school for education program. An aging facility built in 1960 but with sufficiently adequate structure and plan configuration to accommodate future additional renovations.



- Computer Science Building. Other than minor roof leaks, this building generally works as intended. Its instructional spaces are up-to-date.
- Crawford Science Building. An aging facility built in 1967, inadequate labs, obsolete equipment, frequent HVAC issues, narrow corridors, no study space, and severely limiting floor-to-floor dimensions. Scheduled for demolition as part of the Natural Science building contract.
- Maintenance Building. An aging facility built in 1967/1973, multiple levels, disconnected; insufficient automotive shop and grounds storage. Occupying land scheduled for future student housing. Recommended for demolition.
- Fine and Performing Arts Center. Completed in 2011, provides ample space classrooms, studios, performance spaces, gallery, offices for visual and performing arts. The building works well.
- Central Heating Plant. Unused except for grounds storage after central steam system was discontinued. Recommended for demolition.
- Goodloe House. Historic (1916). Located off-campus, renovated and used by Alumni Office.
- James Physical Education Complex. Another aging facility, built in 1973 with no major renovations since that time, is in need of a comprehensive renovation. James contains insufficient locker room areas but has opportunities for re-claiming unused areas such as handball courts and wrestling room. ROTC lacks sufficient space, and the classrooms are outdated.
- The Field House is in satisfactory condition, and a recent addition and renovation added team locker rooms, showers, toilet rooms, and a concession area.
- McKeldin, historic (1957) is recommended to be renovated with an addition for a student wellness center.
- Student Center. Completed in 2013, this building provides appropriate space for food service venues, meeting rooms, small theater, recreation areas, bookstore, and student organization offices. The building works well, although students voiced a desire for more gathering spaces.

Total gross area including Crawford: 1,032,936 square feet.

Center for Natural Science, Mathematics and Nursing CNSMN). Currently under construction, this building will
provide much needed science laboratory space, classrooms, nursing labs, offices and meeting and study
areas.

Total gross area including CNSMN: 1,182,045 square feet.



The **Residence Halls** provide housing for 1347 students, excluding Goodloe, which is not being used. Off-campus housing is extremely limited, due to the relative isolation of the campus. On-campus student housing includes the following residence halls:

- Towers 194 beds. Problematic infrastructure and building systems. Recommended to be razed.
- Alex Haley 326 beds. One of the newer halls, in satisfactory condition.

- Dwight Holmes 126 beds. Fair condition.
- Christa McAuliffe 460 beds. Newest hall, most desirable for students.
- Lucretia Kennard 82 beds. Fair condition.
- Harriet Tubman 159 beds. Oldest hall, historic, in need of renovation.
- Goodloe Apartments 20 beds. Proposed for demolition.

Other than Alex Haley and Christa McAuliffe, the other residence halls are approximately 50 years old and in unsatisfactory condition. Tubman Hall should be retained in consideration of its historic character. Total gross area including Goodloe: 400,576 square feet. Total beds: 1367



Of all non-housing facilities, five were built in a 9-year span from 1967-1976, including Crawford, James PE Complex, MLK, Henry Administration, and the Library. Except for modest renovations to Henry and Crawford, none of these buildings have experienced any major renovation and are in need of major renovation or replacement. At almost 500,000 square feet, these buildings represent a bit less than half of the non-residential building area. Two of the buildings from this era are recommended and scheduled for demolition: MLK and Crawford.

## CAMPUS

#### **INFRASTRUCTURE**

Site and infrastructure improvements are required to support the proposed building program and to improve the safety and efficiency of the campus operations. BSU now has a quite attractive inventory or exterior walkways, roadways, fixtures, landscaping, sculptures and student gathering areas. Several exterior areas that contained a combination of walkway/landscaping/sculpture feature are truly outstanding, for example at the Henry Circle pond and walking garden north of the Henry Administration Building. Generally, the surface site improvements are in good condition, but some areas of deferred maintenance exist, such as settled sections of sidewalk, damaged area of masonry walls and areas of deteriorated pavement. Adequate maintenance funding will be needed to repair and upgrade these areas, also removing abandoned structures. BSU also needs to maintain and perhaps upgrade the existing storm water management and recreational areas.

Proposed campus capital projects will require more capacity and extensions to the site infrastructure. Sanitary sewer and water service appear to have adequate capacity for the foreseeable future, according to the Washington Suburban Sanitary Commission (WSSC). Since the campus contains many underground utility lines, each new building or addition will require some relocation of existing lines outside of the new footprint area. Improvements and upgrades to the storm water management system will also be required to support development. The site infrastructure in the academic core area is in a satisfactory overall condition; however, outside the central core, conditions vary from poor to satisfactory. Electric service to the campus has recently been improved by feeder upgrades. Future campus load growth beyond the CNSMN will involve a re-evaluation of the BGE supply capacity to determine if additional upgrades are needed

#### CAMPUS ORGANIZATION AND LANDSCAPE CHARACTER

The overall character and physical setting of the 342-acre campus is an important asset to be preserved. Significant wooded open spaces surround and create a backdrop for campus development. Within campus, well proportioned landscaped open spaces contribute to the comfortable pedestrian scale. Overall, the campus presents a well maintained, positive image. The central pedestrian open space has been recently improved, and should set the standard for future site improvements.

The campus is divided into three generally distinct districts–1) the academic, administrative and residential campus core, 2) the athletic facilities, and 3) circulation and parking. The Campus Loop Road and Jericho Park Road generally form the perimeter of campus development. Parking is mostly accessed from the Loop Road and is well separated from the pedestrian oriented campus core. This overall organization which focuses buildings around a pedestrian core, generally limits parking to the edges, and maintains a "limited access" perimeter loop road is successful and should be respected.

Key organizational features of the proposed Site Development Plan include:

- Reinforcement of the existing campus land use patterns to strengthen the residential, athletic, academic / administrative and vehicular circulation districts.
- Placement of the new Humanities and Academic Buildings along Henry Circle to anchor the southwest area of the campus and better tie the campus to the MARC station.
- Expansion of the residential district through the creation of two residential complexes: one mid-campus and the other towards the west campus loop road.
- Reinforce the park-like main campus quad, establishing a second, more student-friendly quad south of the James Gym.
- Reacquire the MARC Station parking lot and extend the park-like perimeter Loop Road with reorganized and increased parking via a parking garage in the southwest parking area, possibly serving MARC patrons as well as the BSU community.
- Provide parking for the new residential developments with reconfigured surface parking on the west campus.
- Development of strong pedestrian connections and amenities through the athletic district. Renovation and expansion of all athletic facilities includes a new stadium, new practice/soccer fields, expansion of James PE Complex and a Field House.
- Relocation of the Maintenance facility to the northwest corner of the campus, away from an important campus entrance.



#### PEDESTRIAN CIRCULATION

The Bowie State University campus is generally a comfortable pedestrian environment, with vehicles limited to the outer edges of the campus. The center of campus features a beautiful, pastoral space with curvilinear walkways and large trees. Two north/south promenades create a strong organization for the pedestrian circulation system. The West Promenade collects pedestrians from the adjacent parking lots, with multiple entrances into the center of campus. The East Promenade is flanked by Residence Halls and the new CNSMN, creating an important gathering and meeting space. MARC train riders access campus through a circuitous, minimal sidewalk.

Key pedestrian improvements proposed include:

- The Eastern Promenade should be extended and strengthened on both the north and south ends, providing a connection to the athletic area, and a visual and physical terminus between the Library and the new Student Union.
- The West Promenade is shown extended to the north, connecting to new student housing, the softball field, the new practice field and the Maintenance Facility.
- Improve the West Promenade through improved shade tree planting and development of key pedestrian gateways to the campus core.
- If and until the MARC station is relocated, the connection to the MARC Station should be improved including new walks, crosswalks, and landscaping.
- Create a strong pedestrian connection between the campus core and the MARC Sector Community Center by aligning the proposed underpass with the successful landscaped space between the CLT and the Henry Administration Building
- Continue the use of campus standards for paving, site furniture, lighting, etc.
- Develop and implement a pedestrian signage and way-finding program coordinated with corresponding vehicular and building way-finding and signage.

#### ACCESS, VEHICULAR CIRCULATION AND PARKING

The access to Bowie State University is from Maryland Route 197. The divided entry road intersects with Jericho Park Road, at a rather large four way stop, where directional signage and roadway improvements are needed. The "front door" to the campus is Henry Circle, fronted by academic and administrative buildings. The Loop Road provides access to all parking areas, and interior vehicular / service circulation. Parking driveways are generally limited along the Loop Road with the exception of the lots on the south western edges near the MARC parking. The eastern and northern portions of the Loop Road have a park-like feel, passing through wooded and wetland areas. This character should be maintained as the campus develops. While there is sufficient parking based on the requirements, the distribution is not balanced with the demand, in particular near the academic and residential areas.

Key improvements proposed for access, vehicular circulation and parking include:

- Traffic circles at the main campus entrance and at Jericho Park Road and Loop Road to slow and direct traffic.
- Provide additional parking on the southeast portion of the campus to better balance parking location with destinations
- Provide additional parking for future growth, including additional residential parking. Construct up to two new parking structures accommodating up to 900 cars each on the west side of the campus, general following proposed campus development.
- If and when it is developed, provide a vehicular connection to the MARC Station Community Center via a
  proposed underpass.
- All existing parking lots should be improved with shade tree planting and pedestrian accommodations. All future parking lots should also include bio-retention facilities.
- Undertake a comprehensive vehicular way-finding and signage program coordinated with a corresponding signage program for buildings and pedestrian ways.

#### OPEN SPACE AND LANDSCAPING

The BSU campus has a generous amount of open space ranging from the pastoral campus core to the significant park areas to the north, to the grand scale of Henry Circle. The open feel of the campus is a character defining element that should be celebrated and reinforced. The Site Development Plan locates new buildings with concern for convenience and relation to other buildings, but also for their proximity to existing open space and to define new outdoor places.

Key proposals in the Site Development Plan include:

- Provide a greater variety of outdoor spaces such as plazas and courtyards defined by new buildings, large scale plazas for gathering and programmed activities, lawn spaces for student recreation, and natural park-like settings featuring bio-retention, rain gardens, etc.
- Create a student-oriented "quad" that allows for student activities and gathering.
- Provide additional site furniture and seating "nooks".
- Maintain existing woodlands on campus where possible, especially the woodlands on the eastern edge.
- Take advantage of the significant public parkland around the campus through trail connections.
- Develop a palette of plant materials to be used consistently throughout the campus, emphasizing native and drought tolerant species.
- Emphasize large shade tree planting campus wide using native and adapted species.
- Plant consistent ornamental trees at campus entrances and pedestrian gateways in a recognizable pattern.
- Replace declining shade trees along the promenades with more consistent varieties.
- Replace some natural turf areas with native grasses and low-growing shrubs.
- Adopt green landscaping practices including composting, organic fertilizers, etc.

## TRANSPORTATION

Relocation and expansion of the MARC Bowie Station, as an integral part of the Bowie State MARC Sector Plan, is expected to increase visibility and ridership by commuters from beyond the BSU campus. Along the way, visibility and accessibility by BSU students, faculty, staff, and visitors should increase as well. Parking for the station will be expanded, particularly in the new town center. Now that the MARC train operates on weekends, it facilitates access to the campus by rapid transit and a corresponding increase in ridership. The University should maintain a dialogue with MARC to ensure that discounted student rates remain in effect and to encourage further discounting to improve affordability. The MetroBus routes stopping at the University should be maintained, and the University should engage MetroBus officials in discussions to extend service from BSU to Laurel, supplementing connections to Bowie and to Washington. Given the relative isolation of the BSU campus and the relative proximity of amenities in Bowie and Laurel, there appears to be a potential market for a campus shuttle. Need seems to be during weekdays and especially evenings and weekends. This could be initiated as a pilot project and promoted and managed to help ensure the potential for use and corresponding success of such a program.



## SUSTAINABILITY

The Facilities Master Plan fully supports the University's sustainability commitment. All projects envisioned in the master plan are expected to embrace the University's sustainability goals. Sustainable strategies which have been incorporated into the master plan include:

- Providing for enlightened storm water management consistent with new State of Maryland regulations
- Improving intra-campus pedestrian connections, discouraging use of vehicles for intra-campus transportation
- Clarifying way-finding to reduce unnecessary driving
- Retaining natural wooded areas to maximum extent
- Fully respecting the extensive, natural woodlands leading to the Patuxent National Wildlife Research Refuge
- Safeguarding natural wetlands and environmentally sensitive areas
- Develop the campus in relatively high density, avoiding unnecessary extensions of infrastructure
- Re-using existing buildings where possible; renovating buildings in lieu of new construction, providing the existing buildings do not present in-feasible renovation possibilities
- Building on previously developed areas
- Encouraging multi-story buildings, minimizing building footprints
- Retaining and improving the existing athletic fields rather than re-configure them
- Recommending development of shuttle services
- Supporting commitment to LEED Silver level construction for future new construction and renovation projects
- Supporting the proposed town center envisioned in the Bowie State University MARC Station Sector Plan
- Establishing and facilitating strong linkage to the town center
- Enhancing connections to the proposed MARC Station relocation as envisioned in the MARC Station Sector Plan, encouraging increased use of the rapid transit line
- Replacement of most parking lot lighting with LED fixtures to minimize light pollution and for energy efficiency and sustainability.
- Campus-wide replacement of pedestrian and street lighting to LED fixtures to minimize light pollution and for energy efficiency and sustainability.
- Site Improvement Project Phase II, including modifications to the campus entrance road, re-surfacing of parking lots A, B, C, F, H, and K, Liberty Plaza, pedestrian paths from MLK to the MARC Train Station, and re-surfacing Henry Circle.
- Electrical: medium voltage electrical distribution network upgrade using a dual radial feeder pair
- Addition to the Field House (locker rooms and concession area)
- Replacement of several roofs: Thurgood Marshall Library, Crawford Science, James Complex, McKeldin Gymnasium, MLK, Robinson Hall, Henry Administration, and Maintenance
- New Lighting for the Football Stadium
- Expansion and modernization of smart classrooms in Robinson Hall and MLK (8 total)



## **PROJECTS SINCE 2011**

Since the time of the previous 2011 Facilities Master Plan, the University has completed several capital projects and undertaken other initiatives. Those projects and initiatives include the following:

- Completed the Fine and Performing Arts Center
- Student Center
- New Fitness Center in James Gym
- Site Improvements II
- Electrical upgrades
- Replaced approximately 60% of site lighting
- Addition to the Field House
- Resurfaced and renovated the tennis courts
- Resurfaced and renovated the running track
- Established a Veterans Office
- Continued replacement of several roofs
- Adopted branding/graphics guidelines
- Sustainability initiatives, including Solar charging tables, C-4 Committee, Green Ambassadors program In addition, the Center for Natural Science, Mathematics and Nursing was begun and is now under construction.



Acknowledging these accomplishments, the physical plant needs of the University have nonetheless continued to grow, as has its enrollment, requiring continued capital investment in buildings, site, and infrastructure.

## PROPOSED CAPITAL PROJECTS

			GSF New /	Bud	get Constructior
		GSF Renovation	no. stalls		Cost - note 1
Pro	jects Under Construction		110. 510115		
	CNSM&N (cost estimated; to be furnished by BSL	J)	149,109	\$	85,000,000
	Total - Projects Under Construction	-	149,109	\$	85,000,000
Pro	posed Projects: 0-5 Years 2016-2020				
	Demolish Steam Plant - allow ance		(5,940)	\$	75,000
2	Humanities Building Phase 1		133,500	\$	77,625,000
3A	Demolish MLK Communiication Arts Center - note	2	(149,374)		
3B	Humanities Building Phase 2 - note 2		80,000	\$	52,500,000
4	Student Housing - 600-Beds		200,000	\$	48,000,000
5	Public Safety & Communications Complex - note	3	49,217	\$	29,050,000
6	McKeldin Gym Renov. & Addn - Wellness Ctr	21,142	38,968	\$	25,917,000
7	Thurgood Marshall Library Renovation	166,869		\$	77,669,000
8	Facilities & Maintenance		44,444	\$	23,000,000
9	Parking / Loop Rd - SW Perimeter - Allow.			\$	3,000,000
	Total Gross Non-Residential 2016-2020	188,011	346,129		
	Total Gross Residential 2016-2020	100,011	200,000		
	Total: 2011-2015	188,011	546,129		226 026 000
Dro	posed Projects: 5-10 Years 2021-2025	100,011	540,129		336,836,000
	Demolish Maintenance Bldg - allowance		(29,613)	¢	350,000
	Demolish Towers - Allow.		(40,828)		500,000
	Center for Learning & Technology	18,000	(40,020)	\$	5,400,000
	James Complex Renovation & Expansion	102,135	34,000		42,540,500
	Henry Administration Building	37,396	34,000	\$	11,218,800
	Demolish Kennard - allow ance	31,370	(22,646)	\$	240,000
	Student Housing - 300-Beds		100,000	\$	24,000,000
	Stadium Complex - note 4		40,000	\$	12,000,000
	Athletic Fields Improvements - Allow.		10,000	\$	6,000,000
	Convocation Center		100,000	\$	40,000,000
	Site & Site Utilities Improvements - allowance		100,000	\$	10,000,000
				*	10/000/000
_	Total Gross Non-Residential 2021-2025	157,531	174,000		
	Total Gross Residential 2021-2025	-	100,000		
	Total: 2016-2020	157,531	274,000		152,249,300
	posed Projects: 10-20 Years 2026-2035>	20,000		¢	( 000 000
	Charlotte Robinson Hall	20,000	70,000	\$	6,000,000
	New Academic Building Incubator and Innovation Center		70,000 75,000	\$ ¢	21,000,000
	Athletics & Rec Field House (practice facility)		72,000	⊅ \$	33,750,000
	Tubman Residence Hall	33,282	72,000	⊅ \$	
	Holmes Residence Hall	21,779		⊅ \$	6,656,400
	Alex Haley Residence Community	90,855		₽ \$	18,171,000
	Field House (old portion)	3,194		\$	638,800
	Site & Site Utilities Improvements - allowance	5,174		.⊅ \$	10,000,000
7	•			φ	10,000,000
	Total Gross Non-Residential 2026-2035	169,110	217,000		
	Total Gross Residential 2026-2035		-		
	Total: 2026-2035	169,110	217,000	\$	122,172,000
_	Total Gross Non-Residential	514,652	886,238		
	Total Gross Residential	-	300,000		
_	TOTAL	514,652	1,186,238	\$	696,257,300
_					
	Total Non-Residential New Buildings 2016-20		886,238		
	Deduct for Demolition - Steam Plant, MLK, M	aintenance	(184,927)		
	Net Gain - Non-Residential GSF 2016-2025		701,311		
	Note 1: Construction Cost: 2016 dollars. Other Pr	oject Costs (fees, FFE.	inspection, etc)	not i	ncluded.
	Note 2: Humanities Phase 2 includes \$51,700,000	, ,			
	Note 3: Public Safety Complex includes \$29,000,				
	· · · · · · · · · · · · · · · · · · ·	aining, Concessions, G			

The order and proposed schedule for the Proposed Capital Projects is deliberate, sequential, generally providing sufficient space to minimize the need for temporary facilities, and dependent on available funding. The proposed building projects will require corresponding increases in site infrastructure and, in some cases, renovation of vacated space. The *schedule* indicated in this chart is secondary to consideration of the *sequence*; funding may or may not be in place in each fiscal year indicated. The University's *Capital Improvement Plan* will establish the capital projects schedule.

## CAMPUS DEVELOPMENT CONCEPTS

Three alternative concepts were developed showing new building locations, open space and pedestrian circulation, vehicular circulation, parking distribution and parking structures. Each concept was developed not knowing the disposition of the proposed MARC Station Sector Plan development west of the Amtrak right-of-way. Elements considered for each alternative included:

#### CAMPUS ORGANIZATION AND SITE DESIGN

The location of proposed buildings follows the existing organization of campus districts – academic and administrative, residential, and athletic.

- The future Humanities Building and future academic building replace the MLK Building, maintaining a building edge along Henry Circle. The future Humanities Building will provide large assembly space for the university community. The Humanities Building will anchor the southern terminus of the Western Promenade. The position of this building will reinforce pedestrian connections to the existing MARC station as well as to the proposed relocated MARC station.
- Renovations to Robinson Hall are to continue, including instructional and office spaces.
- A future academic building will replace the existing Facility Maintenance and Office Building. This building will support the campus gateway experience by framing the east-west pedestrian connection north of the Student Center. This building will also help frame a new campus quad east of McAuliffe Residential Building.
- A new Public Safety Facility will anchor the improved intersection of the Loop Road and Jericho Park Road. This facility will replace Goodloe Apartments.
- A future Research / Incubator Building will be located at Route 197 at the campus entrance. The facility, similar to the Center for Business and Graduate Studies, will provide space to help foster business, research and academic partnerships. This building will afford Bowie State University additional visibility from Route 197.
- Two new Residence Halls are located west of McKeldin Gym, forming a new residential quad along the northern end of the Western Promenade. This residential community will provide shared common space with food service opportunity.
- A new larger and more appropriately scaled Residential Hall will replace Kennard Residence Hall. The new Residence Hall will help create a sense of enclosure and physical separation between Holmes Plaza and West Courtyard. This Residential Hall will continue to preserve residential life in the heart of the campus and reinforce the residential presence between the academic core to the south and athletics to the north.
- The James Physical Education Complex will be expanded to the east providing additional sense of enclosure to Holmes Plaza. When the Towers Residential Hall is demolished a new quad will be created between James Physical Education Complex and Haley Residential Hall.
- A future field house will be located east of the existing track, providing additional indoor recreational and athletic facilities. This facility anchors the northern end of the Eastern Promenade.
- McKeldin Gymnasium will be renovated and expanded to provide an on-campus fitness facility for residents, an
  important component of residential life. The expanded McKeldin will front on the new West Promenade
  residential quad and the existing Holmes Plaza.
- A new football stadium is proposed in its current location and features new stands, public bathrooms,

concessions and ticketing. New decorative fencing will provide structure and enclosure around the stadium. A plaza at the southwest corner of the stadium will serve as a terminus for the East Promenade and monumental stairs adjacent to the future field house. Convenient parking will be provided to better serve visitors less able to walk from the campus. Together these features will create a football venue appropriate for a collegiate team.

- The softball field is re-oriented to provide improved orientation and a more generous, comfortable setting. The slope between the track and softball field will be shaped to create a nature seating area with views around the backstop and infield of the softball field. A pathway traversing the slope along the track & field will provide easy access between the stadium and the West Promenade.
- The Maintenance Facility and Offices are relocated to a site outside the Loop Road, on the northwest corner. This is a more suitable location for the maintenance operations and storage, rather than its current location at an important campus entrance.
- Two new practice fields will be located within the Athletic precinct of the campus. A practice field north of the
  Loop Road and east of the proposed Maintenance Facility and Offices will provide the trail connector between
  the Bowie Heritage Trail and WB&A Trail. The shared parking between the Maintenance Facility will help
  mitigate parking demand for this practice location. The other practice field will be located southeast of the
  Stadium. This field will be connected by a trail and bridge connection to the southern end of the stadium and a
  path connection to the new quad north of the Student Common.

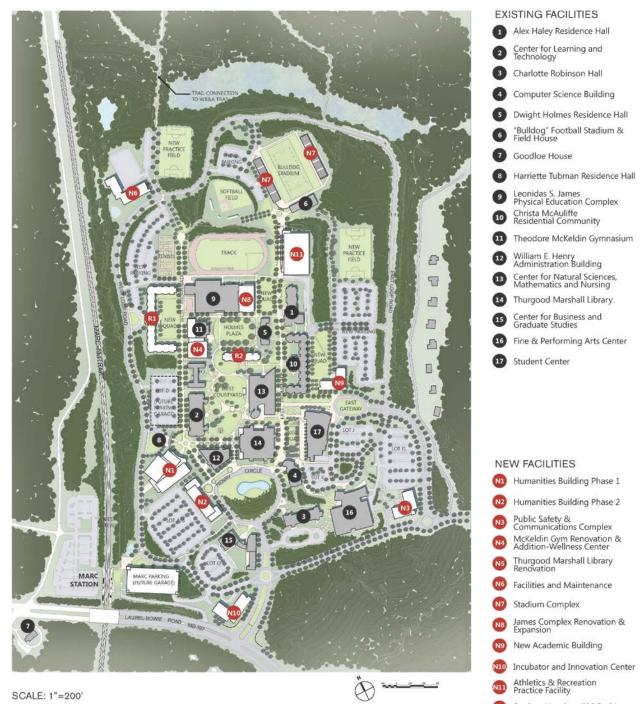
#### VEHICULAR CIRCULATION AND PARKING

- The Master Plan illustrates two significant proposals to the major roadway system. To facilitate traffic movement, turning circles are proposed along Jericho Park Road at the intersection with the main entrance road and with the east end of the Loop Road.
- On the southwest portion of the campus, it is recommended that Bowie State reacquire the MARC parking lot in order to complete the Loop Road in a consistent fashion. All campus parking then remains inside the Loop Road, and can be configured efficiently with pedestrian considerations.
- Campus Drive will be reconfigured as an important campus entrance, providing clear sequence from the Jericho Park Road to a monumental campus drop-off adjacent the Student Union. This road way will reuse the median portion of Loop Road and extend this street design to the proposed drop-off. Secondary access and drop-off to the Fine and Performing Arts Center will be preserved and the eastern portion of the Loop Road will terminate perpendicularly into the realigned Campus Drive, eliminating confusion for visitors.
- Parking Lots K, J and J1 will be reconfigured to improve the clarity of vehicular movement, reduce pedestrian
  and vehicular conflicts and maintain parking capacity. Parking Lot K will be reduced in size adjacent to the
  Computer Science Building to enhance the pedestrian experience from the East Promenade to the Fine and
  Performing Arts Center. Parking Lot J-1 will be expanded south to the proposed Security Building. A future
  parking structure is envisioned on Lot J-1 if additional parking demand requires it.
- Two new surface parking lots will be developed north of the new academic building adjacent to the Student Commons. These parking lots will replace Parking Lot I and H and provide additional parking spaces for the University. These parking lots will provide residential parking, but also serve athletic events.
- The area south of the proposed new west student housing complex will be developed to include a new surface parking lot. In the future, if necessary, a parking garage can be accommodated on this lot.
- Surface parking lot B will be expanded inward to the campus to fill the void created by the demolition of MLK building. Access to this parking lot will be restricted to few locations with a landscape edge along Loop Road.
- A new parking lot will be located parallel to the Loop Road northwest of the track. This parking area will provide parking to residences and for athletics.
- New tree planting is recommended for both new and existing parking lots. Parking lot islands can be utilized for bio-retention as well as tree planting.
- The proposed vehicular and pedestrian tunnel to connect to the proposed Village Center and new MARC Station is shown to align with the new western gateway between the new Humanities Building and reconfigured surface parking.

#### PEDESTRIAN CIRCULATION AND CAMPUS OPEN SPACES

- Existing parking Lot K east of the Computer Science Building will be reduced in size to create an important pedestrian connection between the Fine and Performing Arts Center and the East Promenade.
- A significant green open space is proposed in the new residential quad to provide casual recreation space for residence and McKeldin Gym.
- A significant green open space is proposed north of the Student Center along the east side of McAuliffe Residential Community. As the space continues north the open space transitions into a wildlife corridor between the Stadium and new practice field. The wildlife corridor provides natural drainage and ground water recharge functions as well as habitat for species.
- The West Promenade is extended to the north, along the relocated tennis courts and connecting to the practice field, Maintenance Facility and trail connection linking to the WB&A Trail and Bowie Heritage Trail.
- The East Promenade will extend north along the face of the new Field House, terminating on monumental stairs descending down to the Bulldog Stadium Plaza.
- Completion of the pedestrian system around the Loop Road will provide safe walking and jogging circuit.
- The pedestrian connection to the Village Center should be emphasized, with traffic calming features at the intersection with the Loop Road.

#### PREFERRED DEVELOPMENT PLAN



SCALE: 1"=200'

Student Housing (600 Beds)

Student Housing (300 Beds)

R1

RZ

#### PREFERRED DEVELOPMENT PLAN WITH ALTERNATE DEVELOPMENT



R2 Student Housing (300 Beds)

# Chapter 2 Overview of the University

Introduction History and Character Strategic Plan Mission Vision Core Values Institutional Goals Academic Programs Governance and Organization Faculty and Staff Enrollment Facilities

# OVERVIEW

## INTRODUCTION

Bowie State University (BSU or Bowie) is a nationally accredited four-year Master's (Comprehensive) University (Master's/L) by Carnegie classification. Established in 1865, BSU is the oldest of the four Historically Black Institutions (HBIs) of higher education in the State of Maryland and the fifth oldest in the nation. Offering 41 bachelor's and master's degree programs, two doctoral, and 17 graduate and advanced certification programs with a focus on computer science, information technology, business, nursing, natural sciences, and education, BSU is one of 12 degree-granting institutions in the University System of Maryland (USM), the state's public higher education system. USM comprises 12 institutions, two regional higher education centers, and a system office. USM:

- Offers expansive access to affordable, high quality educational opportunities;
- Performs groundbreaking research;
- Instills a culture of innovation and entrepreneurship;
- Promotes economic growth and workforce development;
- Provides vital services to communities and individuals; and
- Partners with business, government, nonprofits, and other organizations to improve quality of life<sup>1</sup>

Having evolved from an elementary school to a normal school and grown into a doctoral research university. Bowie State University currently serves a diverse population of 5,700 students, providing educational opportunities that will enable students to function in a highly technological and interdependent world. Bowie State continues to honor its heritage of providing access to higher education for under-represented populations, with a continuing commitment to African Americans. Bowie State is also a leader in the infusion of technology into the curriculum while maintaining its role as an institution grounded in the liberal arts, and produces graduates who are leaders among their peers in a global community, who think critically, who value diversity, and who are committed to high moral standards. "Bowie State's signature pipeline program *Education Innovation Initiative (ei2)*, prepares students to become leaders in technology-related careers with hands-on opportunities to tackle problems for businesses and communities. Expert faculty foster student success with award-winning teaching methods and a passion for supportive mentoring. Bowie's dynamic learning environment helps students to explore new challenges as researches on NASA missions, analysts for the Environmental Protection Agency, developers of visual reality platforms to evaluate emergency evacuation plans, and in other varied and important ways."<sup>2</sup>

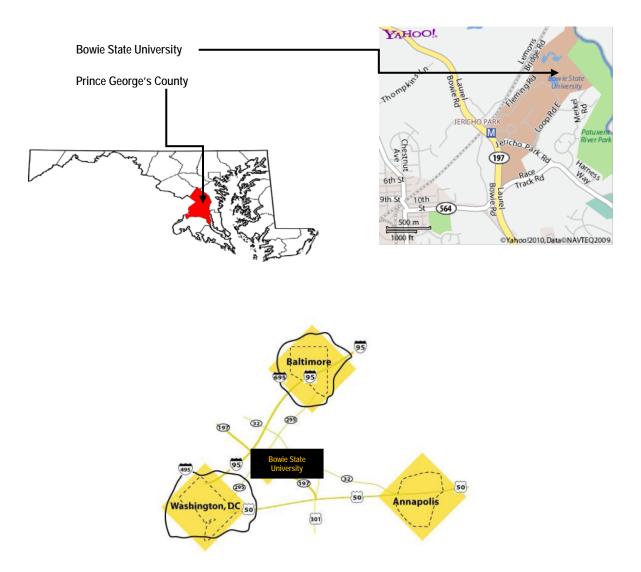
*Forbes* magazine recognized Bowie State University as one of America's Top Colleges from 2011-2013. *U.S. News & World Report* ranked Bowie State among the top 25 historically black colleges and universities in 2014. Bowie State's cyber security programs are recognized as a National Center for Academic Excellence in Information Assurance Education by the National Security Agency and the Department of Homeland Security. Bowie State University became a hub for startup businesses when the Bowie Business Innovation Center opened its doors on campus in 2012. It is the first Maryland incubator established at a historically black college or university. As a champion of diversity, Bowie State University opened a resource center for lesbian, gay, bisexual, and transgender students in 2012, the first of its kind at a historically black college or university. Currently, Bowie State University ranks among the top 20 historically black colleges and universities producing Peace Corps volunteers. BSU's new state-of-the-art Fine and Performing Arts Center has the signature distinction of featuring only the prestigious Steinway pianos throughout the facility, as well as specialized spaces for music technology and digital media arts.

<sup>&</sup>lt;sup>1</sup> Source: <u>http://www.usmd.edu/institutions/profile/?Inst=BSU</u>

#### Location

Bowie State University is in a rural setting centrally located on a scenic and serene wooded tract next to the City of Bowie, between the metropolitan areas of Baltimore (25 miles), Washington D.C. (17 miles), and Annapolis (15 miles). The campus is about five miles east of Greenbelt and Lanham, and seven miles north of the Capital Beltway (95) at the New Carrollton exit at Route 450. The Baltimore-Washington Parkway is less than five miles west of the University if using either the Greenbelt Route 193 exit or the Laurel Route 197 exit. Route 197 brings motorists within 200 yards of the campus in Prince George's County. The University's address is 14000 Jericho Park Road, Bowie, Maryland 20715.

Figure 2-1: Vicinity Maps



The Baltimore-Washington-Annapolis triangle serves as a center of international, national, and regional business, government and technology. Located within close proximity to each of these urban hubs, the BSU has on-campus access to the MARC train and Metrobus making it easily accessible.

#### HISTORY AND CHARACTER

Bowie State University is an outgrowth of the first school opened in Baltimore, Maryland on January 9, 1865 by the Baltimore Association for the Moral and Educational Improvement of Colored People, which was organized on November 28,1864 to engage in its self-appointed mission on a statewide basis.

Designated School #1, the first elementary level classes were held in the African Baptist Church, located on the corner of Calvert and Saratoga Streets. In the same building as School #1, the first normal school classes were added in 1866 to train Negro teachers. In 1867 the normal school moved to a renovated building of the Friends Meeting House at the corner of Saratoga N.W. and Courtland Streets. The Baltimore Normal School had received occasional financial support from the City of Baltimore since 1870 and from the State since 1872. In 1871, it received a legacy from the Nelson Wells Fund. This fund, established before Wells' death in February 1843, provided for the education of freed Negro children in the State of Maryland. On April 8, 1908, at the request of the Baltimore Normal School, which desired permanent status and funding as an institution for the education of Negro teachers, the State Legislature authorized its Board of Education to assume control of the school re-designated the institution as Normal School No.3.

Subsequently, the institution was physically relocated to a 187-acre tract in Prince George's County. By 1914, it had become known as the Maryland Normal and Industrial School at Bowie. A two-year professional curriculum in Teacher Education, which started in 1925 with the approval of the State Board of Education, was expanded to four years in 1935 and the school renamed the Maryland Teachers College at Bowie. The institution established programs to train teachers for junior high schools in 1951. Ten years later, permission was granted to implement a more comprehensive teach-training program for secondary education. In 1963, a liberal arts program was established and the name of the institution was changed to Bowie State College.

In 1970, Bowie State College was authorized to grant the Master of Education which was its first graduate degree. A significant milestone in the development of Graduate Studies at Bowie State College was achieved with the Board of Trustees' approval of the establishment of the Adler-Dreikurs Institute of Human Relations in 1975. Currently, the University offers 41 bachelor's and master's degree programs, two doctoral, and 17 graduate including the Bachelors in Technology, Master of Arts in Teaching, Master of Arts in English, Master of Business Administration (MBA), and the Doctoral degree in Educational Leadership.

On July 1,1988, Bowie State College officially became Bowie State University, a change reflecting significant growth in the Institution's programs, enrollment, and service to the area. On that same day, the University also became one of 11 constituent institution of the newly formed University System of Maryland.

In fall 1992, Bowie State University took a distinctive step into the international market by becoming the first Historically Black University in the nation to expand its satellite and continuing education programs overseas. In partnership with the University of Maryland University College, Bowie State now offers graduate programs in Management Information Systems and Administrative management to military personnel stationed in Europe and Asia.

In spring 1994, The Maryland Higher Education Commission approved a new mission for Bowie State University, reaffirming its heritage and special commitment to the African American community and identifying a special focus on computer and technology applications, as well as an enhanced role as a teaching institution. Bowie State University now serves a student population of approximately 5,700 which is technologically sophisticated, culturally diverse, and internationally sensitive.

Bowie State University, in 1995, was awarded an 11-year, \$27 million grant from the National Aeronautics and Space Administration/National Science Foundation. This grant made Bowie State one of only six

national Model Institutions for Excellence in Science, Engineering, and Mathematics. This award significantly strengthened the institution's academic infrastructure and enhanced an already excellent computer science and technology program. Currently, the Computer Science program ranks first, in the nation, in graduating African American students with master's degrees in Computer Science.

The year 1996 was a stellar year for the University as it established its *Institute for Diversity and Multicultural Affairs* (IDMA) and the schools of Education and Professional Studies, Arts and Sciences, and Graduate Studies and Research. In 1998, the IDMA launched a new initiative, supported by a \$1.9M award from the Kellogg Foundation, which is an important effort to facilitate access to higher education for an increasingly diverse population across South-Central Maryland, especially in Anne Arundel, Montgomery, and Prince George's counties. In 1998, Bowie State also successfully earned reaffirmation of its National Council for Accreditation of Teacher Education (NCATE) accreditation.

In the new millennium, the University continued to achieve major milestones. During the years 2001-2004 a new state-of-the art Center for Learning and Technology, a \$21 million high-tech facility, was completed. In addition, ground was broken for a new science building, and The Christa McAuliffe Residential Community, were completed. The University earned reaffirmation of its Middle States Association accreditation. A new entrance to the campus was completed. Bowie was awarded a \$1.6 million grant by the U. S. Department of Labor for technology training. The University System of Maryland Board of Regents and Maryland Higher Education Commission approved revision to BSU's mission statement and authorized the University to offer an applied Doctorate in Educational Leadership and to explore the granting of an applied doctorate in information technology and computer science.

In 2005, one of the nation's fastest college supercomputers was built by university faculty and students and placed in service. Also in 2005, Bowie State University graduated its first class of doctoral candidates who earned a Doctorate of Education in education leadership (EdD) and its first class of four-year nursing students from the School of Professional Studies. The Doctoral Degree in Computer Science was approved and classed began in fall 2006.

During fiscal year 2008, the institution further solidified its administrative structure by hiring new deans for each of its four schools: School of Professional Studies (July 2007), School of Business (December 2007), School of Arts and Sciences (June 2008), and School of Education (June 2008). This new leadership brings renewed focus on the academic programs.

In spring, 2008 the institution launched a new bachelor's degree in sport management with nine concentrations: public relations, print journalism, broadcast journalism, general business management, marketing, media management, telecommunications, and economics. Programmatic enhancements have been made to improve the Doctorate of Education in educational leadership degree program. The nursing curriculum was revised.

During spring 2008, the University System of Maryland officially designated Bowie as a "growth institution," confirming the expectation that Bowie will absorb more students over the next decade. The institution continues aggressive marketing and outreach as part of an ongoing enrollment initiative.

During the spring semester of 2012, the University celebrated the opening of the new \$71 million Fine and Performing Arts Center. This 123,000 square foot facility includes a 400-seat main theater, a 200-seat black box theater, a 200-seat recital hall, an art gallery, classrooms, class laboratories and offices.

In 2012 BSU celebrated the grand opening of the Bowie Business Innovation Center, which was established in partnership with the city of Bowie, and is the first Maryland incubator to be established at an HBCU.

In effort to enhance campus life for Bowie's students, a new Student Center was constructed and completed in time for the 2013-2014 academic year, replacing the old Wiseman Center.

Among the nation's leaders in teacher education, Bowie State has maintained accreditation of its programs by the National Council of the Accreditation of Teacher Education since 1956 and has continued its legacy of producing outstanding teachers and school administrators, with recent graduates including county and state Teachers of the Year.

Bowie State University has positioned itself for the challenges of the 21st Century by continuing to build systems of academic and institutional excellence. In May 2015, a groundbreaking ceremony was held for a new 150,000-square-foot state-of-the-art Center for Natural Sciences, Mathematics, and Nursing slated to open in late 2017. The New Center for Natural Sciences, Mathematics and Nursing will provide Bowie State University with state-of-the-art classrooms, teaching and research laboratories, and computer labs.

A three-story elliptical multipurpose room, clad in curtain wall, anchors the building's south elevation. Additional unique building features include a green house, integrated into the exterior aesthetic, and a threestory atrium with skylights. The building exterior will consist of metal panels, terra-cotta tile, and curtain wall façade, with terra-cotta baguettes. Portions of the curtain wall system will utilize dynamic glazing, which can change its shading factor and performance characteristics based upon outside conditions. This element, along with other sustainable features, will help the building achieve a LEED Gold certification. Once the facility reaches substantial completion in 2016, the project team will demolish the existing Crawford Science Buildings, making way for a new campus greenscape.

Today, Bowie State University enrolls a diverse student body of more than 5,700. Offering 41 bachelor's and master's degree programs, two doctoral, and 17 graduate and advanced certification programs with a focus on computer science, information technology, business, nursing, natural sciences, and education. Bowie State equips students with rigorous academics and the individual support they need to compete in a changing world.

# STRATEGIC PLAN

Bowie State University's 2013-2018 Strategic Plan reaffirms the University's commitment to academic excellence and student success as shown traditionally through deeply rooted strengths in teaching, research, and service. The *Plan's* purpose is to give direction and focus to unit planning for a five year period, including aligning goals and financial resources and providing a mechanism for tracking the University's progress toward its mission and vision.

#### MISSION

Bowie State University empowers a diverse population of students from Maryland, the nation, and the world to reach their full potential through its high-quality, liberal-arts-based bachelor's, master's, and doctoral programs. The University provides a nurturing environment distinguished by a culture of success that supports students in completing their course of study. As Maryland's first historically black university, Bowie State inspires and prepares ethical and socially responsible leaders who can think critically, discover knowledge, commit to lifelong learning, value diversity, and function effectively in a highly technical and dynamic global community.

### VISION

Bowie State University's quintessential priority is academic excellence. This refers to the educational achievements of our students, including their intellectual growth, and the scholarly and pedagogical achievements of our faculty members. Bowie State University will be widely recognized as one of the nation's best public comprehensive universities. Bowie State's ability to increase its national stature will depend in part on its ability to enhance its graduation rate, the reputation of its faculty, and the excellence of its undergraduate and graduate programs.

To achieve this vision, Bowie State is committed to:

- Enrolling, educating, and graduating the most promising diverse student body possible.
- Fostering a success-driven undergraduate and graduate culture, culminating with a degree that
  positions graduates to be part of an educated citizenry that positively contributes to the community.
- Cultivating an institutional culture of high expectations and climate of success that advances student learning and emphasizes efficient time to degree.
- Providing all students with an education that is innovative, distinctive, and of the highest quality that inspires life-long learning.
- Implementing and sustaining a strategic approach to building BSU's reputation and brand recognition as a nationally preeminent university.
- Continuing to explore additional institutional revenue streams and operating in an efficient and effective manner.
- Supporting faculty in scholarly and creative endeavors.

Excellence:	Bowie State University expects students, faculty, staff and administrators to demonstrate outstanding levels of performance by fostering a stimulating learning and work environment.
Civility:	Bowie State University cultivates an environment in which the interaction between individuals is one that is inherently imbued with value, respect, and appreciation.
Integrity:	Bowie State University students, faculty, staff, administrators and the larger community demonstrate high ethical standards in their interactions with one another.
Diversity:	Bowie State University nurtures an awareness of, and sensitivity toward, differences of race, gender, ethnicity, national origin, culture, sexual orientation, religion, age, and disability.
Accountability:	Bowie State University expects each member of the University community to be responsible and accountable for the outcomes of one's efforts and actions.

INSTITUTIONAL GOALS	
Strategic Goal 1:	Deliver high quality academic programs and relevant co-curricular experiences.
Strategic Goal 2:	Develop and implement programs and services that promote access, affordability, and completion for a diverse student body with an emphasis on underserved populations.
Strategic Goal 3:	Conduct and sustain academic transformation initiatives to improve student success and promote greater faculty collaboration.
Strategic Goal 4:	Develop a comprehensive model of regional, national, and global engagement to address societal needs.
Strategic Goal 5:	Advance the overall effective and efficient use of resources and identify new revenue sources to support the university's core mission.
Strategic Goal 6:	Define and communicate the University's distinctive identity and value proposition.
Strategic Goal 2: Strategic Goal 3: Strategic Goal 4: Strategic Goal 5:	<ul> <li>experiences.</li> <li>Develop and implement programs and services that promote access, affordability, and completion for a diverse student body with an emphasis on underserved populations.</li> <li>Conduct and sustain academic transformation initiatives to improve student success and promote greater faculty collaboration.</li> <li>Develop a comprehensive model of regional, national, and global engagement to address societal needs.</li> <li>Advance the overall effective and efficient use of resources and identify new revenue sources to support the university's core mission.</li> <li>Define and communicate the University's distinctive identity and value</li> </ul>

#### ACADEMIC PROGRAMS

Academic programs are designed to prepare students for immediate employment or graduate studies. The institution's state-of-the-art information infrastructure, facilities, research laboratories, and technology-enabled interactive classrooms provide businesses and government with excellent opportunities for new partnerships and collaborative projects of mutual benefits.

In partnership with the University of Maryland University College, Bowie State University became the first historically black university to include overseas studies. It was also the first university in the nation to offer a bachelor's degree in pedagogy.

Bowie State University is nationally, regionally, and state accredited or certified by the following accrediting entities:

## National Accreditation Association of Collegiate Business Schools and Programs Computing Science Accreditation Board National Council for the Accreditation of Teacher Education National Council on Social Work Education National League for Nursing

#### **Regional Accreditation**

Maryland State Board of Nursing Maryland State Department of Education Middle States Association of Colleges and Schools

The institution is continuously positioning itself to address critical needs in the immediate Prince George's County community, the state of Maryland, the nation and the world. Those critical needs encompass but are not limited to the educational, economic, cultural, and social needs.

Bowie State University offers 41 bachelor's and master's degree programs, two doctoral, and 17 graduate and advanced certification programs with a focus on computer science, information technology, business, nursing, natural sciences, and education.

#### **Carnegie Classification**

Master's (Comprehensive) University I (Master's /L)

#### Academic Accreditation

#### Accreditation

Association of Collegiate Business Schools and Programs (ACBSP)
The B.S. in Computer Science Program is accredited by the Computing Accreditation Commission of ABET, <u>http://www.abet.org</u>.
Accreditation Board (CSAB)
Maryland Board of Nursing
Maryland State Department of Education
Middle States Association of Colleges and Schools
National Association of School Psychologists
National Council for the Accreditation of Teacher Education
National Council on Social Work Education
National League for Nursing Accrediting Commission

#### **Memberships**

American Association for Higher Education American Association of Colleges of Nursing American Association of Colleges of Teacher Education American Association of State Colleges and Universities American Association of University Women American Council on Education Association of Teacher Education and Institutions College Entrance Examination Board Council for the Advancement of Secondary Education Maryland Association of Higher Education National Association for Equal Opportunity in Higher Education National League for Nursing

#### Colleges<sup>3</sup>

#### Arts and Sciences

The College of Arts and Sciences is where we open your eyes and mind to ideas that range from fine arts and creative writing to philosophy and computer programming.

The College of Arts and Sciences offers a broad spectrum of courses that teach you how to question, analyze, understand and theorize. You will work closely with highly credentialed professors who are either

<sup>&</sup>lt;sup>3</sup>As published on Bowie State University website: https://www.bowiestate.edu/academics-research/colleges/

practicing their art or doing cutting-edge research, and select from unique programs like music technology or bioinformatics—which combines mathematics and biology.

There are also multiple ways that you can sharpen your skills at Bowie State University. You can do exciting research with professors in our genomics, cybersecurity or virtual reality labs. Or head over to the new Fine and Performing Arts Center, which was designed to enhance your artistic gifts, to practice on the Steinway pianos or mix music in the recording studio. And no matter your major, you'll have on- and off- stage opportunities that could range from working in an artist's studio to snagging a foreign relations internship at the U.S. Department of State.

- Communications
- Computer Sciences
- English and Modern Languages
- Fine and Performing Arts
- History and Government
- Mathematics
- Military Science
- Natural Sciences

#### <u>Business</u>

The College of Business places students on pathways to successful business careers.

You will learn the skills you need for a rewarding career in corporate America, government or as an entrepreneur through the College of Business' holistic, career-oriented approach. You'll find flexible course options (online, in person, or hybrid), as well as professional and leadership development. The college's top-notch faculty combines hands-on experiences with the latest tools and research to replicate challenges you'll face in a business environment. Our close relationships with area businesses and government agencies mean you'll have many opportunities for internships and post-graduate employment.

Our programs create a microcosm of the real-life business arena where students interested in starting their own businesses learn to think like entrepreneurs and have direct access to entrepreneurs and other mentors via our business incubator, the Bowie Business Innovation Center. Your entrepreneurial ventures will be nurtured via the Entrepreneurship Academy and student business hatchery.

- Accounting, Finance, and Economics
- Management Information Systems
- Management, Marketing, and Public Administration

#### **Education**

In the College of Education we prepare effective educators to change lives and become caring and collaborative professionals who make a difference in our global community.

In the College of Education, you'll learn from faculty members who have the highest credentials and are constantly researching best practices and programs to meet national trends and local needs, such as our new teacher-leader emphasis. As an intern, you'll have yearlong placements and mentorships through our innovative, nationally recognized partnerships with local public schools. These internships will help you stand out when you are ready to seek full-time employment.

Thinking of advancing from the classroom to administration? Select from several of our top-rated graduate programs. The college is working with local school districts to increase the number of well-prepared principals to fill anticipated vacancies. Proof of our commitment to educational excellence is reflected in our nearly 100 percent pass rate for key exams and graduates who go on to win awards and take leadership posts.

- Counseling
- Educational Leadership
- Teaching, Learning, and Professional Development

#### Professional Studies

The College of Professional Studies is where students learn how to prepare for a life of service, leadership, and professional practice in a technologically advanced global community.

In the College of Professional Studies, you will be equipped to create solutions to community challenges, ask and answer the hard questions and leave our programs ready to lead positive social change. Along the way you'll have opportunities for cross-disciplinary learning, internships with top employers, community involvement and global learning that will literally take you places. You will also work with highly credentialed faculty who are active in the community and conduct research that further their individual fields.

You will be prepared to enter in-demand fields, like criminal justice and nursing, and get hands-on experience inside the classroom and in our criminalistics and simulation labs. Overall, the college provides you access to innovative programs and resources tailored to supporting your success.

- Behavioral Sciences and Human Services
- Nursing
- Psychology
- Social Work

#### Departments

With 18 departments, 22 undergraduate majors, 19 master's degree programs, two doctoral programs, and nine advanced certificate programs, Bowie State University offers a wide range of academic opportunities. The University's student-faculty ratio is a low 15:1. The faculty are highly qualified, with 92% of full-time professors holding at least a master's degree and 64% holding PhDs. The National Science Foundation recognized the strength of the University's science, engineering, and mathematics programs by selecting it as one of six Historically Black Colleges/Universities to be chosen as a Model Institution of Excellence. Research at the University is supported by such advanced facilities as a \$1 million supercomputer and a NASA satellite operations control center.

#### The Graduate School

The Graduate School provides qualified students with an opportunity to pursue advanced study leading to the Master of Education degree, the Master of Arts degree, the Master of Business Administration degree, the Master of Public Administration degree, the Master of Science degree, the Master of Science in Nursing degree, the Doctor of Education (Ed. D.) degree and the Doctor of Applied Science (D.A.S.) degree in Computer Science.

Bowie State University has four academic colleges: Arts and Sciences, Business, Education, and Professional Studies. Within these four schools, we offer 19 master degree programs, 14 specialty

certificates and two doctoral programs. We offer specialty certificates, master, and doctoral degrees in the following:

#### Master's Programs

#### College of Arts and Sciences

- Applied and Computational Mathematics
- Computer Science
- English
- Organizational Communications

#### **College of Education**

- Counseling Psychology
- Elementary Education
- Elementary & Secondary School Administration
- Mental Health Counseling
- Reading Education
- School Counseling
- School Psychology
- Secondary Education
- Special Education
- Teaching

#### **College of Business**

- Business Administration (MBA)
- Management Information Systems
- Public Administration (MPA)

#### College of Professional Studies

- Human Resource Development
- Nursing

#### **Doctoral Programs**

- Computer Science
- Educational Leadership

#### Certificate Programs

#### Post-Baccalaureate Certificates

- Addictions Counseling
- Applied and Computational Mathematics
- Computer Science
  - Database Management/Artificial Intelligence
  - Geographical Information Systems & Image Processing
  - o Graphics & User Interface
  - o Network & Distribution Systems
  - o Scientific Software Development
  - Software Engineering
- Information Systems Analyst

- Organizational Communications Specialist •
- Project Management Public Administration •
- •

## Certificates of Advanced Study

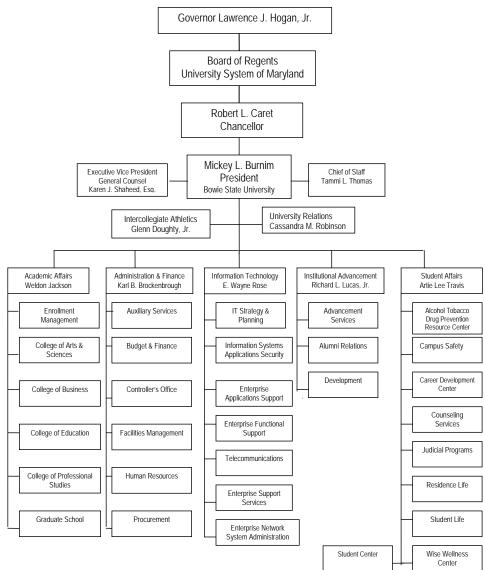
- Psychotherapy
- School Psychology •

#### **GOVERNANCE AND ORGANIZATION**

The University System of Maryland's (USM) 17-member Board of Regents is the governing authority for Bowie State University. Appointed by the governor, the board has oversight over USM's institutions, centers, and institutes and is responsible for setting policy for the institutions within the system as well as for selecting their presidents. Each president, along with their designees, is responsible for the institution's dayto-day governance and operation. Thus, the president has overall operational authority and responsibility for Bowie State University and as such, exercises general supervision of all departments.

As shown in the following figure, the president shares administrative responsibility with five vice-presidents and an executive vice-president who also serves as general counsel; each with a broad range of responsibilities. Rounding out the President's Cabinet is a director of university relations and marketing, a director of athletics, and a chief of staff to the president. Students, faculty, and staff also participate in the governance of the University through standing and ad hoc committees.

#### Figure 2-2: Bowie State University Organization Chart



#### FACULTY AND STAFF

During the academic year 2014-2015, Bowie State University employed 225 full-time faculty and 370 fulltime staff. In addition, 207 part-time faculty and 56 part-time staff were employed. In addition to faculty, approximately 27 graduate assistants obtain valuable academic or research experience while making progress towards a graduate degree.

Table 2-1. Faculty and St	un nenus							
						Current	% Change /	Annual Rate
	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	2009-2014	2009-2014
Full-Time Faculty	230	229	226	216	228	225	-2.2%	-0.4%
Part-Time Faculty	176	171	184	192	212	207	17.6%	3.3%
,								
Total Faculty	406	400	410	408	440	432	6.4%	1.2%
Full-Time Staff	342	338	355	365	380	370	7.6%	1.6%
Part-Time Staff	35	49	34	37	52	56	37.5%	9.9%
Total Staff	377	387	389	402	432	426	11.5%	2.5%
Total Students	5,617	5,578	5,608	5,421	5,561	5,695	1.4%	0.3%
Student/Faculty Ratio	16:1	16:1	15:1	16:1	15:1	16:1		

#### Table 2-1: Faculty and Staff Trends

Data Source: Bowie State University Office of Planning, Analysis and Accountability and Common Data Set Formula (Ratios)

#### ENROLLMENT

Fall 2014 headcount enrollment at Bowie State University was 5,695 students. A total of 68,641 credit hours were generated by 4,721 full-time equivalent students (FTES).

Headcount	Actual	Actual	Actual	Actual	Actual	Current	% Change	Annual Rate
	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	2009-2014	2009-2014
UG:FullTime	3,710	3,709	3,669	3,493	3,521	3,675	-0.9%	-0.2%
UG:Part-Time	690	692	783	790	837	781	13.2%	2.5%
UG:Total	4,400	4,401	4,452	4,283	4,358	4,456	1.3%	0.3%
GR:FullTime	401	409	402	396	453	513	27.9%	5.0%
GR:Part-Time	816	768	754	742	750	726	-11.0%	-2.3%
GR:Total	1,217	1,177	1,156	1,138	1,203	1,239	1.8%	0.4%
Total:FullTime	4,111	4,118	4,071	3,889	3,974	4,188	1.9%	0.4%
Total:Part-Time	1,506	1,460	1,537	1,532	1,587	1,507	0.1%	0.0%
Total	5,617	5,578	5,608	5,421	5,561	5,695	1.4%	0.3%

# Table 2-2: Enrollment Trends

Credit Hours	Actual Fall 2009	Actual Fall 2010	Actual Fall 2011	Actual Fall 2012	Actual Fall 2013		% Change / 2009-2014	
Undergraduate	59,695	59,941	59,470	56,623	57,791	59,929	0.4%	0.1%
Graduate	7,777	7,606	7,603	7,507	8,179	8,712	12.0%	2.3%
Total	<b>67,472</b>	<b>67,547</b>	<b>67,073</b>	<b>64,130</b>	<b>65,970</b>	<b>68,641</b>	<b>1.7%</b>	<b>0.3%</b>

Data Source: Bowie State University Office of Planning, Analysis and Accountability

#### **CAMPUS FACILITIES**

At the beginning of the base year for this *Facilities Master Plan* (fall 2014), the facilities inventory at Bowie's campus includes 24 buildings totaling 1,495,769 gross square feet (GSF) that contain approximately 895,000 net assignable square feet (NASF) of space. A new 149,109 GSF/88,428 NASF Center for Natural Science, Mathematics and Nursing is currently under construction and due to be completed in 2016-2017. The buildings are presented below as either state supported or non-state supported (auxiliary enterprise) facilities.

Table 2-3: Campus Buildings				
Bowie State University Fall 2014				
State Supported Buildings	Built	GSF	NASF	Primary Use
Boiler Plant	1952	2,970	2,970	Inactive
Center for Business and Graduate Studies	2007	66,000	37,944	Academic/Faculty Offices, Instruction
Center for Learning and Technology	2000	101,193	58,241	Instruction, Faculty Offices
Computer Science Building	2002	47,000	27,641	Instruction/Research, Faculty Offices
George M. Crawford Science Center	1967	47,008	27,753	Instruction/Research, Faculty Offices
Field House	1992	4,500	3,200	Athletics
Center for Fine and Performing Arts	2011	123,475	62,645	Performing Arts, Instruction
Goodloe House	1916	3,815	2,100	Inactive
William E. Henry Administration Building	1976	37,396	19,027	Administrative Offices
Leonidas James Physical Education Complex	1973	102,135	63,976	Physical Education, Athletics
Theodore McKeldin Gymnasium	1957	21,142	15,469	Recreation, Intramurals
Maintenance Building	1967	29,613	20,432	Shops, Storage
Thurgood Marshall Library	1975	166,869	105,336	Library
Martin Luther King Communication & Arts Center	1973	149,374	77,082	Instruction, Assembly, Faculty Offices
Charlotte Robinson Hall	1960	31,534	18,192	Administrative Offices, Central Services
Totals State Supported Buildings		934,024	542,008	

Bowie State University Fall 2014 Auxiliary Enterprise Buildings	Built	GSF	NASF	Primary Use
Alex Haley Residential Community	1994	90,855	54,929	Residential
Christa McAuliffe Residential Community	2004	185,240	124,305	Residential, Health Center
Goodloe Apartments	1954	5,946	5,001	Residential
Harriet Tubman Residence Hall	1921	33,282	19,374	Residential
Dwight Oliver Wendell Holmes Residence Hall	1951	21,779	15,114	Residential
Lucretia Kennard Residence Hall	1957	22,646	14,267	Residential
Student Center	2013	95,503	58,217	Student Union
Towers Residence	1973	40,828	23,518	Residential
Wiseman Center <sup>a</sup>	1981	65,666	39,190	Inactive
Totals Auxiliary Enterprise Buildings		561,745	353,915	
Totals Bowie State University		1,495,769	895,923	

Source: BSU Facilities

<sup>a</sup> Subsequent to this 2014 facilities inventory, the Wiseman Center was razed to allow for construction of the new Center for Natural Science, Mathematics and Nursing.

# Chapter 3 Space Needs

Introduction Summary of Key Findings Existing Space Demand Against Existing Space Quantitative Indicators of Space Need Qualitative Indicators of Space Need

# SPACE NEEDS

#### INTRODUCTION

The purpose of space needs analysis is to assess, on a macro level, the extent to which the current total amount of academic and other space is adequate for use in support of future enrollments. Specifically, space needs analysis incorporates the concept of supply and demand. It is the process of estimating the needed supply of learning, support and resource space given a projected demand of academic programs, faculty and staff, and student enrollments.

Projected space needs are the results of demand, in terms of anticipated programs, enrollments and staffing, on buildings and space at a future date. The ultimate outcome of this assessment is to provide estimates of the supply of types and amounts of space likely to be needed to accommodate Bowie State University's (BSU) projected fall 2024 demand in terms of academic programs and their ensuing enrollments and staffing levels.

#### Planning Assumptions

The base year for this analysis is fall 2014. Student headcount of 5,695 reflects the total number of students taking credit courses at Bowie State. Full-time day equivalent students (FTDES) are calculated from credit hours earned reflected in BSU course data files. Data on faculty and staff are provided by the University. Library Volumes are physical bound volume equivalents calculated from base collections data provided by the University.

	(Base) Fall 2014	(Projected) Fall 2024	Percent Change An	Average nual Change
Total Student Headcount	5,695	6,825	19.8%	1.8%
Undergraduate	4,456	5,294	18.8%	1.7%
Graduate	1,239	1,531	23.6%	2.1%
Total Student FTDE	3,969	4,871	22.7%	2.1%
Undergraduate	3,509	4,310	22.8%	2.1%
Graduate	460	561	22.0%	2.0%
Total Faculty	432	495	14.6%	1.4%
Full-Time	225	275	22.2%	2.0%
Part-Time	207	220	6.3%	0.6%
Total Staff	453	491	8.4%	0.8%
Full-Time	370	441	19.2%	1.8%
Part-Time	83	50	-39.8%	-4.9%
Library Volumes	410,119	516,352	25.9%	2.3%

#### Table 3-1: Planning Assumptions

Source: BSU Office of Planning, Analysis and Accountability (Enrollment); 2014 SGAP (Faculty, Staff and Volume:

For convenience, a glossary containing definitions of generic terms related to educational facilities planning is provided at the end of this section.

#### Methodology

The University provided a space inventory for each building, their Space Guideline Application Program (SGAP) for fall 2014, section-level fall 2014 course enrollment data, staffing data for 2014, and library collection data for fall 2014. These sets of data formed the basis for quantitative analysis of Bowie State University's space needs

The consultant team then applied elements of the data to the Maryland Higher Education Commission's *Space Guidelines for Four Year Public Institutions* to provide quantitative indicators of current and future space needs. Definitions and room use codes are those provided by the Higher Education General Information Survey (HEGIS) taxonomy found in the *Postsecondary Education Facilities Inventory and Classification Manual* published in 2006 by the U.S. Department of Education in cooperation with the National Center for Education Statistics. Basic methodology for quantitative analysis can be expressed using the following demand vs. supply formula:

Total Space Need (Demand) -- Facilities Space Inventory (Supply) = Net Space Need (Minimum Need)

#### **Need Determinants**

The need for space via new or renovated facilities is typically calculated with respect to hours of instruction and the number of students, employees, and library volumes to be accommodated. Projections of total space need are based on anticipated student enrollments, faculty and staff, and library volumes for fall semester 2024 as mutually determined by Bowie State University and the University System of Maryland.

Space Use Categories	Determinants
Instructional Spaces	Weekly Student Contact Hours (WSCH)
Research Spaces	Faculty Headcount
Assembly Spaces	Academic Programs
Lounge and Physical Plant Spaces	Combination of All Determinants
Library and Study Spaces	Library Volumes and Student FTDE
Residential Spaces	Residential Student Headcount
All Other Spaces	Student FTDE/FTE

These space projections are to be viewed only as an aid in identifying the types and amounts of facilities that may be required for a campus to meet its future overall space needs, whether funded by the state or from other sources and do not necessarily relate to "needs" of a particular program or facility. The space planning guidelines application suggests only a computed state funding allowance for each category of space and does not suggest what sort of projects should be undertaken. Space deficits and surpluses are identified based on the application of Maryland guidelines to inventories of various categories of space and projected core amounts of space, student enrollments, and programmatic requirements. However, guidelines are not to be used as the only determining factor when making decisions about facilities needs. A variety of qualitative or non-statistical indicators of space need offer augmentation to any statistical calculations.

Qualitative indicators of current conditions and future space needs/desires are a culmination of observations by the consultants and of views expressed by University personnel and students during interviews, focus group sessions, and written statements. Interviews and focus groups were the primary methods of eliciting the opinions of the various members of the University community. Much of what was learned via these methods is non-specific and cannot be summarized except to say that it contributed to an overall view of the University. These indicators were taken to heart by the consultant team and were, in various ways, both directly and indirectly, incorporated into the recommendations found later in this document.

## Glossary of Terms

This glossary contains brief definitions of generic terms related to educational facilities planning and explanations of the acronyms and abbreviations referred to in this Space Needs Analysis.

Class Laboratory	Spaces that are used primarily for formally or regularly scheduled classes that require special purpose equipment for a specific room configuration for student participation, experimentation, observation, or practice in an academic discipline
Classroom	Spaces that are not tied to as specific subject or discipline by equipment or room configuration
Core Space	Space necessary because of existence of the institution or program without regard to other factors
Credit Hour	A numerical value awarded a student for successfully completing a course
Facilities Inventory	Room-by-room and building-by-building listing of assignable spaces, their primary use, their size and their capacity
Full-Time Equivalent Faculty (FTEF)	A base factor statistic equal to a full-time faculty plus 25% of all part-time faculty <u>Note</u> : This statistic is used in this document for facilities planning purposes only, and the calculation may differ from the FTEF computed for budgetary or other reporting purposes.
Full-Time Equivalent Student (FTE or FTES)	The total number of on-campus credit hours taught during a given semester, divided by 15 for undergraduate and by 12 for graduate students. <u>Note</u> : This statistic is used in this document for facilities planning purposes only, and the calculation may differ from the FTE computed for budgetary or other reporting purposes.
Full-Time Day Equivalent Student (FTDE or FTDES)	The total number of on-campus credit hours taught before 5:00 p.m. during a given semester, divided by 15 for undergraduate and by 12 for graduate students. <u>Note</u> : This statistic is used in this document for facilities planning purposes only, and the calculation may differ from the FTDE computed for budgetary or other reporting purposes.
Gross Square Feet (GSF)	The sum of square feet of space in a building included within the outside faces of exterior walls for all stories or areas that have floor surface Included are all structural, mechanical, service and circulation areas.
Net Assignable Square Feet (NASF)	The sum of all areas on all floors of a building assigned to, or available for assignment to an occupant for specific use Excluded are spaces defined as structural, mechanical, service and circulation areas.
On-Campus	Refers to BSU's main campus only
Physical Bound Volume Equivalent (PBVE)	The physical space required to accommodate a variety of library materials in amounts equal to one single typical book
Student Contact Hour	A measure of time of scheduled interface between students and teacher that is usually expressed in terms of Weekly Student Contact Hour (WSCH), which is the number of hours per week of required interface <u>Note</u> : This statistic is used in this document for facilities planning purposes only, and the calculation may differ from the WSCH computed for budgetary or other reporting purposes.

#### SUMMARY OF KEY FINDINGS

Space deficits in all but three major room use categories are suggested when Maryland space planning guidelines formulae are applied to Bowie State University's projected (2024) space inventory.

Anticipated student population increases from fall 2015 through fall 2024 and anticipated impact on campus inventory as the result of the following programmed building projects: Natural Science/Nursing/Math Building, Humanities Building, Residence Hall, Public Safety and Communications Complex, Fitness and Recreation Center, Facilities Maintenance Procurement Complex, and Thurgood Marshall Academic Commons, as well as demolition of Crawford Science Building, Wiseman Centre, Martin Luther King Communication and Arts Center, Goodloe Apartments and the Maintenance Building, will have a significant impact on institutional space needs at Bowie State University. BSU currently has an overall space deficit of approximately 7,000 net assignable square feet (NASF) when Maryland guidelines are applied to existing space. By the year 2024, Bowie's campus is projected to have a space surplus of approximately 41,200 NASF.

A comprehensive summary of computed space needs is presented in the table at the end of this section. This table is organized into four broad categories of space: Academic Space, Academic Support Space, Other Classified or Ad-Hoc Space, and Unclassified Space.

#### Academic Space

Academic Space includes the space categories of Classroom, Class Laboratory, Open Laboratory, Research Laboratory, and Physical Education. These categories also include the service spaces that directly support the core spaces.

Guideline application to academic space inventories suggests a current deficit of 13,755 NASF. Guideline application suggests a projected deficit of 10,496 NASF in 2024.

The University currently owns 94% of the space allowance in this classification. The data suggests that by 2024, the University will own 96% of its computed space allowance.

#### Academic Support Space

Academic Support Spaces includes the core and support space in the categories of Office, Study, Media Production, Assembly, Exhibition, Lounge (Non-Auxiliary), Central Computer/Telecommunications, Physical Plant, and Health Care.

Guideline application to academic support space inventories suggests a current surplus of 6,880 NASF. Guideline application suggests a projected surplus of 51,695 NASF of Academic Support Space in 2024.

The University currently owns 102% of the space allowance in this classification. The data suggests that by 2024, the University will own 114% of its computed space allowance.

#### Other Classified Space (Ad-Hoc)

Other Classified or Ad-Hoc Space, comprising 302,417 NASF and representing 33.8% of BSU's existing inventory, are not addressed by Maryland's space planning guidelines. These are either specialized spaces for which need is based entirely on programmatic requirements which vary by institution or auxiliary enterprises which are not state-funded. For these ad-hoc categories of spaces, existing space is the guideline.

These categories, which are shown but excluded from this analysis, are:

- Armory
- Spectator Seating
- Clinic
- Demonstration .

#### **Unclassified Space**

- . Field Building
- Animal Quarters
- . Greenhouse
- Food Facilities .
  - Day Care
- Merchandising •
- Recreation
- Meeting Room
- Residential Facilities

Unclassified Space reflects categories that are either available for assignment, but unassigned at the time of the inventory or spaces that are being occupied by entities other than the University and are not available for University use. BSU assigns two space categories to this group: 72,676 NASF that is inactive (fall 2014) and 3,000 NASF being used by other organizations. Unclassified Space is also excluded from this analysis.

#### Table 3-2: Summary of Computed Space Allowances

	Base Year (Fall 2014)					Projected Year (Fall 2024)		
	Use	Inventory	Guideline	Surplus /	2015-2024	Inventory Guideline Surplu		
Space Use Category	Code	NASF	NASF	(Deficit)	Net Change <sup>a</sup>	NASF	NASF	(Deficit
Academic Space								
Classroom	110	55,329	70,164	-14,835	1,352	56,681	81,365	-24,68
Class Laboratory	210	78,920	60,626	18,294	22,582	101,502	67,576	33,92
Open Laboratory	220	14,633	16,669	-2,036	3,490	18,123	20,458	-2,33
Research Laboratory	250	5,478	5,925	-447	9,058	14,536	9,555	4,98
Physical Education	520	60,636	75,367	-14,731	660	61,296	83,680	-22,38
Sub-Total: Academic Space		214,996	228,751	-13,755	37,142	252,138	262,634	-10,49
Academic Support Space								
Office	300	140,048	113,402	26,646	44.304	184,352	134,523	49,82
Study	400	60,681	84,354	-23,673	20,939	81,620	104,679	-23,05
Media Production	530	7,782	7,938	-156	586	8,368	9,742	-1,37
Assembly	610	52,052	29,938	22,114	9,719	61,771	31,742	30,02
Exhibition	620	3,968	3,969	-1	6,772	10,740	4,871	5,86
Lounge (Non-Auxiliary)	650	9,783	15,092	-5,309	-70	9,713	17,188	-7,47
Central Computer/Telecommunications	710	2,553	2,500	53	1,412	3,965	3,353	61
Physical Plant	720-760	24,367	37,170	-12,803	7,317	31,684	41,442	-9,75
Health Care	800	1,600	1,591	-12,003	7,283	8,883	1,861	7,02
•					98,262			
Sub-Total: Academic Support Spa	ce	302,834	295,954	6,880	98,202	401,096	349,401	51,69
Other Classified Space (Ad-Hoc: Not	included	in Marylan	d snaco n	anning qu	idalinas)			
Armory	510	0	0 opace p	0	100	100	100	
Spectator Seating	523	3,920	3,920	0	0	3,920	3,920	
Clinic	540	3,720	3,920	0	0	3,720	3,720	
Demonstration	550	1,444	1,444	0	1,630	3,074	3,074	
Field Building	560	118	118	0	0	118	118	
Animal Quarters	570	0	0	0	0	0	0	
Greenhouse	580	1,330	1,330	0	670	2,000	2,000	
Other (All Purpose)	590	0	0	0	1,010	1,010	1,010	
Food Facility	630	27,488	27,488	0	-17,066	10,422	10,422	
Day Care	640	0	0	0	200	200	200	
Merchandising	660	5,946	5.946	0	-3.373	2,573	2,573	
Recreation	670	4.809	4.809	0	3,250	8,059	8.059	
Meeting Room	680	2,454	2,454	0	13,445	15,899	15,899	
Hazardous Waste Storage	770	0	0	0	500	500	500	
Residential Facilities	900	254,908	254,908	0	54,379	309,287	309,287	
				0	54,745			
Sub-Total: Other Classified Space (Ad	-HOC)	302,417	302,417	U	54,745	357,162	357,162	
Inclose ified Space								
Inclassified Space	050	72 477	72 477	0	10 504	E4.000	E4 000	
		72,676	72,676	0	-18,584	54,092	54,092	
	090	3,000 75,676	3,000 75,676	0	-3,000 -21,584	0 54.092	0 54.092	
Other Organizations			/20/0	0	-21,584	54,092	54,UYZ	
Other Organizations Sub-Total: Unclassified Space		75,070	10,010					

Academic Commons Communications Complex, Fitness and Recreation Center, Facilities Maintenance Procurement Complex, and Thurgood Marshall Academic Commons 2015-2024 Deletions: NASF for planned demolition of Craw ford Science Building, Wiseman Centre, Martin Luther King Communication and Arts Center,

Goodloe Apartments, and Maintenance Building. The majority of the inactive area represents Wiseman Centre which was vacated upon completion of the Student Center and prior to demolition at the time of this inventory

#### **EXISTING SPACE**

#### **Facilities Inventory**

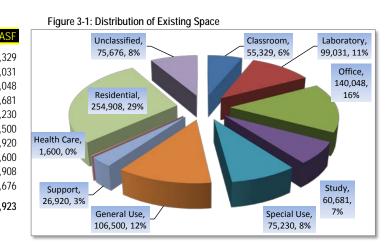
A building-level inventory of assignable space in each building was prepared by the University and given to the consultant team. This inventory of existing spaces serves as the baseline data against which computed space needs are compared.

The inventory utilizes the Higher Education General Information Survey (HEGIS) space taxonomy found in the 2006 Postsecondary Education Facilities Inventory and Classification Manual published by the U.S. Department of Education in cooperation with the National Center for Education Statistics. For the most part, HEGIS categories referenced in this analysis refer to the primary activity space plus support space that directly services the primary activity. In this document, the terms HEGIS, "Space Use Code" and "Use Code" have the same meaning. Furthermore, the space inventory data in this chapter is presented in such a way as to satisfy the requirements of the Maryland Higher Education Commission's *Space Guidelines for Four Year Public Institutions*. More detailed attention is devoted to each of the University's building structures in Chapter 4.

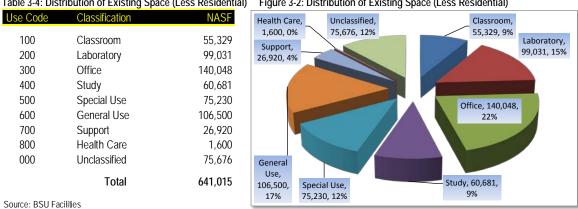
In determining the base inventory to be used in calculating permanent space needs, inventoried net assignable square footage (NASF) is designated as either "state-supported" or "auxiliary enterprise." Although a comprehensive overview of the University's space inventory is provided in this section, only "state-supported" space is used to determine space needs. Space contained in temporary structures and space in facilities at locations other than a main campus or in leased facilities is not included in these base calculations.

As depicted in the following graphic, residential space constitutes the largest single classification in Bowie's 895,923 net assignable square feet (NASF) of space inventory. Student residential facilities occupy approximately 255,000 NASF or 28% of the total campus inventory. Seventeen (17) percent of assignable campus space is classified as classroom and laboratory/studio instruction (classroom 6%, laboratory 11%), 16% as office, 7% as study (library), and the remaining 60% is a combination of special use, general use, and support. There was 39,190 NASF of "unclassified" space in the Wiseman Centre at the time of the inventory. Since the inventory, the Wiseman Centre has been razed to make way for the new Center for Natural Science, Mathematics and Nursing that is now under construction. Marshall Library has 3,000 NASF of space used by outside organizations, and 33,486 NASF of "unclassified" space distributed among various buildings at the time of the inventory.

Table 3-3: Dis	tribution of Existing Spa	ace
Use Code	Classification	NA
100	Classroom	55,3
200	Laboratory	99,0
300	Office	140,0
400	Study	60,6
500	Special Use	75,2
600	General Use	106,5
700	Support	26,9
800	Health Care	1,0
900	Residential	254,9
000	Unclassified	75,6
	Total	895,9
Source: BSU Fac	ilities	



Removing residential space from the inventory mix allows a more useful analysis for planning purposes. As depicted in the following table and graphic, 24% of the University's assignable space is classified as classroom and laboratory. Office space occupies 22% of the inventory while library accounts for 9%.



#### DEMAND AGAINST EXISTING SPACE

#### Enrollment

Headcount enrollments and full-time equivalent student (FTE or FTES) enrollments are the primary measures of student population. Although the headcount is most commonly used when referring to enrollments, this measure is generally not used for facility planning purposes. The most generally accepted method of counting students for the purposes of assessing facilities needs is the FTE. However, it is useful to analyze trends in headcount enrollments with particular attention given to the mix of full-time versus part-time students. Because full-time students have more needs for space than do part-time students, a sizeable shift in the ratio of full-time to part-time could have a significant impact on FTE generation, and consequently, on overall space needs.

Space needs analysis primarily focuses upon academic activities that occur during the prime hours before 5:00 p.m. (Day), and will be engaged by full-time and part-time students, faculty and staff. Students enrolled during these hours are referred to as full-time day equivalent students (FTDES).

While presenting various measures of FTES is important, of prime significance is establishing a stable foundation of planning tools upon which the effectiveness and quality of instructional environments necessary for learning can be predicted. For those purposes, projections of weekly student contact hours (WSCH) are also presented.

The University estimates that the total daytime on-campus WSCH will reach 84,893 by fall 2024. Of this total, approximately 73,302 WSCH (86 %) will be generated by lecture segments and approximately 11,591 WSCH (14%) are expected to occur in laboratory segments for courses offered before 5:00 p.m.

Determination of program and course content ten years out is difficult at best. However, given an anticipated number of students to be enrolled, projections of weekly student contact hours generated, as well as the number of classroom and laboratory sections, general estimations of space need can be calculated. These projections of weekly student contact hours form the basis for planning for future instructional spaces.

Projections of enrollments for fall 2014 through fall 2024 represent the recommendations developed by Bowie State University and the University System of Maryland in keeping with the pursuit of BSU's mission through the year 2024. Projections are presented in such a manner as to satisfy the requirements of the Maryland Higher Education Commission and the State of Maryland.

The following table presents an overall distribution of projected credit/contact hours for the fall semesters of 2019 and 2024 in comparison with fall 2014 enrollments. Isolated are those on-campus credit hours, FTDES and weekly student contact hours expected to be generated on campus during the day before 5:00 p.m.

#### Table 3-5: Current and Projected Enrollments by Headcount, Credit Hours, FTES, FTDES and WSCH Undergraduate Enrollments

		UNIV	ON-CAMPUS DAY ONLY (Before 5:00 pm)						
	Full-Time	Part-Time	Total	Credit	Credit	Credit	Credit	WSCH	WSCH
	Headcount	Headcount	Headcount	Hours	FTES	Hours	FTDES	Lecture	Laboratory
Fall 2014	3,675	781	4,456	59,929	3,995	52,635	3,509	63,211	10,399
Fall 2019	4,054	866	4,920	66,162	4,411	60,270	4,018	72,629	11,948
Fall 2024	4,394	900	5,294	71,151	4,742	64,650	4,310	73,302	11,591
% Change									
2014-2024	19.6%	15.2%	18.8%	18.7%	18.7%	22.8%	22.8%	16.0%	11.5%
Annual Average									
Growth Rate	1.8%	1.4%	1.7%	1.7%	1.7%	2.1%	2.1%	1.5%	1.1%

Graduate Enrollments

	UNIVERSITY TOTALS					ON-CAMPUS DAY ONLY (Before 5:00 pm)			
	Full-Time	Part-Time	Total	Credit	Credit	Credit	Credit	WSCH WSCH	
	Headcount	Headcount	Headcount	Hours	FTES	Hours	FTDES	Lecture Laboratory	
Fall 2014	513	726	1,239	8,712	726	5,520	460	Included w/Undergraduate	
Fall 2019	501	931	1,432	10,071	839	6,528	544	Included w/Undergraduate	
Fall 2024	536	995	1,531	10,404	867	6,732	561	Included w/Undergraduate	
% Change									
2014-2024	4.5%	37.1%	23.6%	19.4%	19.4%	22.0%	22.0%	Included w/Undergraduate	
Annual Average									
Growth Rate	0.4%	3.2%	2.1%	1.8%	1.8%	2.0%	2.0%	Included w/Undergraduate	

#### Total Enrollments

		UNIV	ON-CAN	IPUS DAY ONLY	(Before 5:00 pn	ר)			
	Full-Time	Part-Time	Total	Credit	Credit	Credit	edit Credit	WSCH	WSCH
	Headcount	Headcount	Headcount	Hours	FTES	Hours	FTDES	Lecture	Laboratory
Fall 2014	4,188	1,507	5,695	68,641	4,721	58,155	3,969	63,211	10,399
Fall 2019	4,555	1,797	6,352	76,233	5,250	66,798	4,562	72,629	11,948
Fall 2024	4,930	1,895	6,825	81,555	5,609	71,382	4,871	73,302	11,591
% Change									
2014-2024	17.7%	25.7%	19.8%	18.8%	18.8%	22.7%	22.7%	16.0%	11.5%
Annual Average									
Growth Rate	1.6%	2.3%	1.8%	1.7%	1.7%	2.1%	2.1%	1.5%	1.1%

Sources: Bowie State University Office of Planning, Analysis and Accountability (fall 2014) University System of Maryland Projections (fall 2019 and 2024)

#### Faculty and Staff

The University expects to maintain its current student/faculty ratios for the year 2024. For master planning purposes, a conservative annual increase of 0.8% is projected for staff. Added demand against existing space is generated by the number of full-time faculty researchers in certain specific academic disciplines that offer doctoral or master's degree programs. This is addressed in greater detail later in the analysis.

Table	3-6.	Current	and	Pro	heted	Faculty	and	Staff
I able	J-0.	Current	anu	FIU.	Jecleu	racuity	anu	Jian

		Facult	у	Staff			
	Full-Time	Part-Time	Total	FTE	Full-Time	Part Time	Total
Fall 2014	225	207	432	277	370	83	453
Fall 2019	250	213	463	303	406	66	472
Fall 2024	275	220	495	330	441	50	491
% Change							
2014-2024	22.2%	6.3%	14.6%	19.2%	19.2%	-39.8%	8.4%
Annual Average							
Growth Rate	2.0%	0.6%	1.4%	1.8%	1.8%	-4.9%	0.8%

Source: Bowie State University Office of Planning, Analysis and Accountability

#### Library Volumes

The following table presents Thurgood Marshall Library's actual (2014) and projected (2024) holdings as well as the measure, in physical bound volume equivalents (PBVE), of the collection size. The Library expects its holdings to grow at a conservative average annual rate of 2.3% over the next ten years.

Table 3-7: Library Collection and Physical Bound Vo	Actual 20	, ,	Projected 2	,	Conversion
Collection Category	Collections	PBVE	Collections	PBVE	Factor
Books	285,815	285,815	366,213	366,213	1.00
Bound Periodicals	32,296	32,296	35,502	35,502	1.00
Documents/Pamphlets	4,517	565	6,776	847	8.00
Microfilm Reels	45,227	15,076	46,227	15,409	3.00
Records	1,029	206	1,029	206	5.00
Maps	1,529	191	1,529	191	8.00
Maps in Cases	0	0	0	0	1.00
Microform (non-reel)	474,196	5,927	474,196	5,927	80.00
Newspapers Unbound	33	589	63	1,125	0.06
Newspapers Bound	41	569	62	861	0.07
Reference Books	19,356	56,929	26,556	78,106	0.34
Slides	289	14	289	14	20.00
Periodicals Unbound	1,435	5,740	1,435	5,740	0.25
Video Disks	0	0	0	0	3.00
Audio Tapes	569	71	569	71	8.00
Computer Diskettes	0	0	0	0	5.00
Compact Disks	53	11	100	20	5.00
Video Tapes	7,241	6,034	7,241	6,034	1.20
Films (reel-to-reel)	341	85	341	85	4.00
Total Physical Bound Volume Equiv	alent	410,119		516,352	

Table 3-7: Library Collection and Physical Bound Volume E	Equivalents (PBVF) Actual (2014) and Projected (2024)
Table 5 7. Elbrary concentration and Thysical bound volume E	

Data Source: Bowie State University SGAP 2014 2.16,2015

The Library currently has holdings in all types of materials except government documents. Additionally, the Library's Department of Archives and Special Collections is the repository for materials, including rare books and photographs documenting Bowie State University's history, the local community, Maryland, African American history, and nineteenth century documents relating to the history of slavery in the antebellum south.

#### QUANTITATIVE INDICATORS OF SPACE NEED

#### Space Guidelines Applications

Total need for space is based primarily on the projected program of instruction and the number of weekly student contact hours (WSCH) that it generates. Determinations of current and projected space surpluses and/or deficits are driven by current space inventory and anticipated changes, current enrollment and projected enrollments, and current and anticipated staffing levels.

The consultant team applied these data elements to the Maryland Higher Education Commission's *Space Guidelines for Four Year Public Institutions* to provide quantitative indicators of current and future space needs. Definitions and room use codes are those provided by the Higher Education General Information

Survey (HEGIS) taxonomy found in the *Postsecondary Education Facilities Inventory and Classification Manual* published in 2006 by the U.S. Department of Education in cooperation with the National Center for Education Statistics.

By applying information about the type of space required to teach the various courses to the current and projected enrollments previously presented, it is possible to determine the approximate state allowance for campus-wide space using the guidelines. Then by applying space inventory data, it is possible to determine a current and projected space surplus or deficit.

The assumptions made for the application of the formulae-driven space computations for BSU are shown in the following table and applied to the current campus space inventory.

Table 3-8: Space Planning Guidelines Input Data Actu		
Input Item	Fall 2014	Fall 2024
1. Student Data (On-Campus Before 5 p.m.)		
a. Residence Hall Capacity	1,370	2,300
b. Total FTDE	3,969	4,871
c. Undergraduate FTDE	3,509	4,310
d. Graduate FTDE	460	561
2. Credit Hour Data		
a. Total Undergraduate Credit Hours	59,929	71,151
b. Undergraduate Credit Hous Before 5 p.m.	52,633	64,650
c. Total Graduate Credit Hours	8,712	10,404
<ul> <li>d. Graduate Credit Hours Before 5 p.m.</li> </ul>	5,071	6,242
<ol><li>Contact Hour Data (On-Campus) Before 5 p.m.</li></ol>		
a. Weekly Student Contact Hours (WSCH) Classroom	63,211	73,302
b. Weekly Student Contact Hours (WSCH) Laboratory	10,399	11,591
4. Faculty & Staff Requiring Office Space		
a. Full-Time Faculty	225	275
b. Part-Time Faculty	207	220
c. Full-Time Staff	370	441
d. Part-Time Staff	83	50
e. FTE Faculty	277	330
f. FTE Staff	391	454
5. Library Information Factor		
a. Physical Bound Volume Equivalents (PBVE)	410,119	516,352
6. Research Laboratory Factors		
a. Module "A" Programs (1,000 NASF)		
FT Faculty, Doctoral Programs (1.0)	0	0
FT Faculty, Masters Programs (0.5)	0	4
FT Faculty, Undergraduate Programs (0.1)	4	6
b. Module "B" Programs (650 NASF)		
FT Faculty, Doctoral Programs (1.0)	0	0
FT Faculty, Masters Programs (0.5)	15	19
FT Faculty, Undergraduate Programs (0.1)	10	12

Table 3-8: Space Planning Guidelines Input Data Actual (2014) and Projected (2024)

These assumptions, along with the space inventory, provide a snapshot of the fall 2014 semester which is the most recent data available at the time of this analysis. The 2014 data reflect the actual situation while the data projected to 2024 are statistically based and are, for the most part, assumptions made by Bowie State University and the University System of Maryland (USM). Summary explanations of the data assumptions for the input items are as follows:

Student Data (FTDE) are calculated from course credit hours. Credit Hour Data and Contact Hour
Data are derived from current enrollment course data provided by Bowie State University Office of
Planning, Analysis and Accountability; and projections were then calculated based on enrollment
projections developed by the University and USM.

- Faculty and Staff Data are provided by BSU administration. Information about the projected number of faculty is obtained by maintaining the current student/faculty ratio. Information about the projected number of staff is based on an anticipated average annual growth rate of 0.8% over the next ten years.
- Library Information, in terms of Physical Bound Volume Equivalent (PBVE), is based on an anticipated 2.3% average annual increase of basic collection over the next ten-year period.
- Research Laboratory Data is based on the number of researchers in disciplines specified by Maryland's space planning guidelines.

Given this input data, it is possible to estimate the amount of campus-wide space needed to support future enrollments at Bowie State University. This state allowance is derived by analyses within the parameters of the guideline algorithm contained in Maryland's space guidelines. The amounts of allowable net assignable square feet are calculated for each type of space in the U.S. Department of Education's Higher Education General Information Survey (HEGIS) space classification system for both 2014 and 2024.

Surpluses and deficits for each room use category are determined by subtracting the guideline allowance from the on-campus space inventory.

These space allocation calculations are used only as an aid to analyze campus-wide amounts of space needs by room use category. Quality of spaces is not considered when using these guidelines, and these guidelines are not used in individual project programming.

## Space Guideline Analysis

Student enrollments, faculty and staff are expected to increase, over the next ten years at the Bowie campus, and so are the spatial requirements. By the year 2024, BSU is expected to have an on-campus enrollment of 4,871 FTDE and a spatial surplus of just over 20,000 net assignable square feet. This surplus assumes a 2024 inventory consisting of the current (2014) inventory plus the addition of the new Center for Natural Science, Mathematics and Nursing, which is currently under construction, along with the following programmed building projects: Humanities Building, two Residence Halls, Public Safety and Communications Complex, Fitness and Recreation Center, Facilities Maintenance Procurement Complex, and Thurgood Marshall Academic Commons. Also considered in the projected inventory is the demolition of Crawford Science Building, Wiseman Centre, Martin Luther King Communication and Arts Center, Goodloe Apartments, and the Maintenance Building.

Application of the Maryland guidelines formulae for computing space allowances to Bowie's inventory results in current and projected space surpluses in three of the eight major room use categories. Those three are Laboratory (HEGIS 200), Office (HEGIS 300) and General Use (HEGIS 600). A comprehensive summary of computed space needs was presented in the "Summary of Key Findings" section starting on page 3-4.

As previously noted, HEGIS categories referenced in this analysis refer to the primary activity area plus support space that directly services the primary activity. For example, references to classroom HEGIS 110 include the primary activity space (110) and the service space (115). Notable exceptions are HEGIS 410 and 420 (study and library stack) and HEGIS 523 (spectator seating) which have no direct service support designation.

With respect to current and projected space deficits as the result of guidelines application, review of the individual data elements reveals the following:

## Academic Space

This group includes the types of spaces most typically used for instruction and research activities.

#### Table 3-9: Academic Space

		Base	Year (Fall 2	014)		Projecte	ed Year (Fal	l 2024)
	Use	Inventory	Guideline	Surplus /	2015-2024	Inventory	Guideline	Surplus /
Space Use Category	Code	NASF	NASF	(Deficit)	Net Change <sup>a</sup>	NASF	NASF	(Deficit)
Academic Space								
Classroom	110	55,329	70,164	-14,835	1,352	56,681	81,365	-24,684
Class Laboratory	210	78,920	60,626	18,294	22,582	101,502	67,576	33,926
Open Laboratory	220	14,633	16,669	-2,036	3,490	18,123	20,458	-2,335
Research Laboratory	250	5,478	5,925	-447	9,058	14,536	9,555	4,981
Physical Education	520	60,636	75,367	-14,731	660	61,296	83,680	-22,384
Total Academic Space	е	214,996	228,751	-13,755	37,142	252,138	262,634	-10,496

<sup>a</sup> 2015-2024 Net Changes: Programmed NASF for the Center for Natural Science, Mathematics and Nursing, Humanities Building, new Residence Hall, Public Safety and

Communications Complex, Fitness and Recreation Center, Facilities Maintenance Procurement Complex, and Thurgood Marshall Academic Commons <sup>a</sup> 2015-2024 Deletions: NASF for planned demolition of Crawford Science Building, Wiseman Centre, Martin Luther King Communication and Arts Center,

Goodloe Apartments, and Maintenance Building.

<u>Classroom (HEGIS 110)</u>: A room or space used primarily for instruction classes and that is not tied to a specific subject or discipline by equipment in the room or the configuration of the space. This category includes general purpose classrooms, lecture halls, seminar rooms, and support rooms that directly service classroom activity.

Guideline allowance assumes 30 hours per week target room utilization, 60% seat occupancy rate, and 20 NASF per student station. Classroom space needs are determined by a formula that multiplies the target room utilization rate by the seat occupancy rate, and divides the result into the average student station size. This calculation results in a guideline of 1.11 NASF per weekly student contact hour (WSCH).

NASF/Student Station  $\div$  (Room Hours/Week x Seat Occupancy Rate) 20  $\div$  (30 x .6) = 1.11

The total number of weekly student contact hours for a lecture section is derived by multiplying the number of students enrolled by the number of meeting hours in a week. For example, a theoretical lecture section with 30 students enrolled that meets 3 times a week for one hour generates 90 weekly student contact hours.

Given the current inventory of classroom space, application of the classroom guideline to the University's weekly student contact hour data suggests a current deficit of 14,835 NASF. Projected inventory and weekly student contact hours applied to the guideline suggests a projected deficit of 24,684NASF in 2024. This anticipated increased space deficit is attributed primarily to a projected 19.8% increase in enrollment with only a 2.4% increase in classroom space.

The University currently owns 79% of the space allowance in this classification. The data suggests that by 2024, the University will own 70% of its computed space allowance.

**Class Laboratory (HEGIS 210):** A space used primarily for formally or regularly scheduled instruction (including associated mandatory, but non-credit-earning laboratories) that requires special purpose

equipment or a specific space configuration for student participation, experimentation, observation, or practice in an academic discipline. Included in this category are spaces generally called teaching laboratories, instructional shops, computer laboratories, drafting rooms, band rooms and similar specially designed or equipped rooms, and support rooms that directly service class laboratory activity.

Guideline allowance assumes 18 hours per week target room utilization, 80% seat occupancy rate, and 84 NASF per student station. Class Laboratory space needs are determined by a formula that multiplies the target room utilization rate by the seat occupancy rate, and divides the result into the average student station size. This calculation results in a guideline of 5.83 NASF per weekly student contact hour (WSCH).

NASF/Student Station  $\div$  (Room Hours/Week x Seat Occupancy Rate) 84  $\div$  (18 x .8) = 5.83

As with lecture contact hours, the total number of weekly student contact hours for a laboratory section is derived by multiplying the number of students enrolled by the number of meeting hours in a week.

Given the current inventory of class laboratory space, application of the class laboratory guideline to the University's weekly student contact hour data suggests a current surplus of 18,294 NASF. Projected inventory and weekly student contact hours applied to the guideline suggests a projected class laboratory space surplus of 33,926 NASF in 2024.

The University currently owns 130% of the space allowance in this classification. The data suggests that by 2024, the University will own 150% of its computed space allowance.

**Open Laboratory (HEGIS 220):** A laboratory used primarily for individual or group instruction that is informally scheduled, unscheduled, or open. An open laboratory is designed for or furnished with equipment that serves the needs of a particular discipline or discipline group for individual or group instruction. Included in this category are spaces generally called music practice rooms, language laboratories used for individualized instruction, studios for individualized instruction, special laboratories or learning laboratories if discipline restricted, individual laboratories, and computer laboratories involving specialized restrictive software or where access is limited to specific categories of students.

Guideline allowance assumes 4.2 NASF per FTDE.

Given the current inventory of open laboratory space, application of the open laboratory guideline to the University's FTDE data suggests a current deficit of 2,036 NASF. Projected inventory and FTDE applied to the guideline suggests a projected class laboratory space deficit of 2,335 NASF in 2024.

The University currently owns 88% of the space allowance in this classification. The data suggests that by 2024, the University will still own 89% of its computed space allowance.

**Research Laboratory (HEGIS 250):** A space used for laboratory experimentation, research, or training in research methods; professional research and observation; or structured creative activity within a specific program or for sponsored research (whether sponsored with federal, state, private, or institutional funds). This category is also referred to as non-class laboratory.

Although Bowie State University is not classified as a research university, faculty and student research is a vital part of BSU's learning experience.

Maryland's guideline allows for non-class research space based on the number of full-time faculty and the highest degree offered in the following disciplines:

- Aariculture
  - **Environmental Design**
- **Biological Sciences**
- Engineering Fine Arts
- Health Professions

- Home Economics
- **Physical Sciences** .
- Psychology

#### Table 3-10: Research Space Guideline Application

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Fall 2014		Doctorate	e (1Mod)	Master's (	(0.5Mod)	Bachelor's	(0.1Mod)	
	Module	FT	Guideline	FT	Guideline	FT	Guideline	Total
Academic Discipline	NASF	Faculty	NASF	Faculty	NASF	Faculty	NASF	NASF
Module "A" Programs	1,000	0	0	0	0	4	400	400
Module "B" Programs	650	0	0	15	4,875	10	650	5,525
Totals			0		4,875		1,050	5, <b>92</b> 5

Fall 2024		Doctorate	e (1Mod)	Master's (	0.5Mod)	Bachelor's	(0.1Mod)	
	Module	FT	Guideline	FT	Guideline	FT	Guideline	Total
Academic Discipline	NASF	Faculty	NASF	Faculty	NASF	Faculty	NASF	NASF
Module "A" Programs	1,000	0	0	4	2,000	6	600	2,600
Module "B" Programs	650	0	0	19	6,175	12	780	6,955
Totals			0		8,175		1,380	9,555

Source: BSU SGAP 2.16.2015

Although the guideline assumes that need for research space is driven by faculty requirements, allowance is intended to also accommodate student participants in research activities.

Given the current inventory of research laboratory space, application of the research laboratory guideline to the University's full-time faculty data suggests a current deficit of 447 NASF. Projected full-time faculty applied to the guideline suggests a research laboratory space surplus of 4,981 NASF in 2024.

The University currently owns 92% of the space allowance in this classification. The data suggests that by 2019, the University will own 152% of its computed space allowance.

Physical Education (HEGIS 520): A room or area used by students, staff, or the public for athletic or physical education activities. Physical Education space includes gymnasia, basketball courts, handball courts, squash courts, wrestling rooms, weight or exercise rooms, racquetball courts, indoor swimming pools, indoor putting areas, indoor ice rinks, indoor tracks, indoor stadium fields, and field houses. This category includes spaces used for dancing and bowling.

Guideline allowance is for 30 NASF per undergraduate FTDE for the first 1600 plus 10 NASF for each additional FTDE, 3 NASF/graduate FTDE, and an additional 5,800 NASF for institutions with intercollegiate athletic programs. Maryland guideline is exclusive of indoor spectator seating and stadium seating.

Given the current inventory of physical education space, application of the guideline to the University's FTDE data suggests a current deficit of 14,731 NASF. Projected inventory and FTDE applied to the guideline suggests a projected physical education space deficit of 22,384 NASF in 2024.

The University currently owns 80% of the space allowance in this classification. The data suggests that by 2024, the University will own 73% of its computed space allowance.

## Academic Support Space

These spaces provide environments that directly support the institution's instruction and research activities.

		Base	Year (Fall 2	014)		Projecte	ed Year (Fal	l 2024)
	Use	Inventory	Guideline	Surplus /	2015-2024	Inventory	Guideline	Surplus /
Space Use Category	Code	NASF	NASF	(Deficit)	Net Change <sup>a</sup>	NASF	NASF	(Deficit)
Academic Support Space								
Office	300	140,048	113,402	26,646	44,304	184,352	134,523	49,829
Study	400	60,681	84,354	-23,673	20,939	81,620	104,679	-23,059
Media Production	530	7,782	7,938	-156	586	8,368	9,742	-1,374
Assembly	610	52,052	29,938	22,114	9,719	61,771	31,742	30,029
Exhibition	620	3,968	3,969	-1	6,772	10,740	4,871	5,869
Lounge (Non-Auxiliary)	650	9,783	15,092	-5,309	-70	9,713	17,188	-7,475
Central Computer/Telecommunications	710	2,553	2,500	53	1,412	3,965	3,353	612
Physical Plant	720-760	24,367	37,170	-12,803	7,317	31,684	41,442	-9,758
Health Care	800	1,600	1,591	9	7,283	8,883	1,861	7,022
Total Academic Support Space		302,834	295,954	6,880	98,262	401,096	349,401	51,695

#### Table 3-11: Academic Support Space

<sup>a</sup> 2015-2024 Net Changes: Programmed NASF for the Center for Natural Science, Mathematics and Nursing, Humanities Building, new Residence Hall, Public Safety and Communications Complex, Fitness and Recreation Center, Facilities Maintenance Procurement Complex, and Thurgood Marshall Academic Commons

<sup>a</sup> 2015-2024 Deletions: NASF for planned demolition of Crawford Science Building, Wiseman Centre, Martin Luther King Communication and Arts Center,

Goodloe Apartments, and Maintenance Building.

**Office (HEGIS 300):** Office facilities are individual, multi-person, or workstation spaces specifically assigned to faculty, staff, or students in academic, administrative, and service functions of a college or university. This category also includes conference rooms, file rooms, break rooms, kitchenettes, copy rooms, and testing/tutoring space.

The guideline allows 166 NASF per FTE faculty and staff requiring office space, plus an additional 30 NASF per full-time faculty member in disciplines not included in research laboratory (HEGIS 250) that award doctoral or master's degrees.

Given the current inventory of office space, application of the guideline to the University's faculty and staff data suggests a current surplus of 26,646 NASF. Projected faculty and staff applied to the guideline suggest an office space surplus of 49,829 NASF in 2024.

The University currently owns 123% of the space allowance in this classification. The data suggests that by 2024, the University will own 137% of its computed space allowance.

**Study (HEGIS 400):** In this analysis, study space refers to, individually or collectively, three space categories:

Study (HEGIS 410): A room or area used by individuals to study at their convenience and not
restricted to a particular subject or discipline by contained equipment. It includes rooms or areas
located in the library or other buildings. Study spaces are primarily used by students or staff for
learning at their convenience.

- Stack (HEGIS 420): A space used to house arranged collections of educational materials for use as a study resource.
- Processing/Service (HEGIS 440): A room or area devoted to processes and operations in support
  of library functions. Included are card and microfiche areas, reference desk and circulation desk
  areas, bookbinding rooms, multimedia materials processing areas, interlibrary loan processing
  areas, and other areas with a specific process or operation in support of library functions.

Current guidelines used by Maryland allow the total of the following:

- 35 NASF per FTDE for 20% of the FTDE for study facilities
- .10 NASF per physical bound volume equivalent (PBVE) for stack facilities
- 20% of study and stack space with a minimum of 3,000 NASF

Library collections and physical bound volume data were presented earlier in this chapter.

Given the current inventory of study space, application of the guideline to the University's FTDE and PBVE data suggests a current deficit of 23,673 NASF. Projected FTDE and PBVE applied to the guideline suggest a study space deficit of 23,059 NASF in 2024.

The University currently owns 72% of the space allowance in this classification. The data suggests that by 2024, the University will own 78% of its computed space allowance.

**Media Production (HEGIS 530):** A space used for the production or distribution of multimedia materials or signals. This classification includes spaces generally called TV studios, radio studios, sound studios, photo studios, video or audio cassette and software production or distribution rooms, and media centers.

Guideline allowance assumes 2 NASF per FTDE.

Given the current inventory of media production space, application of the guideline to the University's FTDE data suggests a current deficit of 156 NASF. Projected inventory and FTDE applied to the guideline suggests a projected media production space deficit of 1,374 NASF in 2024.

The University currently owns 98% of the space allowance in this classification. The data suggests that by 2024, the University will own 86% of its computed space allowance.

Assembly (HEGIS 610): A space designed and equipped for the assembly of many persons for such events as dramatic, musical, devotional, livestock judging, or commencement activities. Includes theaters, auditoria, concert halls, arenas, and chapels that are used primarily for general presentations (speakers), performances (dramatic, musical, dance), and devotional services.

The guideline allows a base of 12,000 NASF per institution, plus 10,000 NASF if the institution offers a degree program in Theater, plus 5,000 NASF if the institution offers a degree program in Music, plus 2 NASF per FTDE.

Given the current inventory of assembly space, application of the guideline to the University's academic program and FTDE data suggests a current surplus of 22,114 NASF. Projected academic program and FTDE data applied to the guideline suggests an assembly space surplus of 30,029 NASF in 2024.

The University currently owns 174% of the space allowance in this classification. The data suggests that by 2019, the University will own 195% of its computed space allowance.

**Exhibition (HEGIS 620):** A room or area used for exhibition of materials, works of art, artifacts, etc., and intended for general use by faculty, students, staff, and the public. It includes both departmental and institution-wide museums, galleries, and similar exhibition areas that are used to display materials and items for viewing by the institutional population and the public.

The guideline allows 1 NASF per FTDE.

Given the current inventory of exhibition space, application of the guideline to the FTDE data suggests a current deficit of 1.0 NASF. Projected FTDE data applied to the guideline suggests an exhibition space surplus of 5,869 NASF in 2024.

The University currently owns 100% of the space allowance in this classification. The data suggests that by 2024, the University will own 220% of its computed space allowance.

**Lounge (Non-Auxiliary) (HEGIS 650):** A space used for rest and relaxation that is not restricted to a specific group of people, unit, or area. This category (non-auxiliary) excludes student services spaces in a student union building and lounges located in residence halls.

The guideline allowance is 3% of total NASF in HEGIS categories 100 through 765.

Given the current inventory of non-auxiliary lounge space, application of the guideline suggests a current deficit of 5,309 NASF. Projected inventory data applied to the guideline suggests a non-auxiliary lounge space deficit of 7,475 NASF in 2024.

The University currently owns 65% of the space allowance in this classification. The data suggests that by 2024, the University will own 57% of its computed space allowance.

**Central Computer/Telecommunications (HEGIS 710):** A space used as a data or telecommunications center with applications that are broad enough to serve the overall administrative or academic primary equipment needs of a central group of users, department, college, school, or entire institution.

The guideline allows a base of 2,500 NASF for the first 4,000 FTDE, plus 0.75 NASF per FTDE beyond 4,000.

Given the current inventory of central computer/telecommunications space, application of the guideline to the University's FTDE data suggests a current surplus of 53 NASF. Projected FTDE data applied to the guideline suggests a computer/telecommunications space surplus of 612 NASF in 2024.

The University currently owns 102% of the space allowance in this classification. The data suggests that by 2024, the University will own 118% of its computed space allowance.

**Physical Plant (HEGIS 720-760):** For this analysis, the following three space use categories are combined and defined as physical plant space: maintenance shops, central or general storage, and vehicle storage; central services; and centralized hazardous materials storage.

For maintenance shops / central or general storage / vehicle storage, Maryland guideline allows 4% of the institution's total NASF excluding HEGIS categories 720 through 740.

For central services the guideline allows a base of 4,000 NASF for the first 4,000 FTDE, plus 1 NASF per FTDE beyond 4,000, plus 1.5 NASF per FTDE beyond 15,000.

For centralized hazardous materials storage the guideline allows 3% of existing inventory in HEGIS category 250, plus 2% of existing inventory in HEGIS categories 720 through 740.

Given the current inventory of physical plant space, application of the guideline to the University's FTDE and specific inventory data suggests a current deficit of 12,803NASF. Projected FTDE and specific inventory data applied to the guideline suggests a physical plant space deficit of 9,758 NASF in 2024.

Table 3-12: Physical Plant Space								
		Base	Year (Fall 2	014)		Projecte	ed Year (Fal	2024)
	Use	Inventory	Guideline	Surplus /	2015-2024	Inventory	Guideline	Surplus /
Space Use Category	Code	NASF	NASF	(Deficit)	Net Change <sup>a</sup>	NASF	NASF	(Deficit)
Physical Plant Space								
Shop, Central Storage, Vehicle Storage	720-740	20,183	32,602	-12,419	-3,823	16,360	35,816	-19,456
Central Services	750	4,139	4,000	139	9,340	13,479	4,871	8,608
Hazardous Materials Storage	760	45	568	-523	1,800	1,845	755	1,090
Total Physical Plant Space		24,367	37,170	-12,803	7,317	31,684	41,442	-9,758

<sup>a</sup> 2015-2024 Net Changes: Programmed NASF for the Center for Natural Science, Mathematics and Nursing, Humanities Building, new Residence Hall, Public Safety and Communications Complex, Fitness and Recreation Center, Facilities Maintenance Procurement Complex, and Thurgood Marshall Academic Commons

Goodloe Apartments, and Maintenance Building.

The University currently owns 66% of the space allowance in this classification. The data suggests that by 2024, the University will own 76% of its computed space allowance.

**Health Care (HEGIS 800):** Space used for patient care areas that are located in separately organized and budgeted health care facilities: student infirmaries and centers, teaching hospitals, stand-alone clinics run by these hospitals, and veterinary and medical schools.

The guideline allows a base of 1,000 NASF for the first 2,000 FTDE, plus 0.3 NASF per FTDE beyond 2,000 for institutions with at least 300 residential students, or 0.5 NASF per FTDE beyond 2,000 for institutions with fewer than 300 residential students.

Given the current inventory of health care space, application of the guideline to the University's FTDE and residential student data suggests a current surplus of 9 NASF. Projected FTDE data residential student data applied to the guideline suggests a health care space surplus of 7,022 NASF in 2024.

The University's health care facilities occupy 1,600 square feet of space in the Henry Wise Wellness Center located in the Christa McAuliffe Residential Community. The University currently owns 101% of the space allowance in this classification. The data suggests that by 2024, the University will own 477% of its computed space allowance. This increase in space for this classification is primarily attributed to the health care programmatic components of the proposed Fitness and Recreation Center.

## Other Classified Space (Ad-Hoc)

This grouping represents spaces that are not addressed by Maryland's space planning guidelines. These are either specialized spaces for which need is based entirely on programmatic requirements which vary by institution or auxiliary enterprises which are not state-funded. Examples of space needs based on programmatic requirements are armory, spectator seating, clinic, demonstration, field building, and greenhouse. Auxiliary enterprise categories include day care, residential facilities, and space for student service functions typically housed in a student union building. Examples of student union spaces are food

<sup>&</sup>lt;sup>a</sup> 2015-2024 Deletions: NASF for planned demolition of Crawford Science Building, Wiseman Centre, Martin Luther King Communication and Arts Center,

facilities, lounge, merchandising, recreation, and meeting rooms. For these ad-hoc categories of spaces, existing and projected space is the guideline.

Table 3-13:	Othor	Classifiad	Snaco	(V q Hoc)
	Unier	Classifieu	JUALE	(Au-HUC)

Table 5-15. Other Classified Space (Au	-1100)							
		Base	Year (Fall 2	014)		Projecte	ed Year (Fa	
	Use	Inventory	Guideline	Surplus /	2015-2024	Inventory	Guideline	Surplus /
Space Use Category	Code	NASF	NASF	(Deficit)	Net Change <sup>a</sup>	NASF	NASF	(Deficit)
Other Classified Space (Ad-Hoc) <sup>b</sup>								
Armory	510	0	0	0	100	100	100	0
Spectator Seating	523	3,920	3,920	0	0	3,920	3,920	0
Clinic	540	0	0	0	0	0	0	0
Demonstration	550	1,444	1,444	0	1,630	3,074	3,074	0
Field Building	560	118	118	0	0	118	118	0
Animal Quarters	570	0	0	0	0	0	0	0
Greenhouse	580	1,330	1,330	0	670	2,000	2,000	0
Other (All Purpose)	590	0	0	0	1,010	1,010	1,010	0
Food Facility	630	27,488	27,488	0	-17,066	10,422	10,422	0
Day Care	640	0	0	0	200	200	200	0
Merchandising	660	5,946	5,946	0	-3,373	2,573	2,573	0
Recreation	670	4,809	4,809	0	3,250	8,059	8,059	0
Meeting Room	680	2,454	2,454	0	13,445	15,899	15,899	0
Hazardous Waste Storage	770	0	0	0	500	500	500	0
Residential Facilities	900	254,908	254,908	0	54,379	309,287	309,287	0
Total Other Classified Space (	(Ad-Hoc)	302,417	302,417	0	54,745	357,162	357,162	0

<sup>a</sup> 2015-2024 Net Changes: Programmed NASF for the Center for Natural Science, Mathematics and Nursing, Humanities Building, new Residence Hall, Public Safety and Communications Complex, Fitness and Recreation Center, Facilities Maintenance Procurement Complex, and Thurgood Marshall Academic Commons

<sup>a</sup> 2015-2024 Deletions: NASF for planned demolition of Crawford Science Building, Wiseman Centre, Martin Luther King Communication and Arts Center,

Goodloe Apartments, and Maintenance Building.

<sup>b</sup> Maryland space planning guidelines do not include these space categories.

#### **Unclassified Space**

These spaces are assignable areas that are inactive or unassigned; in the process of being altered, renovated, or converted; or in an unfinished state at the time of the inventory. They include inactive areas, alteration or conversion areas and unfinished areas. Inactive areas are spaces that are available for assignment to an organizational unit or activity.

Another area of unclassified space in the BSU inventory is "other organizations." These are spaces that are being occupied by entities other than the University and are not available for University use and are listed as ad-hoc.

#### Table 3-14: Unclassified Space

		Base	Year (Fall 2	014)		Projecte	ed Year (Fa	l 2024)
	Use	Inventory	Guideline	Surplus /	2015-2024	Inventory	Guideline	Surplus /
Space Use Category	Code	NASF	NASF	(Deficit)	Net Change <sup>a</sup>	NASF	NASF	(Deficit)
Unclassified Space								
Inactive Area <sup>b</sup>	050	72,676	72,676	0	-18,584	54,092	54,092	0
Other Organizations	090	3,000	3,000	0	-3,000	0	0	0
Total Unclassified Spa	се	75,676	75,676	0	-21,584	54,092	54,092	0

<sup>a</sup> 2015-2024 Net Changes: Programmed NASF for the Center for Natural Science, Mathematics and Nursing, Humanities Building, new Residence Hall, Public Safety and Communications Complex, Fitness and Recreation Center, Facilities Maintenance Procurement Complex, and Thurgood Marshall Academic Commons

<sup>a</sup> 2015-2024 Deletions: NASF for planned demolition of Crawford Science Building, Wiseman Centre, Martin Luther King Communication and Arts Center,

Goodloe Apartments, and Maintenance Building.

<sup>b</sup> The majority of this space represents Wiseman Centre which was vacated upon completion of the Student Center and prior to demolition at the time of this inventory.

## Conclusions

Space deficits in all major HEGIS room use categories except Laboratory, Office, and General Use is suggested when Maryland space planning guidelines formulae are applied to Bowie State University's projected (2024) space inventory. In total, approximately 41,000 net assignable square feet of surplus space is suggested by applying space planning guidelines to target year inventories. This total is exclusive of auxiliary enterprise or other types of facilities that are not state-supported.

## QUALITATIVE INDICATORS OF SPACE NEED

Responses to new ways of learning and emerging technologies in just the last ten to fifteen years have affected not only the need for more space, but also the need for different kinds of spaces. Students are demanding greater flexibility in what, where and when they learn, and new technologies are enabling more mobile and distributed learning anywhere on campus. For example, increased emphasis on group / collaborative informal learning requires more group study spaces.

The learning landscape is constantly and dramatically changing in terms of the ways by which people learn and the technologies that can facilitate the learning process. Bowie State needs the flexibility and responsiveness required to ensure that its teaching and learning infrastructure is sufficient and appropriate to accommodate emerging technology and functional requirements of an interdisciplinary approach to higher education. Additional or re-focused services may from time to time be required; and with them, the obligation to adjust the physical plant accordingly.

A variety of qualitative or non-statistical environmental characteristics impact the space needs of Bowie State University. Unlike quantitative analysis, qualitative analysis is very subjective, most often reflecting observations by the consultants and of views expressed by University personnel and students. These global space needs are summarized here by the following functions:

- Instructional Functions
- Instructional Support Functions
- Student Services Functions
- Institutional Support Functions
- Outdoor Functions

#### Instructional Functions

- There are insufficient numbers of classrooms on campus.
- Many classrooms and some laboratories lack contemporary technology. The need exists for technology-enhanced instructional spaces that empower faculty and students to benefit from the use of virtual learning experiences that enhance engagement.
- There are classrooms with accessibility issues. In addition to being extremely small, several
  classrooms were built with cast-in-place risers, severely limiting access (for able and disabled
  persons alike) and flexibility. Classrooms exist with recessed entrances and steep design limiting
  wheelchair access to the top rows only.
- There is a need for highly flexible, multi-functional instructional spaces, now and in the future. Migration to teaching more disciplines in computer labs has created rooms that are inflexible. Permanent furniture, hardware and wiring installations have made it difficult, if not impossible, to rearrange classrooms to suit varied needs in different courses or even in the same course. There is a need for some "quick response capability" to take advantage of emergent opportunities to respond rapidly to business needs particularly in Continuing Education environments.

- There is insufficient laboratory storage in general.
- There are no learning lab and inadequate interview, observation, and child development spaces for education students.
- ROTC facilities, housed in James Physical Education Complex, are inappropriate for their functions. There are no dedicated spaces for indoor drills.
- Functions that should be co-located are often separated and distributed throughout the campus. There is a need for physical proximity with respect to spaces within the various colleges.
- It is not uncommon to find instruction being conducted in spaces considered inappropriate for the discipline.
- There appears to be instances of territoriality with respect to computer class laboratories. Although this phenomenon speaks mainly to operations and policy, it does have an adverse impact on utilization of instructional resources.

## Instructional Support Functions

- Marshall Library is not only archaic, but is also dysfunctional due to insufficient and inappropriate spaces for modern-day reading/study, processing operations, offices, archives, instructional resource functions and general storage. There needs to be a major redistribution of space to address deficiencies in study spaces, computer stations and processing areas.
- The University has few facilities for adjunct faculty to work and communicate before and after classes. Not only is there a need for appropriate settings outside the classroom for student/faculty interaction, but also a need for spaces that allow for seamless integration of adjunct faculty into departmental frameworks.
- There are no adequate commons areas or large professional development areas for faculty. There is a need for modern facilities that address faculty development needs.
- There are no facilities that cater to the unique needs of doctoral students.
- There is a need for more group study rooms. There are a minimal number of group or collaborative learning environments on campus. Lack of rooms for group study means noisy students are often a disturbance to others. There is a need for available study rooms where small groups could meet, either as spontaneous groupings or scheduled study circles. Students can be found studying in groups in major circulation corridors. There are no adequate spaces for quiet study.
- There is a need for an enhanced and consolidated presence of academic support services. Current functions as the writing center, tutoring, testing are scattered over campus.
- Students have expressed need for more academic support services spaces.

## Student Services Functions

- There is a need for personal fitness "Wellness" facilities that involve only individual participation. There are no fitness facilities for students other than athletes.
- There are no dedicated space for recreation fitness and nutrition programs.
- There is generally insufficient and inadequate informal social spaces such as student lounge spaces, meeting spaces, and recreational areas. There is a need for student areas that allow for individual study and group learning, like coffeehouses, cyber café and Starbucks libraries.
- There is a particular need for commuter lounges and other spaces that allow commuting students to experience the culture of the campus. There is a need for more spaces with docking stations for personal laptops.
- There are no concessions to support major events held at the Field House.
- It is perceived by some students that there are no fitness rooms for students other than athletes.
- There are insufficient resource rooms and/or activity spaces in the physical education buildings.

- James Physical Education complex has insufficient locker rooms in support of athletic teams. Soccer players and cheerleaders use empty classrooms to change. Other conditions that plague this over 40-year-old include inadequate athletic training rooms, no meeting or conference rooms, no academic development rooms, no video center and little to no storage.
- Health care facilities are insufficient given the number of students that currently and are anticipated to live on campus.
- There is the need for facilities and spaces that address the needs of students with families. There is a need for married and family housing. There is a particular need for residential and day-care facilities that cater to issues of single-parent families. There is a need to provide children's space in the library to accommodate children from families on campus and from the community who come into the library with parents.

## Institutional Support Functions

- Lack of storage space is a significant problem throughout the campus buildings resulting in inappropriate storage of records, furniture and equipment, books, academic and administrative supplies, and custodial supplies.
- Although there is a current overall surplus in space classified as "Office," some individuals are cramped into areas that were designed as closets, storage spaces and alcoves with no air circulation in order to be located near their departments and others in their work teams. Creating office space for new personnel is extremely difficult.
- Trades shops in the Maintenance Building are inappropriately sized for their intended functions.
- There is insufficient space for physical plant operations such as; maintenance shops, storage, and central services functions.
- The current dysfunctional space housing the Bowie State University Department of Public Safety (McKeldin Gymnasium) is not readily susceptible to renovation.
- There are insufficient numbers of convenient small conference spaces and meeting rooms. Often meetings take place in classrooms or other spaces that are inappropriate for such activities.
- Facilities for counseling, human resources and other areas that need confidential spaces are insufficient and inadequate.
- There are insufficient numbers of break rooms and social spaces for staff and faculty.

## **Outdoor Functions**

- For a campus the size of Bowie State, there are relatively few leisure and activity spaces for students and other users of the campus.
- With the exception of the fraternity and sorority spaces, there are very few outdoor seating and gathering spaces.
- There are no fields dedicated for recreational and intramural use. These uses usually take place on residence hall lawns.
- Some parking lots are often full and there is difficulty for commuters to find parking. There is insufficient parking for students around the residence halls.

This listing is by no means all-inclusive as qualitative indicators of space need are referenced throughout the document. Future facility programming for individual new or renovated facilities at Bowie State will require, in each instance, a thorough review and analysis of each of the subject function's component activities to determine specific justification and rationale for new or reconfigured spaces.

# Chapter 4 The Campus Today

Facilities: Buildings Site Infrastructure Technology Site Analysis Transportation

# BUILDINGS

The following buildings currently exist on campus, although the inventory found in chapter 3 Space Needs does not count buildings completed after the fall semester, 2014, e.g. the Center for Natural Sciences, Mathematics and Nursing. This section provides a snapshot summary of those buildings

## Academic, Administration and Auxiliary Buildings

- 1. Center for Learning and Technology
- 2. Thurgood Marshall Library
- 3. William E. Henry Administration Building
- 4. Martin Luther King Jr. Communication Arts Center
- 5. Center for Business and Graduate Studies
- 6. Charlotte Robinson Hall
- 7. Computer Science Building
- 8. George Crawford Science Building
- 9. Maintenance Building
- 10. Fine & Performing Arts Center
- 11. Central Steam Plant
- 12. Goodloe House
- 13. Leonidas S. James Physical Education Complex
- 14. Field House
- 15. Theodore McKeldin Gymnasium
- 16. Student Center
- 17. Center for Natural Sciences, Mathematics and Nursing

#### **Residential Buildings**

- 18. Towers Residence Hall
- 19. Alex Haley Residence Hall
- 20. Dwight Holmes Residence Hall
- 21. Christa McAuliffe Residential Community
- 22. Lucretia Kennard Residence Hall
- 23. Harriet Tubman Residence Hall
- 24. Goodloe Apartments

		g Buildings - Space S	,		Number	Year	
			NASF	GSF	of Beds	Constructed	Age
Adac	emic, Administration, and	d Auxiliary Buildings					
	Center for Learning and T	, ,	58,241	101,193		2000	16
	Thurgood Marshall Library	0,	105,336	166,869		1977	39
	Henry Administration Build		19,027	37,396		1976	40
	Martin Luther King Jr Com	•	77,082	149,374		1973	40
	Center for Business and G		37,944	66,000		2007	4J 9
	Charlotte Robinson Hall		18,192	31,534		1960	56
	Computer Science Building		27,641	47,000		2002	14
	Crawford Science Building		27,041	47,008		1967	49
	Maintenance Building		20,432	29,613		1967	49
	Fine & Performing Arts Ce	ntor	62,645	123,475		2011	49
	Central Steam Plant		2,373	2,970			5 64
	Goodloe House		2,373	3,815		1952 1916	100
		Comploy					
	James Physical Education Field House	Complex	63,976	102,135		1973	43
-			4,540	7,909		1992	24
	McKeldin Gymnasium		15,469	21,142		1957	59
	Student Center	- NA-H	58,217	95,503		2013	3
17		s, Mathematics and Nursing*	88,428	149,109		2017	0
	Subtotal - not including		600,968	1,032,936			
	Subtotal - including CN		689,396	1,182,045			
	*currently under construction	on					
Resid	lential Buildings						
18	Towers Residence Hall			40,828	194	1973	43
19	Alex Haley Residence Hal			90,855	326	1994	22
20	Dwight Holmes Residence	Hall		21,779	126	1951	65
21	Christa McAuliffe Residenti	al Community		185,240	460	2002	14
22	Lucretia Kennard Residen	ce Hall		22,646	82	1957	59
23	Harriet Tubman Residence	e Hall		33,282	159	1921	95
24	Goodloe Apartments (4 un	ts)		5,946	20	1954	62
	Subtotal			400,576	1,367		
	TOTAL - not including C			1,433,512			
	TOTAL - including CNSI	ЛN		1,582,621			

# Center for Learning and Technology

## **Building Description**

Building Designation Number of Floors Net Assignable Square Feet Gross Building Area - GSF Net-to-Gross Efficiency Year Constructed Renovations Additions Contains General Condition Adequacy of Space Sprinkler System

Center for Learning and Technology
 58,241
 101,193
 57.6%
 2000
 No major renovations
 None
 Instructional spaces, faculty offices, major server
 good
 Generally adequate for functions housed in the building
 Fully sprinklered

As one of the largest buildings providing instructional space on campus, the CLT is essential to meeting the academic space needs of the University, particularly for education and nursing programs. Classrooms are appropriately sized, and the lecture hall helps to serve a campus-wide need for large instructional space. Now fifteen years old, with reasonably up-to-date learning technology, the building has most of the infrastructure necessary for comprehensive instructional delivery. Opportunities exist for improved outfitting of informal social spaces with furnishings, technology, and power systems. In addition, some staff and instructors have observed that door lockset and classroom AV systems have been in need of repair. Long corridors on the upper floors provide little relief and no places for students and others to gather near the classrooms and offices. Toilet rooms are curiously remote from each other on each floor, as are the two elevators, both of which are distant from the main entrance. The large "super computer" serving the campus is located in a former lounge space on the first floor. Window treatment could mitigate additional heating loads in this space as well as screen the equipment from exterior views.

# Photographs - CLT





Lecture Hall



Computer Classroom

View from Quad



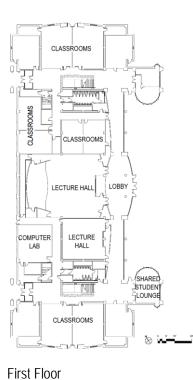
Front Corridor

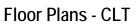


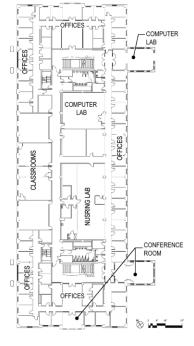
Conference Room



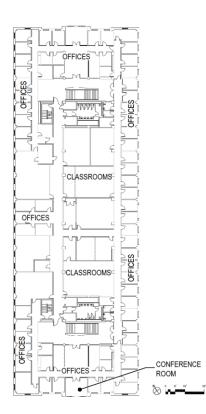
Nursing Lab







Second Floor





# Thurgood Marshall Library

## **Building Description**

Building Designation Number of Floors Net Assignable Square Feet Gross Building Area - GSF Net-to-Gross Efficiency Year Constructed Renovations Additions Contains

General Condition Adequacy of Space Sprinkler System Thurgood Marshall Library
 plus basement level
 105,336
 166,869
 63.1%
 1977
 1996 – ground floor
 None
 Library and related spaces; computer services; classrooms; staff offices; offices serving student organizations
 Fair
 Adequate for library functions
 Partially sprinklered

The largest building on campus, the library is one of several major buildings constructed for the Bowie campus in the mid-1970's. While the building underwent a renovation in 1996 to fit up ground floor spaces for classrooms, many of the essential library spaces remain unchanged, and its learning facilities have not been updated to keep pace with new technologies. Similar to other peer institutions, large expanses of stacks offer print media to library users. Several large areas of study carrels are little used, a marked difference from technology-rich furnished areas where students tend to congregate. Many small study rooms ring the second floor perimeter, but are too small for groups of more than two students. University offices not related to library functions are scattered throughout the ground and second floors. One of two primary computer server centers is located on the ground floor. Adequate floor-to-floor heights (13'-6" ground-to-first floor, 16'-8" first-to-second floor) will accommodate most renovation schemes. As a very outdated facility and as the academic heart of the campus, comprehensive renovations to the library should be a major priority.

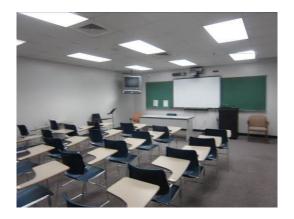
# Photographs – Library





View from Quad

Learning Commons



Lower Level Classroom



Small Lecture Hall



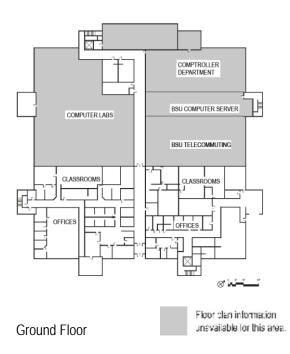
Upper Level Stack Area

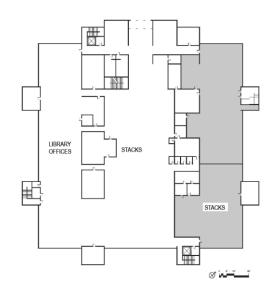


Waiting Area – Academic Advising Suite

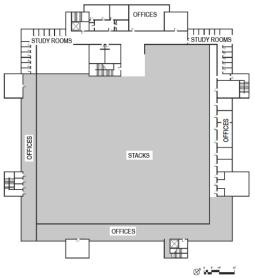
July 2016







First Floor - Library



Second Floor - Library

# William Henry Administration Building

## **Building Description**

**Building Designation** William E. Henry Administration Building 3. Number of Floors 2 Net Assignable Square Feet 19.027 Gross Building Area - GSF 37,396 Net-to-Gross Efficiency 50.1% Year Constructed 1976 Renovations 2003 Additions None Contains Administration offices: student services offices and facilities **General Condition** Good Adequacy of Space Adequate in certain areas; inadequate in other areas Sprinkler System Fully sprinklered Other Needs re-roofing

The Henry Administration Building provides space for most of the administrative and student services functions of the University. Structurally sound and renovated relatively recently, the building can continue to function for the foreseeable future with limited change. The interior open space presents an opportunity for improvement: kiosk-type functions as well as additional seating areas can enliven the first floor area; cross-connections on the second floor are circuitous and could be improved by enlarging and connecting the open corridors; and the opaque stair and second floor handrail systems could be replaced with more transparent systems, facilitating a more connected appearance. A more sophisticated interior would better reflect the surroundings of the president's office.

# Photographs and Floor Plans – Henry Administration



North Elevation Facing Quad



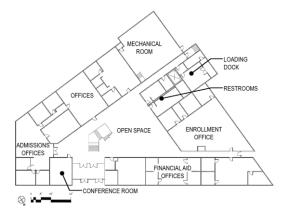
Open Space

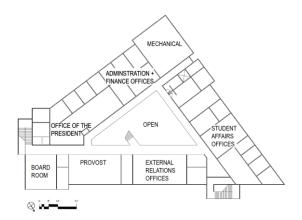


Registrar's Office



Executive Office Suite





First Floor

Second Floor

# Martin Luther King Jr. Communication Arts Center

## **Building Description**

Building Designation Number of Floors Net Assignable Square Feet Gross Building Area - GSF Net-to-Gross Efficiency Year Constructed Renovations Additions Contains General Condition Adequacy of Space Sprinkler System Other

4. Martin Luther King Jr. Communication Arts Center
3 plus lower auditorium level
77,082
149,374
51.6%
1973
No major renovations
None
Classrooms, studios, offices, theater, faculty offices
Poor
Inadequate for the functions housed in the building
Fully sprinklered
Needs re-roofing

Another of the several major buildings built in the mid-70's, this building, known as "MLK", is the second largest building on campus. The extent of classrooms, labs, lecture halls, studios and special use spaces serve to position MLK as a facility critical to the delivery of instruction on campus. The years and constant use have taken their toll, and the building is, simply, wearing out. The building structure is post-tensioned concrete, which would present major challenges in any renovation Several locations of the structure have deteriorated and will likely continue to occur at other locations. Floor-to-floor height of nearly 15 feet on the first floor is adequate, but the 10 foot floor-to-structure height at the second level is severely limiting for any above-ceiling systems. In addition to being extremely small, several classrooms were built with cast-inplace concrete risers, severely limiting access (for able and disabled persons alike) and flexibility. The third floor corridors are very narrow, and one does not meet ADA standards. Mechanical and electrical systems regularly break down, requiring repair and replacement. Several large outdoor spaces under the second floor are dark, not used, and uninviting. Similarly, the central open space feels unalive. Because its functions are so extensive and so important to the mission of the University, taking it off-line by demolition, is problematic, and so, replacement facilities must be put in place first. While the Fine and Performing Arts Center provides a theater, it is much smaller (capacity 350) than the current 990-seat theater/auditorium in MLK. Several spaces previously dedicated to fine and performing arts are not unused. Previous studies and the previous facilities master plan recommended demolition of this building, a conclusion still supported in this report.

# Photographs – MLK



View from North



Open Space – First Floor



Small Tiered Classroom



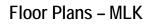
Large Tiered Classroom

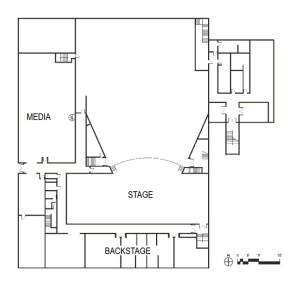


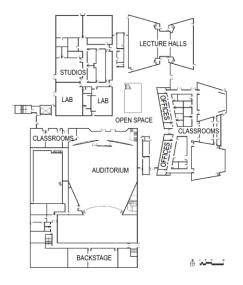
Public Space – Second Floor



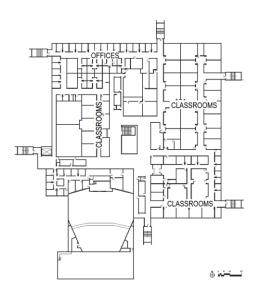
Corridor – Second Floor







Lower Level – Auditorium







Second Floor



# Center for Business and Graduate Studies

## **Building Description**

Building Designation Number of Floors Net Assignable Square Feet Gross Building Area - GSF Net-to-Gross Efficiency Year Constructed Renovations Additions Contains General Condition Adequacy of Space Sprinkler System 5. Center for Business and Graduate Studies
3
37,944
66,000
57.5%
2007
None
None
Classrooms, faculty offices
Excellent
Adequate for the functions housed in the building
Fully sprinklered

Now nine years old but still looking new, the CBGS primarily serves the business programs, also providing classroom and study spaces for other classes. Public spaces are appropriately provided but can be better furnished. A first floor study lounge and third floor study/conference room are utilized frequently by students studying singularly. A part-time café provides refreshments on the ground floor. All of the faculty offices are in a wing connected to the classroom wing by a corridor. Faculty noted again in this study that classrooms are too small for many classes.

# Photographs - CBGS





Tiered Classroom



Study Library

View from Pond Area



Café

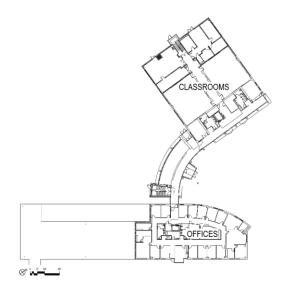


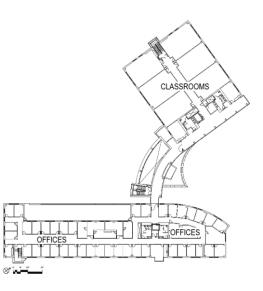
Classroom



Ground Floor Corridor

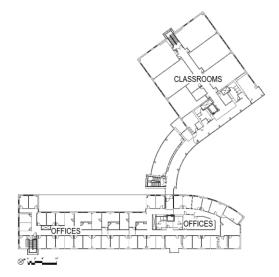






First Floor

Second Floor



Third Floor

# **Charlotte Robinson Hall**

## **Building Description**

Building Designation Number of Floors Net Assignable Square Feet Gross Building Area - GSF Net-to-Gross Efficiency Year Constructed Renovations Additions Contains General Condition Adequacy of Space Sprinkler System 6. Charlotte Robinson Hall
18,192
31,534
57.7%
1960
2010 – lower level classrooms
None
Human resources, custodial offices, storage
Fair
Adequate for functions housed in the building
Not sprinklered

Originally built as the elementary laboratory school serving Bowie State College, Charlotte Robinson Hall has served numerous uses over the past 50 years. A portion of the building is in transition or used for storage, awaiting transfer of functions. Current functions include administrative offices, Public Safety, classrooms, and custodial offices. While the building does not project a collegiate character, its infrastructure – the building shell and structure in particular – provides a platform for renovations to serve the University with additional needed office and/or academic space. Central telephone equipment serving the entire campus is located on the lower level. The building envelope is very energy inefficient; ideally, upgrades to the envelope would be accomplished as part of an overall, comprehensive renovation. If this is not feasible relative to available resources, systemic upgrades to building systems should be undertaken.

# Photographs and Floor Plans - Robinson



View from Southwest



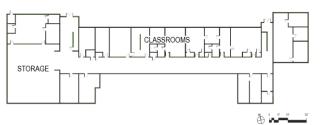
Conference Room



Office



Classroom



Ground Floor



# **Computer Science Building**

## **Building Description**

Building Designation Number of Floors Net Assignable Square Feet Gross Building Area - GSF Net-to-Gross Efficiency Year Constructed Renovations Additions Contains

General Condition Adequacy of Space Sprinkler System 7. Computer Science Building
27,641
47,000
58.8%
2002
None
None
Computer science classrooms and labs; satellite operations control center
Excellent
Adequate for functions housed in the building
Fully sprinklered

Befitting its namesake, this building provides more computer-equipped classrooms and computer labs than any other building on campus. Classroom and lab sizes are appropriately sized for the classes and functions they were built to serve. Generally, faculty offices are located close to the classrooms and labs, facilitating interface between faculty and students. Student lounge spaces are located at the north end of the upper floors but are not furnished or used.

# Photographs – Computer Science



View from Southwest



Classroom



Open Office Suite



Satellite Operations Control Center

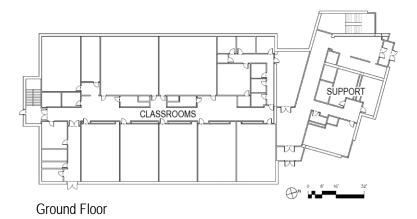


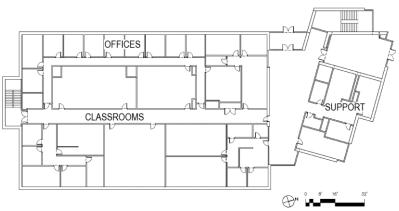
Entrance Hall



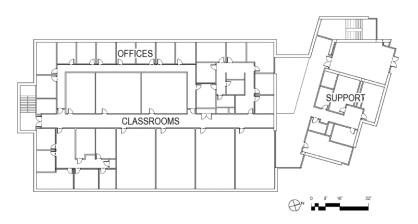
Computer Classroom

# Floor Plans – Computer Science





First Floor



Second Floor

# George Crawford Science Building

## **Building Description**

Building Designation Number of Floors Net Assignable Square Feet Gross Building Area - GSF Net-to-Gross Efficiency Year Constructed Renovations Additions Contains General Condition Adequacy of Space Sprinkler System 8. George Crawford Science Building
 2 plus basement level
 27,753
 47,008
 59.0%
 1967
 1991
 None
 Laboratories, classrooms and faculty offices for Science programs
 Poor
 Inadequate for the functions housed in the building
 Occupied areas are sprinklered

As a 43 year-old building, Crawford has outlived it useful expected life without any major renovation. While the building may have been adequate for the student population that it served in 1967, it is grossly inadequate for the needs of a 21<sup>st</sup> century university learning facility. Demolition is scheduled as part of the new Natural Sciences building construction contract.

## Photographs - Crawford



View from Southwest





Science Lab



Corridor

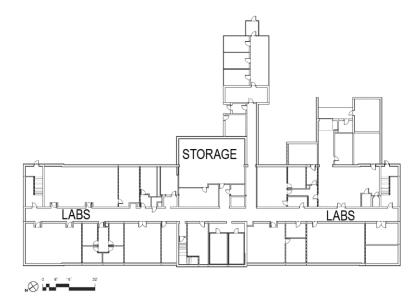


Chemistry Lab

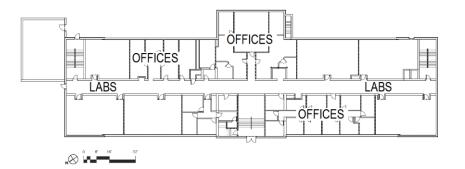


Testing Classroom

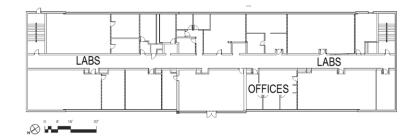
## Floor Plans - Crawford



Ground Floor



First Floor



Second Floor

## Maintenance Building

### **Building Description**

Building Designation Number of Floors Net Assignable Square Feet Gross Building Area - GSF Net-to-Gross Efficiency Year Constructed Renovations Additions Contains General Condition Adequacy of Space Sprinkler System 9. Maintenance Building
1 at various levels
20,432
29,613
69.0%
1967
1973
1973
Offices; maintenance shops; storage
Fair
Inadequate for some areas such as shops
Not sprinklered

While the maintenance building provides generally adequate space for maintenance operations, the space is ineffectively laid out; it is difficult to walk from certain parts of the building to others without going outside or using circuitous internal routes. Multiple levels complicate this condition. The building occupies a prime site on the east side of the campus, near existing student housing. As residence halls are constructed in the future, pressure will increase to relocate this facility. It is shown to be demolished in the campus development plan, to be replaced by a new facility in the northwest area of the campus outside the loop road.

# Photographs and Floor Plan – Maintenance Building



View from Southwest



Storage / Shop



Open Office Area



Grounds Shop



## Fine and Performing Arts Center

Building Designation	10. Fine & Performing Arts Center (FPAC)
Number of Floors	3
Net Assignable Square Feet	62,645
Gross Building Area - GSF	123,475
Net-to-Gross Efficiency	50.7%
Year Constructed	2011
Renovations	N/A
Additions	N/A
Contains	Theater, recital hall, practice rooms, studios, classrooms, offices
General Condition	Excellent
Adequacy of Space	Generously accommodates fine and performing arts programs
Sprinkler System	Fully Sprinklered

The second-newest building on campus, the FPAC provides spaces for fine and performing arts programs previously housed in the Martin Luther King, Jr. Communication Arts Center. Building spaces, envelope, and building systems are functioning as designed, with no major problems reported. Located in the southeast corner of the campus, pedestrian ways to the center can be improved to better connect the building with the rest of the campus.

## Photographs – Fine & Performing Arts





Main Lobby



Theater

View from Northwest



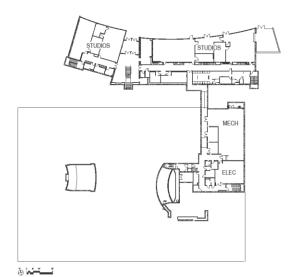
Black Box

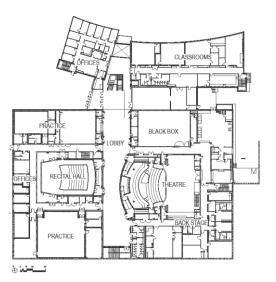


Ceramics Studio

Art Gallery

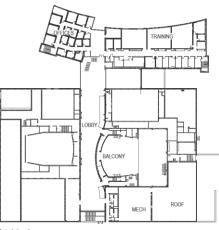
## Floor Plans – Fine & Performing Arts





Ground Floor

First Floor



Second Floor

## **Central Steam Plant**

### **Building Description**

**Building Designation** 11. Central Steam Plant Number of Floors 1 2,373 Net Assignable Square Feet 2,970 Gross Building Area - GSF Net-to-Gross Efficiency 79.9% Year Constructed 1952 Renovations None Additions None Contains Storage General Condition Poor Adequacy of Space N/A Sprinkler System None

Originally providing steam heat for most of the buildings on campus, this function was discontinued in favor of independent heating and cooling for each building. It is currently used for storage but is small, with non-functioning internal equipment, and not well located to serve the campus. It is recommended to be demolished.

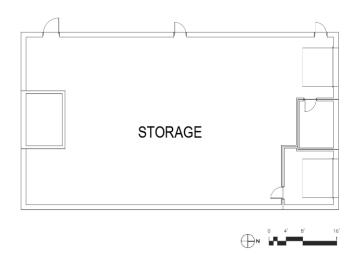
## Photographs and Floor Plan – Steam Plant





View from Loop Road

Open Space used for Storage



### Goodloe House

### **Building Description**

Building Designation Number of Floors Net Assignable Square Feet Gross Building Area - GSF Net-to-Gross Efficiency Year Constructed Renovations Additions Contains General Condition Adequacy of Space Sprinkler System 12. Goodloe House
2 plus basement
2,100
3,815
55%
1916
2008
None
Alumni offices
Good
Adequate for the functions housed in the building
None

Goodloe house, the oldest facility serving Bowie State University – its alumni – is located remote from the main campus, not at all easily accessible by pedestrians or even bicycles. However, a sensitive renovation was completed eight years ago, and the building seems to serve its current purpose adequately. Its remoteness from the campus does isolate the building occupants from the rest of campus life and activities. A proposed pedestrian and bikeway system will ultimately provide more direct connections to the campus.

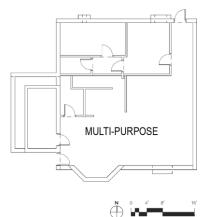
## Photographs and Floor Plans – Goodloe House



Front View



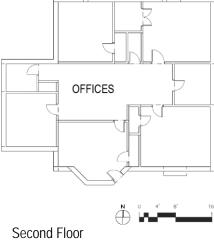
Reception



Basement







## Leonidas James Physical Education Complex (PEC)

### **Building Description**

Building Designation Number of Floors	<ul><li>13 Leonidas S. James Physical Education Complex</li><li>2 plus lower level serving handball courts</li></ul>
Net Assignable Square Feet	63,976
Gross Building Area - GSF	102,135
Net-to-Gross Efficiency	62.6%
Year Constructed	1973
Renovations	No major renovations
	Re-roof 2009
	Pool renovation 2010
	Fitness center renovation 2014
Additions	None
Contains	Spaces for athletics programs: gym, natatorium, multi-purpose room, handball courts, lockers, support spaces; ROTC offices
General Condition	Poor
Adequacy of Space	Inadequate for the functions housed in the building
Sprinkler System	Partial: some corridors

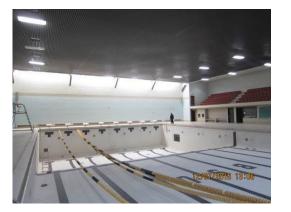
This mid-70's building has served BSU for 42 years without any major renovation. All major building systems, including architectural, mechanical, electrical, and special systems are in need of major repair or renovation. There are too few locker rooms, especially for visiting teams;; the pool has been out of commission on-and-off for several years, a large multi-purpose room on the upper level is remote, unkept, and unused, and the ROTC facilities are inadequate for their programs. Classrooms should be updated with appropriate technology. The 8 handball courts are mostly not used (one or two are used with any frequency) and should be re-purposed. A major renovation to the fitness room has significantly improved access to fitness and training equipment. A major, comprehensive renovation is needed.

## Photographs – James PEC





Main Gym





Pool

View from Quad



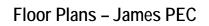
Classroom

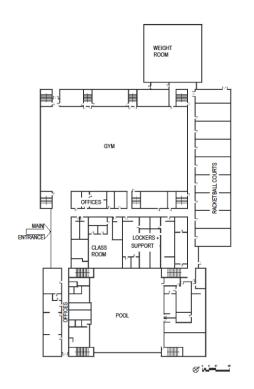
Fitness Center

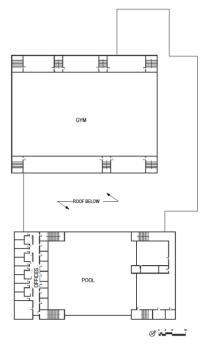


Multi-Purpose Room

July 2016







First Floor

Second Floor

## Field House

### **Building Description**

Building Designation Number of Floors Net Assignable Square Feet Gross Building Area - GSF Net-to-Gross Efficiency Year Constructed Renovations Additions Contains General Condition Adequacy of Space Sprinkler System 14. Field House
1
4,540
7,909
57.4%
1992
None
2014
Restrooms, storage
Good
Inadequate for major athletic events
None

Built to serve events at the football stadium, this facility provides necessary facilities for most events but is inadequate for major events like homecoming games. It is well maintained and, despite its remote location, has remained generally intact. A recent addition added team locker rooms, showers, and restrooms. Food service facilities are still needed.

## Photographs and Floor Plan – Field House



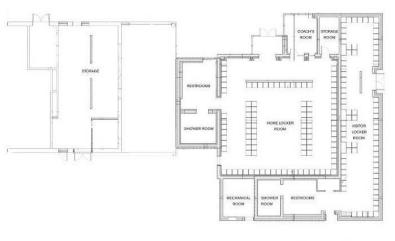
View from Northeast





Storage

Restroom



# Theodore McKeldin Gymnasium

### **Building Description**

Building Designation Number of Floors Net Assignable Square Feet Gross Building Area - GSF Net-to-Gross Efficiency Year Constructed Renovations Additions Contains General Condition Adequacy of Space Sprinkler System Other 15. Theodore McKeldin Gymnasium
1
15,469
21,142
73.2%
1957
2001
None
Recreation, Public Safety
Fair
Adequate for the functions housed in the building
None
Needs re-roofing

Considered one of the historic buildings of the campus, McKeldin was originally the only gym, also providing an auditorium and multi-purpose space. With the addition of the James PE building in 1973, its purpose became secondary. While Public Safety is currently the only tenant, and while the gym and one locker room are used for practice, recreation, and for visiting teams, the building is mostly an opportunity waiting to happen. Although the roof is scheduled for replacement, the shell and structure are generally intact. The high-bay gym offers multiple opportunities, while the lower rear portion can serve in a support role. Scheduled to accommodate a new fitness center, this building will require a major renovation.

# Photographs and Floor Plan - McKeldin





View from Quad

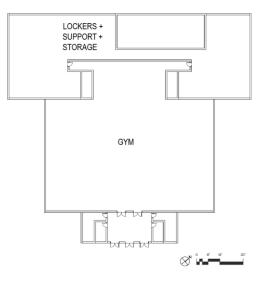


Locker Room / Storage

Practice Gym



Public Safety Office



## Student Center

### **Building Description**

Building Designation Number of Floors Net Assignable Square Feet Gross Building Area - GSF Net-to-Gross Efficiency Year Constructed Renovations Additions Contains General Condition Adequacy of Space Sprinkler System

16. Student Center
3
58,217
95,503
61%
2013
N/A
N/A
Food service facilities, bookstore, meeting rooms, Excellent
Adequate for the functions housed in the building Fully sprinklered

The newest building on campus, the student center replaced the inadequate and outdated Wiseman Center at a different location but still convenient to academic and residential buildings. The Center provides food service and recreation facilities, meeting rooms, small theater, bookstore, and student organization offices. Building systems are functioning well, and there are no major deficiencies at this time.

## Photographs – Student Center





View from Parking Lot

Meeting Room



Theater



Food Service Area

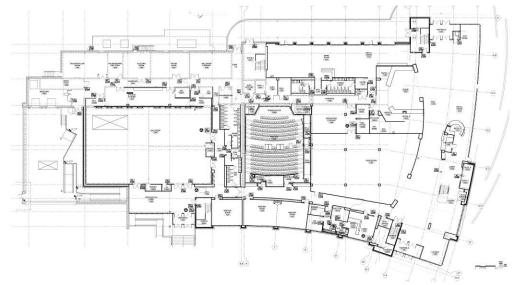


Bookstore

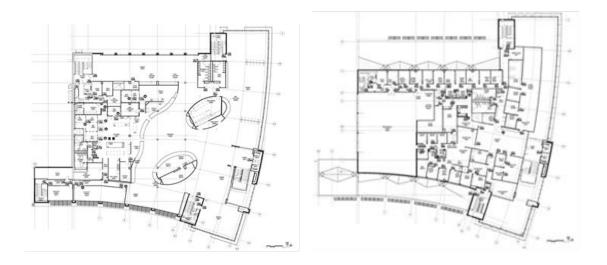


Student Organization Offices





First Floor



Second Floor

Third Floor

## Center for Natural Sciences, Mathematics and Nursing (CNSMN)

### **Building Description**

Building Designation Number of Floors Net Assignable Square Feet Gross Building Area - GSF Net-to-Gross Efficiency Year Constructed Renovations Additions Contains General Condition Adequacy of Space Sprinkler System

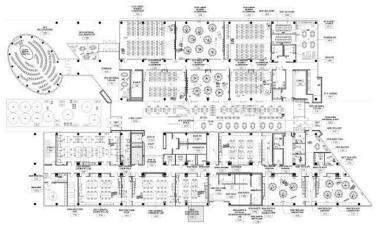
17. Center for Natural Sciences, Mathematics and Nursing
88,428
149,109
59.3%
Scheduled for completion in 2016/17
N/A
N/A
Classrooms, labs, offices
Under construction
Provides much needed science and related program area
Fully sprinklered

Scheduled for completion in late 2016 or early 2017, the Center for Natural Sciences, Mathematics and Nursing will provide space for all of the science and mathematics programs and several of those for Nursing. The building replaces the Crawford Science Building facilities, scheduled to be demolished upon completion of the CNSMN.

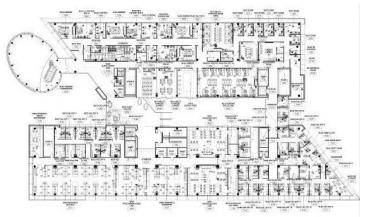


CNSMN under construction

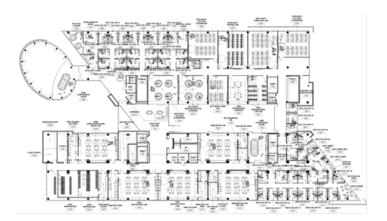
Floor Plans – CNSMN



First Floor



Second Floor



Third Floor

## **RESIDENCE HALLS**

### Towers Alex Haley Dwight Holmes Christa McAuliffe Lucretia Kennard Harriet Tubman Goodloe Apartments

### **Summary Building Descriptions**

Building Designation Number of Floors Number of Beds Gross Building Area - GSF Year Constructed Renovations General Condition Sprinkler System 18. Towers Residence Hall
6
194
40,828
1973
No major renovations
Fair
Not Sprinklered

One of the aging buildings built in the 60's-70's era, Towers does not meet current building codes or ADA, does not provide adequate restroom or shower facilities, the rooms and corridors are small, and the HVAC systems regularly require repair. The building provides only a minimal quality of residential life experience. Demolition is recommended in this plan.



Building Designation Number of Floors Number of Beds Gross Building Area - GSF Year Constructed Renovations General Condition Sprinkler System 19. Alex Haley Residence Hall 6 326 90,855 1994 None Good Fully Sprinklered



Building Designation Number of Floors Number of Beds Gross Building Area - GSF Year Constructed Renovations General Condition Sprinkler System 20. Dwight Holmes Residence Hall 3 126 21,779 1951 2009 Good Fully Sprinklered



Building Designation Number of Floors Number of Beds Gross Building Area - GSF Year Constructed Renovations General Condition Sprinkler System 21. Christa McAuliffe Residential Community
4
460
143,000
2003
None
Good
Fully Sprinklered



Building Designation	22. Lucretia Kennard Residence Hall
Number of Floors	2.5
Number of Beds	82
Gross Building Area - GSF	22,646
Year Constructed	1957
Renovations	1998
General Condition	Fair
Sprinkler System	Fully Sprinklered

Kennard does not meet current building codes or ADA, does not provide adequate restroom or shower facilities, the rooms and corridors are small, and the HVAC systems regularly require repair. The building provides only a minimal quality of residential life experience. Demolition is recommended in this plan, primarily to make way for construction of a much larger and up-to-date residence hall.



Building Designation Number of Floors Number of Beds Gross Building Area - GSF Year Constructed Renovations General Condition Sprinkler System 23. Harriet Tubman Residence Hall
2.5
159
33,282
1916
1971 / detached from Banneker
Fair
Fully Sprinklered



Tubman is an iconic, historic building which should be kept, to be renovated to provide modern internal layouts, accessibility, and contemporary features sought by today's college students.

Building Designation
Number of Floors
Number of Beds
Gross Building Area - GSF
Year Constructed
Renovations
General Condition
Sprinkler System

24. Goodloe Apartments
2
20, but currently unoccupied
5,946
1954
No major renovations
Fair
Not Sprinklered

Goodloe does not meet current building codes or ADA, and is remote, disconnected from the other residence halls on campus. Demolition is recommended in this plan, primarily to make way for construction of the proposed Public Safety & Communications Complex.



### Brief Description, Commentary: All Residence Halls

Seven buildings of various sizes and ages provide on-campus housing for 1347 students, not including the unoccupied Goodloe Apartments. Older buildings are University-owned and operated; the newest building, Christa McAuliffe (CMRC) is privately developed and managed. A 2008 study indicated a need for an additional 300 beds, but during recent years, the buildings have not been fully occupied. Expansion of the student housing to help build a larger campus living community will help build a critical mass of residential students, a goal of the University. This Facilities Master Plan provides for eventual development of three new residence halls providing 800 additional beds.

One student housing building presents problematic infrastructure and physical challenges to long term continued use: Towers Residence Hall is cramped, underserved by gang bathroom facilities, dismally dark in the interior public spaces, and does not meet code requirements for the elevator or exit stairs. Floor-to-floor heights are short, a factor in possible renovations. Interior spaces are disorienting, possibly interfering with safe exiting during emergency events. Mechanical systems regularly break down. Above all, these units are unpopular among students and represent marketing limitations. It is recommended that this building be removed and replaced with more suitable student housing. In addition, the Lucretia Kennard Residence Hall, built in 1957, is outdated and should be razed to make way for a larger, new residence hall. The proposed campus development plan replaces Towers and Kennard, in addition to the Goodloe Apartments scheduled to be demolished and replaced by the new Public Safety and Information Technology Facility. Other student housing buildings, ranging in age from 1916 (Tubman) to CMRC (2007) are in need of various levels of upgrade, mostly a function of the age or each. CMRC is the most popular and up-to-date.

## SITE: INFRASTRUCTURE

### ASSESSMENT OVERVIEW

A site visit and visual assessment were conducted by Carroll Engineering, Inc. during the winter of 2015 to review the Bowie State University (BSU) site infrastructure. Multiple campus visits were made during which our professional staff observed existing conditions, site concerns and active construction. Utilities were also researched with Washington Suburban Sanitary Commission (WSSC) and private utility suppliers such as Baltimore Gas & Electric (BGE), Washington Gas Company, Comcast and Verizon.

The BSU Campus is located at 14000 Jericho Park Road just north and west of the City of Bowie. BSU is in the northeastern most portion of Prince George's County. The campus is bounded by Maryland Route 197 (Laurel Bowie Road) and Bowie Race Track Road to the south, residential neighborhood to the east, MARC train station and track alignment to the west and the Patuxent River Natural Resource Management Area to the north. The state-owned campus is zoned by Prince George's County as R-O-S, Reserved Open Space.

A Master Plan – Existing Site Map and a Master Plan – Existing Utility Map for the BSU campus were prepared by CEI in 2016. For clarity, the referenced plans were published separately from this document and copies were provided to BSU. Both plans were based on information obtained from BSU, Maryland SHA GIS information, 2004 campus planimetric information, current record utility drawings and visual observations.

#### CAMPUS PROPERTY

The campus' shape resembles that of an arrow head with its point at the intersection of Route 197 and Bowie Race Track Road pointing in the southeast direction. According to current Maryland Department of Assessments and Taxation records BSU Campus consists of four land parcels identified as:

> Map 22, Parcel 28 (227.67-aces) Account #1646090 Map 22, Parcel 54 (50.50-acres) Account #1682905 Map 22, Parcel 50 (26.56-acres) Account #1615558 Map 29, Parcel 259 (37.80-acres) Account #1682913

These four parcels represent a total campus area of 342.53-acres of land and do not include the proposed MARC Sector tract west of the campus.

It appears that the BSU Property Boundary Survey plat prepared by Whitney Bailey Cox Magnani in 2004 is still the most recent Boundary Survey plat and that the discrepancies mentioned in the 2010 BSU Master Plan have not been resolved. WBCM document summarized the actual areas of each parcel comprising BSU campus as 298.78-acres and is broken down as follows:

Map 22, Parcel 28 (184.468<u>+</u> acres) Map 22, Parcel 54 (50.5<u>+</u> acres) Map 22, Parcel 50 (26.36<u>+</u> acres) Map 29, Parcel 259 (37.447<u>+</u> acres)

WBCM also summarizes actual deed areas for two of the above parcels:

Map 22, Parcel 28 (187<u>+</u> acres) Map 29, Parcel 259 (37.8<u>+</u> acres)

Therefore, BSU is still faced with three different campus areas from the tax maps (342.53-acres), deed (301.86acres) and property boundary survey (298.78-acres). As noted in the 2010 Master plan, it appears that the tax map areas include items listed above – MARC parking, Jericho Park Road, etc. Also note that the tax maps do not show a Parcel 1 inside Parcel 50; and there are several other small discrepancies between tax maps, deeds and property survey. It is still our suggestion that BSU campus real estate representatives study these discrepancies and resolve any conflicting data.

### TOPOGRAPHY & SOILS

The BSU campus topography is a gentle rolling slope throughout the campus from a high "ridge line" along Jericho Park Road. From this ridge line the campus slopes downward in a southern direction toward Maryland Route 197 and in a northern direction toward the Patuxent River Natural Management Resource Area across the Campus Loop Road. The campus has a generally uniform cross-slope in the east to west direction.

The campus' highest elevation of 168' exists along Jericho Park Road in front of Charlotte Robinson Hall; its lowest elevation of 80' exists across the Campus Loop Road from the stadium area. This high to low elevation difference reflects a relatively consistent average grade drop of 2.5% over the entire campus.

According to USGS Soil Maps, the BSU campus consists of predominantly Elsinboro-Urban Land Complex (Central campus), Urban Land-Elsinboro Complex (central campus) and Elsinboro Sandy Loam (southeast wooded area). These three consist of a mix of type B and D soils. The entire campus is comprised of a mix of type B, C and D soils.

#### INFRASTRUCTURE COMPONENTS

Overall, the observed surface features of the site infrastructure were found to be in good condition. While select areas required maintenance, such as settled and deteriorated sections of sidewalk, areas of failed/damaged pavement and wore/damaged lawn areas, we observed the campus core area to be well maintained. The core areas contained an attractive mix of landscape elements, pedestrian walkways and sculptures.

The areas around the campus core are also in generally good condition. The site infrastructure has deteriorated in select areas, such as erosion at the athletic fields, possible soil issues in the pavement and stormwater facilities and damaged stormwater conveyance systems around the campus. The campus likely suffers from aging utility services.

We recommend that BSU Facilities allocate adequate funds to maintain and improve the existing conditions. The aging underground utility piping and conduit systems are going to need continuous attention; several systems are beyond their useful life. For example on-campus water and sanitary lines that serve several of the older buildings are over 40 years old.

Any major capital improvement projects exceeding 5,000 square-feet of disturbance are required to address stormwater management per the Maryland Department of the Environment's most recent Stormwater Management guidelines. Note that MDE has approved a waiver for all future construction that discharges runoff into the Eastern Stormwater Management Facility and may be eligible for a waiver of Stormwater Management Quantitative and Qualitative control requirements according to the Stormwater Management Report dated December 2007 as written by Gannett Fleming.

Each type of assessed site infrastructure is summarized below:

#### Sanitary Sewer

Washington Suburban Sanitary Commission (WSSC) accepts the sanitary sewerage discharge from the campus. Basically each BSU building discharges sanitary to a series of 6" and 8" underground pipes that flow by gravity into the WSSC 18" sanitary sewer interceptor. This interceptor runs along the north portion of the campus outside the Campus Loop Road then discharges into the Horsepen Pumping Station, which in turn discharges into the Western Branch Basin. WSSC maintains a 30 foot wide easement along the interceptor's alignment for maintenance access. BSU Facilities Management & Planning has reported recent sanitary back-ups in the existing campus sewer system and expressed concerns with the older pipes.

#### Water System

WSSC supplies water service to the campus through a 20 inch main running along Maryland Route 197 in the 350E Pressure Zone. The water main originates from the Patuxent Filtration Plant and supplies water to the entire northeast region of Prince George's County. WSSC has installed a 16 inch water meter and vault near the front entrance at Maryland Route 197.

### Storm Drains & Storm Water Management

The BSU campus contains four distinct drainage areas (DA) denoted at DA-1, DA-2, DA-3 and DA-4. DA-1 and DA-2 received storm water from most of the building at the campus core area. DA-1 and DA-2 include approximately 190-acres of land which drain into the stormwater management ponds along the east portion of the campus. The ponds eventually discharge into the Eastern Regional Stormwater Management Facility that exists outside the Loop Road on the northeast corner of the campus property. The southern portion of DA-2 drains into the stormwater management pond located within Henry Circle. This pond eventually flows via an underground storm drain piping network into the Eastern Regional Stormwater Management Facility mentioned above. D-3 represents a large portion of the western campus which mainly receives storm flow from parking lots A, B, C, D, E, and O into a bio-retention area adjacent to lots D and E. DA-3 then flows across Campus Loop Road to a small regional pond and finally discharges into the Patuxent National Resource Area. DA-4 represents the woodlands south of the entrance road and in between Route 197 and Jericho Park Road. DA-4 drains into an existing stream in a southeast direction and flows off of campus land.

A Stormwater Management Report as prepared by Gannett Fleming and dated December 2007 has been approved by Maryland Department of the Environment (MDE). This report serves as an amendment to the stormwater management report titled Stormwater Management Report, Eastern Stormwater Management Facility, and Bowie State University, dated September 1998, revised April 2000, prepared by WBCM. This amendment was necessary to address quantity and quality management requirements for any development, proposed and future, within drainage areas 1 and 2. Quantity management was designed for maximum development build-out of the campus within DA-1 & 2 which amounts to 11.2 acres of new impervious surfaces.

According to the Prince George's Flood Insurance Rate Map representing the BSU campus area, the campus is located Zone C which is outside the Zone A6 and B flood plain. Note that previous localized projects in the northern portion of the campus have infringed on identified wetlands. The campus is not within the Chesapeake Bay Critical Area.

### **Private Utilities**

Several private utility companies supply services to the campus including Washing Gas Company (gas) Baltimore Gas & Electric (electric), Verizon (telephone) and Comcast (cable television).

Washington Gas supplies natural gas to the campus through an 8 inch main from Jericho Park Road. Washington Gas maintains the underground pipe network throughout the campus to each existing building gas meter location. We have no report of insufficient service.

BGE supplies electricity through an overhead line, which enters the campus from Maryland Route 197 and runs along the MARC railroad tracks to the campus substation. The BSU 13.2 KIV main switch gear is served from two BGE feeders, #8465 from Priest Bridge sub-station, and #7470 from Glen Dale substation. The BGE feeders provide redundant supply capacity to the BSU campus, such that either feeder can carry the total BSU capacity load should the other feeder be out for some planned or unplanned reason. In 2011, BGE upgrades their feeder to support 6MVA continuous. This capacity will provide adequate capacity for the Fine & Performing Arts Facility, Student Center, and Center for Natural Science, mathematics & Nursing, Humanities Addition and a future residence hall.

When the campus load approaches 6.5 MVA continuous, BGE will re-evaluate the campus capacity and determine if changes are needed.

Consequentially, in 2011, the university upgraded its campus electric distribution system from a three feeder system to a dual loop feeder system. This option added a fourth feeder and reconfigure the system into two separate loop feeders with the source ends of each fed from different bases on the BSU Main Switchgear. The two loops operate normally open. This provides N+1 feeder redundancy and eliminates the existing time switch.

All campus buildings are currently generating heat, hot water and chilled water to fulfill their needs. Comcast and Verizon serve the campus through overhead lines off Maryland Route 197. The campus fire alarm and energy management system is largely copper wires in conduit, which run throughout the campus.

#### **Roads & Pavement**

The main campus entrance exists at the Maryland Route 197 & Jericho Park Road intersection, which contains a traffic signal. Jericho Park Road then bears toward the east and the Campus Loop Road bears toward the west. The loop road continues around the campus perimeter and intersects Jericho Park Road again at the southeast corner of the campus. Campus parking is distributed over fifteen existing parking lots. Other small parking areas exist adjacent to the Stadium, around Henry Circle and at Facilities Management. Parking counts from field visits show approximately 2,150 spaces on site. All roadways and parking lots surfaces are bituminous pavement.

#### Handicapped Accessibility

The majority of the building entrances are at-grade. Several handicap accessible ramps exist at the remaining above and below grade building entrances. Major pedestrian walkways throughout the campus appear to be within the handicap accessible route maximum running slope of 5 percent and maximum cross slope of 2 percent. Current parking counts show the campus currently contains approximately 62 handicap parking spaces.

### **Recreational Fields**

The outdoor recreational facilities on campus consist of a football stadium, softball field, 8-lane running track, basketball courts, tennis courts and a series of practice areas. These areas are largely contained in the northern section of the campus. In 2015, the running track was overhauled completely with the addition of many new features. The football field was resurfaced with artificial turf during the summer of 2010. All recreational fields appear to drain properly; however there is a notable area of sediment on the walkway between the tennis and basketball courts which is likely from erosion in nearby areas.

#### Miscellaneous Site Infrastructure

Retaining walls exist throughout the campus for landscaping areas – seat walls, planters, raised beds adjacent to building walls, etc. and to provide access to sub-grade building entrances and exists. Screen walls have been installed around a majority of exterior mechanical equipment. Campus walls have been constructed of concrete, brick masonry and wood.

Two separate front entrance campus signs exist adjacent to the Maryland Route 197 and Jericho Park Road intersection. One older campus sign exist at the Campus Loop and Jericho Park Road intersection. Campus directories exist throughout the campus. See Site Recommendations for additional information.

# TECHNOLOGY

Considering the state of technology on the Bowie State University (BSU) campus, it is necessary to look at several items, namely the state of the infrastructure (cable backbone, network backbone, voice, data, security, etc.), the state of the technology used in administrative and teaching facilities (AV systems, wired connectivity, wireless, etc.), and the state of the technology in student housing (wired vs. wireless connectivity). We also need to address the state of physical security systems campus-wide. Each is addressed below.

### INFRASTRUCTURE

The BSU campus has a well-defined data network that supports voice, data, wireless, etc. technologies throughout campus. The "center" of the network is located in Thurgood Marshall Library (Library). From a backbone cabling perspective, optical fiber cables connect most of the buildings on campus to the Library. However, in some instances, the backbone fiber cables do not connect directly to the Library. Rather, several adjacent buildings may be connected together with copper backbone cables with a fiber cable then connecting the group to the Library. This creates possible bottlenecks and areas of potential failure.

From a network perspective, at the center of the network in the Library resides the core. This essentially consists of (2) core data switches (Cisco 65XX) that provide redundancy in the network. In the main telecom rooms in most of the buildings (especially the larger ones), an access layer switch (Cisco 45XX) provides the connectivity to the core. If there are other telecom rooms in a building, these are supported by fixed-port, stackable switches. For the most part, the core network provides 1 gigabit of throughput over its backbone. Since BSU has implemented Voice over Internet Protocol (VoIP), this network configuration supports both voice and data requirements throughout campus.

While the Library is the sole network node on campus, some of the critical data that typically resides on the network is backed up off-site. This provides disaster recovery for the most important data, including e-mail, core applications, financial information, and student information. However, this does not provide a comprehensive data back-up.

While the network continues to evolve and become more robust, this infrastructure provides several challenges, including the following to name a few:

- Not every building connected directly to the network core
- No redundancy in the fiber backbone
- Potential bottleneck with 1G of throughput to multiple buildings
- Only some (critical), not all, data is backed up off-site

### ADMINISTRATIVE AND TEACHING FACILITIES

The current state of technology in administrative and teaching facilities on the BSU campus is wide-ranging. In older buildings, such as William E. Henry Administration, Martin Luther King Jr. Communications Arts Center, Charlotte Robinson Hall, Facilities Maintenance, Leonidas S. James Physical Education, and Theodore McKeldin Gymnasium, technology has not changed much over the past several years. There is often unpredictable wireless coverage. While most teaching and assembly spaces (classrooms, auditoria, etc.) have some instructional technology (i.e. projector), much of this technology is antiquated and doesn't provide much in the way of new and current teaching technologies. While this has become better in recent years, things are still not optimum. This is likely due to several facts:

- While BSU reported that the BSU Media Services has standards for each category or type of computer classroom, there is still a sizable variation among campus classrooms;
- The University doesn't seem to know what technologies are even available for them to consider;
- Maintenance on the equipment that is available is often poor; much like other "systems" in these buildings (i.e. furniture), regular equipment maintenance and equipment breakdown often goes unattended, as there is insufficient support staff to provide this much needed function;
- The group apparently responsible for maintaining equipment is a division of the Library, not part of the Information Technology department and not connected at all with the campus Help Desk function.

In newer buildings, such as the Fine and Performing Arts Center, Center for Business, Computer Science, Center for Learning and Technology, and especially the new Center for Natural Sciences and new Student Center, the infrastructure and availability of newer instructional technologies is much better.

Outside the regular teaching classrooms, there are now more student computer labs (approximately 28) than in previous years. However, it was reported that there is a lack of testing labs where students can take tests supervised by a proctor. Also, strong, dependable wireless coverage is difficult to find, especially in the outside environment.

### STUDENT HOUSING

Residential facilities have similar connectivity and services to those provided in the Academic and Teaching facilities. While all buildings on campus have some network capabilities, the much older Residence Halls, such as Dwight Holmes, Lucretia Kennard, Harriet Tubman, and Goodloe Apartments do not provide the connectivity (both wired and wireless) that is demanded of today's modern, demanding, ever-connected student.

### SECURITY

The campus Police, located in Charlotte Robinson Hall, is the center of the Security network at BSU. While the physical security systems provide some access control and video surveillance, the campus doesn't seem to have one campus-wide system that is implemented throughout. Rather, there are disparate systems that often do not effectively communicate with each other and are in various stages of operational effectiveness. Older system components, including storage devices, are intermixed with new devices. Again, we could not find any specific campus-wide standards, so it is unclear what the overall campus strategy is as it relates to access control and video surveillance across campus.

### SUMMARY

The technology systems at BSU are in a state of flux. There are no real technology standards for any of these systems, and while newer buildings are making valiant efforts to design infrastructure and supporting technologies that are more current, there are no real guidelines for how systems should be designed or implemented. While many of the active components of the voice and data networks continue to evolve and contain some redundancy and off-site data storage, the cable network supporting them is not very robust

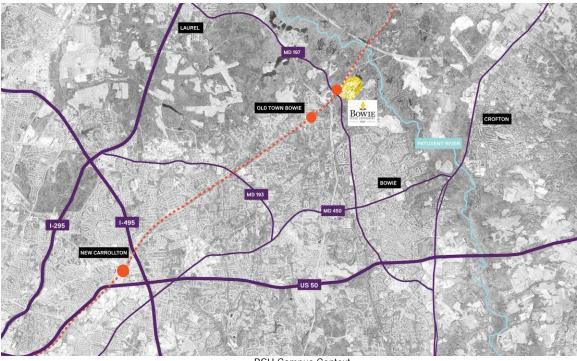
and does not provide any protection should any segment of the network be damaged. Similarly, instructional systems vary throughout campus. While some classrooms have newer technology, others simply use what's available, and often it is not sufficient or not operating properly. Therefore, design, implementation, and use of these systems is often reactionary rather than progressive.

## SITE ANALYSIS

#### COMMUNITY CONTEXT

Located in northeastern Prince Georges County, Bowie State University is situated in the heart of the Baltimore / Washington / Annapolis metropolitan area. The campus is easily accessible to the regional road transportation system, with direct access to Maryland Route 197, an arterial road connected to the Baltimore-Washington Parkway I-295. A MARC station (regional commuter rail line) is located immediately southwest of the academic campus and provides quick and direct access to both Washington DC and Baltimore. METRO bus provides transit between the University and Bowie Town Center as well as New Carrollton Station, with METRO subway, MARC and Amtrak rail service. The City of Bowie and Old Town Bowie are in close proximity to BSU.

Despite its access to the metropolitan region, the area has retained a rural character, with significant areas of permanent environmental open space to the north and west, including the Patuxent National Wildlife Research Refuge, the Fran Uhler Natural Area and the Patuxent River Park. Surrounding residential neighborhoods are typically low density single family homes. This rural, picturesque setting has informed the character of the Bowie State University campus.



**BSU** Campus Context

## **EXISTING CAMPUS**



#### CAMPUS ORGANIZATION AND LANDSCAPE CHARACTER

The overall character and physical setting of the Bowie State University is an important asset to be preserved. The campus is surrounded and framed by significant wooded open space. Internal to the campus, well-maintained landscaped open spaces create a comfortable pedestrian scale. The site is gently rolling to the north, with an overall elevation change of over 80 feet from Jericho Park Road to the northern portion of the Loop Road.

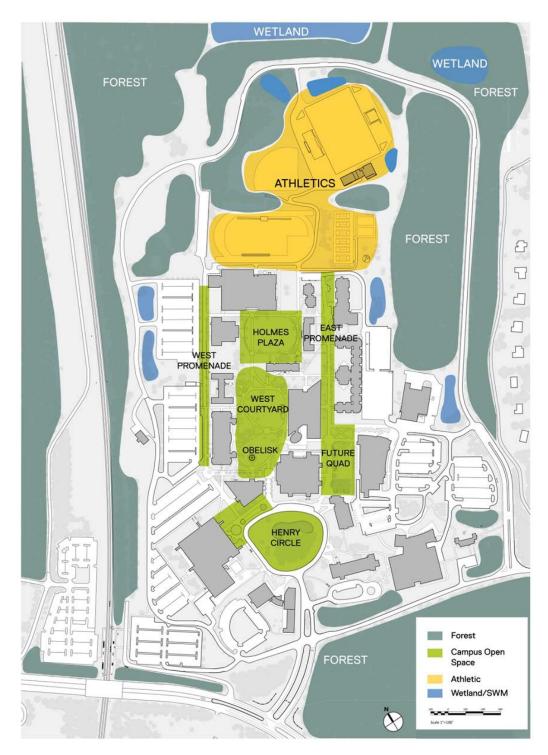
The almost 300 acre BSU campus is comprised of three distinct areas. To the north is a parcel of wetlands, floodplain and forest adjacent to the Patuxent River. This permanent open space borders the loop road, creating a wooded edge with dramatic views. To the southeast of Jericho Park Road is a wooded parcel with a steeply sloping stream valley. Portions of both of these parcels are dedicated Forest Conservation Areas, created to meet the requirements of the State of Maryland forestation requirements.

The third area is the main campus, also organized into generally distinct zones – the academic, administrative and residential campus core, the athletic facilities, and circulation and parking. The Loop Road and Jericho Park Road generally form the perimeter of the campus development. Parking is generally accessed from the Loop Road and is well separated from the pedestrian oriented campus core.

The "front door" to the campus core is Henry Circle, a one way drive circling an attractive open space and pond, fronted by academic and administrative buildings. Well landscaped spaces between the Center for Learning and Technology (CLT), Henry Administration Building, and the Thurgood Marshall Library are comfortable and welcoming gateways to the pedestrian realm of the campus.

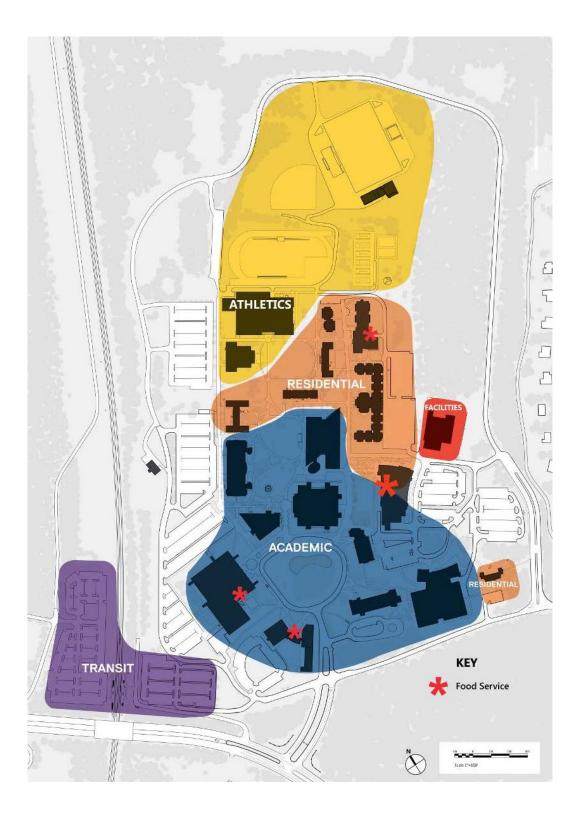
The "heart" of the campus is the Western Courtyard, a pedestrian quadrangle, formed by the Center for Learning and Technology, the Henry Administration Building, the Library, Tubman Residential Hall, Kennard Residential Hall and Center for Natural Sciences, Mathematics and Nursing Building (currently under construction). The gently sloping quadrangle features curvilinear paver walks, small gathering spaces, sculptures and shade trees. This central campus space is picturesque and well-managed.

Holmes Plaza, an open lawn framed by Holmes and Kennard Residence Halls and James Physical Education Complex and the McKeldin Gym continues the pedestrian realm. The broad lawn is used for intramural and informal field sports. Additional shade trees are needed to reinforce the formal arrangement of this quad.



**OPEN SPACE** 

# CAMPUS ZONES



#### PHOTOGRAPHS



Sculpture and landscaping in West Courtyard



View of Henry Circle and open space



Student Union Terrace (Gateway to Campus)



Pond and open space at Henry Circle



East Promenade view towards southern terminus (Computer Science Building)



East Promenade view towards northern terminus (residential area)

#### PHOTOGRAPHS



Gathering space around sculpture in West Courtyard



Holmes Plaza (lawn in front of McKeldin Gym)



Plaza at MLK



Walk looking north from Holmes Plaza (near McKeldin Gym)



Entrance to Harriet Tubman Residence Hall



Landscaped pedestrian promenade near Henry Building

#### PEDESTRIAN CIRCULATION

The pedestrian system is primarily organized with three north-south corridors, a central meandering pathway system through the West Courtyard into Holmes Plaza and two wide straight walkways lined with shade trees, the East and West Promenades. In general the campus is flat and walkable with most buildings located within a ¼ mile distance or 5-minute walk from the Obelisk in the West Courtyard.

The network of walkways of the West Courtyard provide to a scenic and comfortable pedestrian setting linking from north to south, Holmes Plaza to Henry Circle, and all the buildings surrounding this central open space. Small seating areas and plazas reinforce building entries and path connections.

The West Promenade is framed by campus buildings on the east, but edged by surface parking lots on the west. This walkway receives people from parking lots into the campus. Opportunities exist to strengthen the spatial definition of this promenade, create pedestrian gateways and stronger connections to the interior of campus. Pedestrian accommodations are typically lacking in the large parking areas. Future development on the west side of camps offers the opportunity to create nodes and enhance pedestrian movement along this potential north-south corridor.

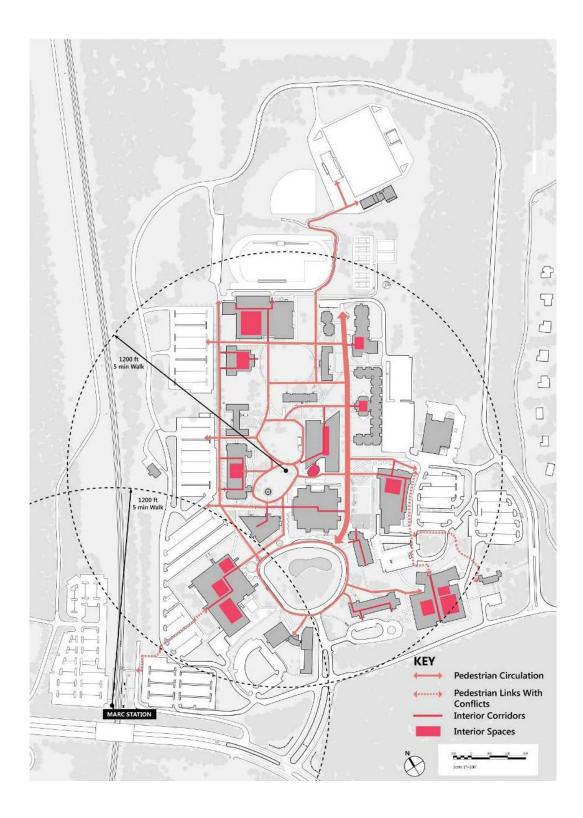
The East Promenade is flanked by Residence Halls, Academic facilities the recent addition of the Student Center. These uses create pedestrian spine of movement, activity, with important gathering and meeting space. Pedestrian spaces occurring at building entrances offer opportunities for improved site amenities including furniture and landscaping. The completion of the Center for Natural Sciences, Mathematics and Nursing and demolition of the old Science Building will allow a sizeable open space quad along the west side of the Student Union. This will provide a large scale gathering space, which is currently lacking along this corridor. The southern end of the East Promenade is terminated by the Computer Science Building, but pedestrian access is interrupted by the service drive accessing Thurgood Marshall Library. Parking Lot K prevents the formation of a stronger pedestrian link between the campus core to the Fine & Performing Arts Center and southeastern corner of the campus. Clear and comfortable pedestrian ways between the Fine and Performing Arts and the center of campus is important.

The northern ends of both promenades provide walkway connections to the athletic facilities. These narrower meandering path connections are not reinforced by landscape and building forms and lack the quality and detail of materials and site furniture present in the campus core. As such the procession from campus core to stadium and fields is not ceremonial. Extensions of the promenade into the athletic precinct should extend the character of the promenade and reinforce the importance of this connection.

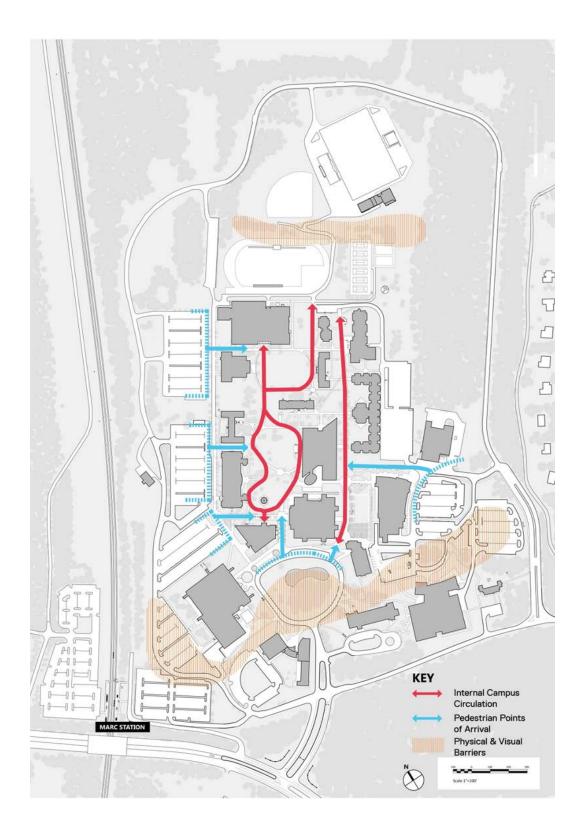
Generally, east-west pathways are dispersed without hierarchical importance. The wide, well-landscaped pedestrian corridor along the north side of the Student Center creates the making of a strong east-west corridor and gateway into the campus from Parking Lot J and I. Student Center activity spills out into adjacent raised plazas and seating areas providing human vitality along this pedestrian corridor. Parking Lot I and the Facilities Management Building and related service areas is a visual distraction to the potential sense of place and arrival along this corridor.

The Center for Business and Graduate Studies, Charlotte Robinson Hall, Fine and Performing Arts Center and Goodloe Apartments appear separated from the core of the campus due to slopes, natural features (forest stands and pond) and roads, service and surface parking areas. The Athletics precinct on the northern end of the campus is located beyond a 5-minute walk from the West Courtyard and downhill.

## **PEDESTRIAN NETWORK**



## **CAMPUS EDGES & CONNECTIONS**



The MARC station is an important gateway between Bowie State University and the world. Surface parking lots decrease the quality and experience of the pedestrian connection between the station and campus core. Improved pedestrian accommodations are needed between the MARC Station and the center of campus to support ridership of this important service. The METRO bus stops are found on Henry Circle near the Communication Arts Center.

The campus is an important land bridge between two trail systems- the Bowie Heritage Trail from the south and the WB&A trail along the Patuxent River to the north. Future campus development needs to consider the importance of connecting these two trails systems to create greater regional bike and pedestrian access and recreational opportunity for campus constituents. The Loop Road sidewalk provides recreational circulation around the campus and in particular into the northern wooded area of campus. Gaps in the sidewalk need to be completed to accommodate safe walking and running around the campus.

#### VEHICULAR CIRCULATION

The entrance to Bowie State University is from Maryland Route 197. The entrance is marked by large brick monument walls framing a divided road which intersects with Jericho Park Road. The arrival and orientation experience is disjointed from this point. Roadway improvements and directional signage are needed at this wide intersection to direct drivers to the Loop Road and parking areas.

From Jericho Park Road, the Loop Road is initially a divided boulevard, and then narrows to a two lane drive. The length of road between the median in Loop Road and Campus Drive is a remnant drive aisle widths and curbs for a potential expansion of the boulevard north. Painted lane strips on the asphalt direct motorists to turn left onto Campus Drive. This transition feels temporary and unresolved. Campus Drive provides access to Parking Lots J, J1, K, I, Fine and Performing Arts Center, Student Center, Facilities Maintenance Building and service drives into the campus core. This entrance to the eastern portion of campus, Campus Drive, brings people directly to the Student Center, but has the feel of a service drive as it passes the Maintenance Building and parking lots. Improvements to intersection design, directional signage, landscape and adjacent uses would improve the sense of arrival to the campus.

Access to the athletic fields is from the northern Loop Road. Vehicular improvements are limited to a narrow service lane which winds through the athletic fields to the James Physical Education Building. Grass parking for stadium events is allowed. No handicapped parking accommodations are evident.

The Loop Road is well separated from parking, except for the lots west of the Communication Arts Center. Each drive aisle in Parking Lots C and B run directly into the Loop Road, without separation. This creates a sense of congestion with multiple intersections along Loop Road.

Generally, the parking lots lack landscaping and pedestrian amenities. While there are sufficient parking spaces based on requirements, the distribution is not balanced with the demand, in particular near the academic and residential areas.

#### WAYFINDING

Wayfinding relies on visual and informational cues such as signs, maps and physical forms to reinforce navigation to or through a place. The clarity of this system helps support the identity of an institution and provide comfort for the visitor's experience. For visitors wayfinding may start on-line with the review of information and maps of the campus. The current three-dimensional map of the campus allows visitors to visualize their destination better a typical two-dimensional map. Visitor parking (on Henry Circle and Lot E) is identified on the webpage, but not clearly marked on the campus map.

The campus is accessible by train, bus and car. The arrival by bus places visitors at the core of the campus, where a campus map sign, directional signage and building labels are present to assist the visitor's next leg of their journey. The MARC train station is named Bowie State University clearly informing a visitor of their destination. The pedestrian experience between the station and campus is less than desirable. Visitors traverse parking lots and enter behind or through buildings to get to the campus. The appears to be no or a lack of directional signage for Bowie State University prior to Exit 11 in both directions along the Baltimore-Washington Parkway to alert motorists to take MD-197 to the campus. The 5-mile journey along MD-197 is generally scenic through the Patuxent wildlife preserves and park spaces, reinforcing the bucclic setting of the campus. There are few directional signs along MD-197 to guide and assure visitors they are approaching the University.

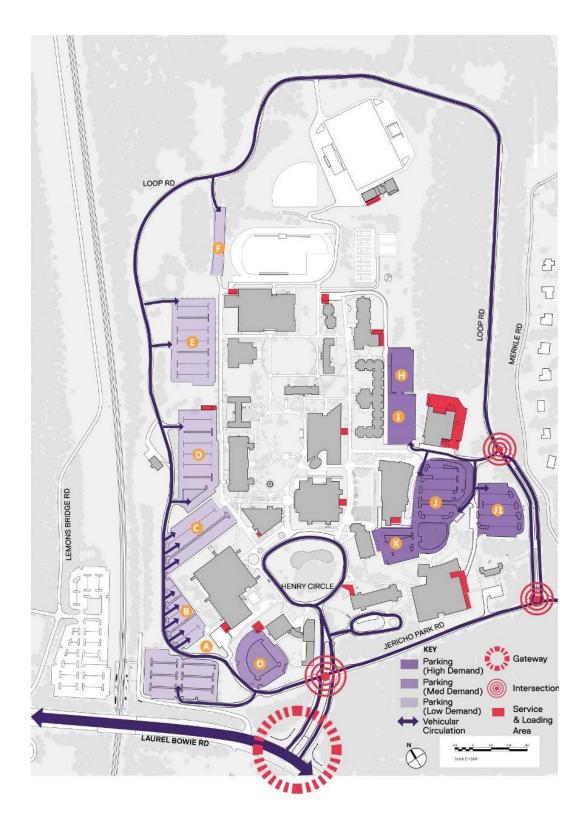
The flanking masonry piers and site walls at the intersection of Jericho Park Road and MD-197 announce the arrival to the campus. This highly visible gateway directs visitors to enter towards the campus on Jericho Park Road. The pull-over lane in the median of Jericho Park Road provides a safe place for a motorist to review a campus map, locate their destination prior to decision-making at the next intersection. The next intersection is a four-way intersection with a variety of visual information creating confusion for a first-time visitor. There are a variety of welcome site sign types at the intersection of Jericho Park Road and Loop Road, of which may not conform with the updated brand of the campus. A directional sign is located on the right-hand side of the Jericho Park Road immediately at the intersection, providing limited time for a motorist to react to the information. The natural inclination for a visitor would be to proceed straight to Henry Circle, however there is limited visitor parking which additionally requires an approved parking pass from Campus Police Department in Robinson Hall.

The Student Center and the Fine and Performing Arts Center are located east of the campus core. Both facilities are destinations for future students and visitors from the surrounding community. However sanctioned visitor parking is located in Parking Lot E, on opposite side the campus core. There is limited directional signage along Jericho Park Road and East Loop Road to direct visitors to these destinations. Motorists are required to make a series of left turns to arrive at a cluster of parking lots with multiple drive lanes and parking access points. This sequence of decision making points is not intuitive for first time visitors. Campus street and walkway name signs are branded with the school's color, reinforcing the identity of the University.

Internal to the campus the landscape and open spaces support the clear organization of the University. In general there is a consistent language of site furniture, lighting fixtures, banner posts and paving materials to create a common campus identity.

Buildings are within a short walk from each other. Buildings are identified by landscape signs as well as labeled directly on the building. Direct mounted letters are less successful to read when the building surface is patterned and textured. The exposed aggregate concrete piers topped by a sign panel are more legible. The sign panels provide sufficient contrast between letters and the white sign background. These signs are in keeping with the concrete skinned buildings such as MLK Center and Henry Administration Building, however these signs are less in keeping with the architectural language of the new Student Center and Natural Science and Mathematics Building. The building signs and site signs lack a uniform appearance and may not conform to the University's brand.

### **VEHICULAR SYSTEM**



#### PHOTOGRAPHS



Frat / Seating Area along East Promenade



East Promenade view north (near Haley Residence Hall)



Paving area in West Courtyard



Western Promenade view north



Western Promenade view south



Stairs leading to Fine and Performing Arts Center

#### PHOTOGRAPHS



Wooded parking area (Lot J1)



MetroBus stop near MLK Center



Parking Area view towards MARC station (Lot B)



Bioretention facility near Student Center

#### ATHLETIC AND RECREATIONAL FACILITIES

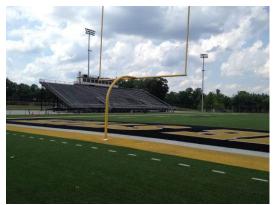
The indoor and outdoor athletic facilities are located on the northern portion of the campus and include a track and field, six tennis and two basketball courts, a softball field and the football stadium. The track is located adjacent to the James Physical Education Building. The athletic precinct has received recent investment including resurfacing of the track, basketball courts and tennis courts, lights at the stadium. The site slopes significantly, with the courts and softball and football fields at a much lower elevation.

While located in an attractive setting surrounded by woods, the athletic area lacks organization and pedestrian amenities. The addition of the Fitness Center, stadium lighting and field upgrades have improved the football stadium, the stadium lacks a sense of arrival, or ceremonial entrance. The stadium complex is surrounded by vast areas of asphalt paving and tall chain link fencing, strong identify entrance into the complex. The softball field does not feel welcoming to spectators, lacking bleachers and an arrival point.

The space between the track and James PE Building is narrow, but could be improved to become a comfortable pedestrian area, linking the East and West Promenade.

There are opportunities for stronger pedestrian connections to the campus core, in particular at the East and West Promenades. With improvements to the stadium complex, and cohesive pedestrian amenities and landscaping, the area has the potential to be an inviting "athletic complex".

### PHOTOGRAPHS



Bulldog Stadium



Tennis courts



Stadium bleachers



Bulldog Stadium



Track



Walkway / service drive to softball field

# Chapter 5 Proposed Campus Development

Recommendations, Proposed Capital Projects Site Infrastructure Technology Sustainability Design Guidelines Campus Planning and Implementation

# **RECOMMENDATIONS, PROPOSED CAPITAL PROJECTS**

#### **RECOMMENDATIONS – GENERAL**

- 1. Create environments to encourage collaborative learning
- 2. Create environments to encourage collaboration among and between students and faculty
- 3. Develop focused master plans for:
  - i. Technology
  - ii. Athletics
  - iii. Student Housing (including market study)
- 4. Increase number of on-campus student housing beds
- 5. For new construction, architecture should be contextual, contemporary, in scale with existing buildings
- 6. Follow recommended design standards
- 7. Undertake a comprehensive inventory of all existing spaces on campus to identify area, by building and by use.
- 8. Introduce a shuttle bus to Bowie and Laurel
- 9. Continue pursuit of Zip Cars on campus
- 10. Develop bike and walking trails on campus and connected to County bikeways
- 11. Expand Henry student services facilities to include (be convenient to) academic advising, student counseling, tutoring
- 12. Develop coordinated signage programs for:
  - i. Buildings
  - ii. Pedestrian ways
  - iii. Campus roadways and parking facilities
- 13. Make trail connections to Patuxent Wildlife Refuge and related conservation areas
- 14. Develop a Veterans Support Center
- 15. Pursue demolition, renovation, and new construction projects identified in the master plan
- 16. Initiate a program to replace aging underground infrastructure (water, sanitary, storm water)
- 17. Coordinate recommended campus development with admissions, academic programs, student affairs, development, and student fees
- 18. Develop a second technology network node to provide redundancy to the data center in the Library
- 19. Accelerate the incorporation of more interactive learning technologies in classrooms
- 20. Continue to develop Sustainability practices and initiatives
- 21. Pursue further MARC train discount for students

Acknowledging major capital projects accomplished over the past decade, the physical plant needs of the University have nonetheless continued to grow, as has its enrollment, requiring continued capital investment in buildings, site, and infrastructure, described below. More detailed descriptions of scope, schedule and cost will be developed in programs for each project.

#### BUILDINGS

The University's needs for renovation and new construction are much improved since the 2011 Facilities Master Plan but are still currently significant. Major space deficits occur in the following space types: (order by magnitude) study, physical education, classrooms, and physical plant. The total 2024 space surplus is approximately 41,000 nasf / 68,000 gsf. For non-residential and non-parking facilities, the *2035* plan provides approximately 886,000 gsf of new space, addressing several deficits. The loss of approximately 185,000 gsf through demolition results in a net gain of 701,000 gsf. Proposed new residential buildings amount to 300,000 gsf for 900 students. In consideration of the proposed demolition of the Towers, Kennard, and Goodloe Apartments residence hall, the net gain in beds will be 900 minus 296 = 604 new beds.

#### SITE, INFRASTRUCTURE

Site improvements related to building projects such as utility work, storm water management, sediment & erosion control, grading, sidewalks, landscaping, and convenience parking and driveways, should be included in the scope of work for each project. Larger project and those which affect several buildings or are campus-wide, are expected to be undertaken as stand-alone capital projects. These include:

- Storm water management currently under construction
- Utility upgrades, including replacement of west water loop
- Surface and structured parking
- Continue site lighting replacement program
- Athletic fields
- Loop road re-surfacing
- Loop road reconfiguration at southwest corner of campus\*
- Continued upgrades to telecommunications network

\*Note: this will require land transfer from Maryland DOT back to BSU.

Recommended capital projects are shown on the *Proposed Capital Projects* on the next page. The order and proposed schedule for the Proposed Capital Projects is deliberate, sequential, generally providing sufficient space to minimize the need for temporary facilities, and dependent on available funding. The proposed building projects will require corresponding increases in site infrastructure and, in some cases, renovation of vacated space. The University's *Capital Improvement Plan* will establish the capital projects schedule.

	Bowie State University Propos	sed Capital Pr	GSF New /	Budget Construction	
		GSF Renovation	no. stalls		Cost - note 1
Pro	jects Under Construction		110. 510115		
	CNSM&N (cost estimated; to be furnished by BSU)		149,109	\$	85,000,000
•	Total - Projects Under Construction	-	149,109	\$	85,000,000
Pro	posed Projects: 0-5 Years 2016-2020				
	Demolish Steam Plant - allow ance		(5,940)	\$	75,000
2	Humanities Building Phase 1		133,500	\$	77,625,000
	Demolish MLK Communication Arts Center - note 2		(149,374)		
3B	Humanities Building Phase 2 - note 2		80,000	\$	52,500,000
4	Student Housing - 600-Beds		200,000	\$	48,000,000
5	Public Safety & Communications Complex - note 3		49,217	\$	29,050,000
6	McKeldin Gym Renov. & Addn - Wellness Ctr	21,142	38,968	\$	25,917,000
	Thurgood Marshall Library Renovation	166,869		\$	77,669,000
8	Facilities & Maintenance		44,444	\$	23,000,000
9	Parking / Loop Rd - SW Perimeter - Allow.			\$	3,000,000
	Total Gross Non-Residential 2016-2020	188,011	346,129		
	Total Gross Residential 2016-2020	100,011	200,000		
	Total: 2011-2015	188,011	546,129		336,836,000
Drn	posed Projects: 5-10 Years 2021-2025	100,011	J40, 127		330,030,000
	Demolish Maintenance Bldg - allowance		(29,613)	\$	350,000
	Demolish Towers - Allow.		(40,828)		500,000
_	Center for Learning & Technology	18,000	(40,020)	\$	5,400,000
	James Complex Renovation & Expansion	102,135	34,000	\$	42,540,500
	Henry Administration Building	37,396	01,000	\$	11,218,800
	Demolish Kennard - allow ance	01,070	(22,646)		240,000
	Student Housing - 300-Beds		100,000	\$	24,000,000
	Stadium Complex - note 4		40,000	\$	12,000,000
	Athletic Fields Improvements - Allow.		,	\$	6,000,000
	Convocation Center		100,000	\$	40,000,000
	Site & Site Utilities Improvements - allowance		,	\$	10,000,000
			171.000		
	Total Gross Non-Residential 2021-2025	157,531	174,000		
	Total Gross Residential 2021-2025	-	100,000		152 240 200
Dro	Total: 2016-2020 posed Projects: 10-20 Years 2026-2035>	157,531	274,000		152,249,300
	posed Projects: 10-20 Years 2026-2035> Charlotte Robinson Hall	20,000		\$	6,000,000
	New Academic Building	20,000	70,000	.⊅ \$	21,000,000
	Incubator and Innovation Center			\$	33,750,000
	Athletics & Rec Field House (practice facility)		72,000	\$	21,600,000
	Tubman Residence Hall	33,282	72,000	\$	6,656,400
	Holmes Residence Hall	21,779		\$	4,355,800
	Alex Haley Residence Community	90,855		\$	18,171,000
	Field House (old portion)	3,194		\$	638,800
	Site & Site Utilities Improvements - allowance	0,171		\$	10,000,000
,				Ψ	10,000,000
	Total Gross Non-Residential 2026-2035	169,110	217,000		
	Total Gross Residential 2026-2035	-	-		
	Total: 2026-2035	169,110	217,000	\$	122,172,000
	Total Gross Non-Residential	514,652	886,238		
	Total Gross Residential	-	300,000		
	TOTAL	514,652	1,186,238	\$	696,257,300
	Total Non Decidential New Puildings 2016 2025				
	Total Non-Residential New Buildings 2016-2025	nanco	886,238		
	Deduct for Demolition - Steam Plant, MLK, Maint Net Gain - Non-Residential GSF 2016-2025	endrice	(184,927)		
_	Net Galil - NUII-RESIDEIIIIal GSF 2010-2025		701,311		
	Note 1: Construction Cost: 2016 dollars. Other Project	Costs (fees, FFE,	inspection, etc)	not ir	ncluded.
	Note 2: Humanities Phase 2 includes \$51,700,000 new	construction + \$80	0,000 MLK der	nolitic	n
	Note 3: Public Safety Complex includes \$29,000,000 r			be der	molition
		ig, Concessions, G			

# SITE: INFRASTRUCTURE

#### RECOMMENDATIONS

Proposed campus capital projects will require more capacity and extensive upgrades to select portion of the site infrastructure. At this time, sanitary sewer and water services appear to have adequate capacity based on conversations with WSSC. Since the campus contains many underground utility lines, each new building or addition may require relocation of existing lines to clear the new footprint area. Improvements and upgrades to meet the current storm water management criteria will also be required to support development. Based on our review and cursory assessment of the BSU campus, we have concluded that its site infrastructure in the academic core area is in a good overall condition.

If any improvement project disturbs more than 40,000 square feet, Maryland Department Natural Resources may require the preparation of a Forest Conservation Master Plan for the entire campus prior to review Forest Stand Delineation and Conservation Plans for individual improvements. All plans for improvements must take into account the mature woodlands throughout this campus. Areas of dedicated trees to satisfy past projects that impacted the Maryland Tree Conservation Act projects exist on campus property.

Any proposed project disturbing more than 5,000 square feet will be required to meet stormwater management requirements based on the current Maryland Department of the Environment Stormwater Management Manual.

A breakdown of the site infrastructure recommendations follow:

#### SANITARY SEWER

Replace and/or upgrade older sections of underground pipe and fixtures, beginning with known problem areas such as the West Promenade. These older sections of pipe are believed to be more than 50 years old and are more than 25 years beyond their useful life based on BOMA (Building Owners and Managers Association) listed figures. WSSC is unable to verify the age of the older on-site pipe section. We request that BSU provide documentation to verify age and location of older sewer pipes. Adequate funding for such maintenance projects should be presently allocated. Also according to future campus growth, a number of pipe sections will need to be extended to future building locations.

#### WATER SYSTEMS

Replace and/or upgrade older sections of underground pipe and fixtures, beginning with known problem areas. These older sections of pipe are believed to be more than 50 years old and are more than 25 years beyond their useful life based on BOMA (Building Owners and Managers Association) listed figures. WSSC is unable to verify the age of the older on-site pipe section. We request that BSU to provide documentation to verify age and location of older water pipes. Adequate funding for such maintenance projects should be presently allocated. Also according to future campus growth, a number of pipe sections will need to be extended to future building locations.

We recommend that with each major facility design, the design team perform fire flow tests at the nearest existing fire hydrants around the Campus Loop Road.

#### **IRRIGATION SYSYEMS**

Based on BSU concerns, we recommend BSU employ the services of an Irrigation Specialist to provide recommendations in areas of concern prior to any future work. Repair/replace/upgrade existing services as required to accommodate current and future campus needs.

#### STORM DRAINS & STORM WATER MANAGEMENT

Based on BSU concerns of settling and deteriorating systems, we recommend BSU employ the services of a

Geotechnical Engineer to test soils and provide recommendations in areas of concern prior to any future work. Replace/replace/upgrade older sections of underground metal and plastic pipe and structures, beginning with known problem areas. These older sections of pipe are more than 50 years old. These metal/plastic pipes are at least 25 years beyond their useful life based on BOMA (Building Owners and Managers Association) listed figures. Future projects may require the existing regional ponds and select outfalls be updated so that they meet the current stormwater management regulations. All future capital improvements which disturb more than 5,000 square feet of soil will require localized stormwater management devices at the project site, however the discharge locations (ponds, retention areas and outfalls) will also be reviewed if they are suitable and meet current requirements. Immediate attention should be given to the streambanks along the western campus property line where heavy erosion has occurred. BSU should amend the Stormwater Management Report to MDE as written by Gannett Fleming dated December 2007 to include the other three campus drainage areas. This would document, and receive a possible water quantity and quality waiver approval for the eastern and southern stormwater management system to assist in future site developments.

#### PRIVATE UTILITIES

Upgrade current electric service to the campus as required for current and future improvements.

#### **ROADS & PAVEMENT**

Based on BSU concerns of settling and deteriorating pavement, we recommend BSU employ the services of a Geotechnical Engineer to test soils and provide recommendations in areas of concern prior to any future work. Repair/replace small areas of existing poor condition roadway paving, curb & gutter and walkways. Reconfigure and improve existing walkways as required.

#### HANDICAPPED ACCESSIBILITY

Handicapped accessibility parking should be check against the current requirements for compliance of the parking space count, size, slopes, access aisles and proper signage. All campus accessible walkway routes are required to have ADA compliant curb ramps, detectable warning surfaces and building entrance ramps where necessary. According to current parking estimates, it appears that the campus only contains 62 reserved handicap parking spaces of the 86 spaces required per the current ADA regulations (required values are based on a total count of 2150 parking spaces).

#### RECREATIONAL FIELDS

Drainage and erosion issue at walkway between tennis and basketball courts should be corrected.

#### MISCELLANEOUS SITE INFRASTRUCTURE

Any spot damages and overall deterioration of the campus retaining and screen walls need to be addressed. Improve the campus information and wayfinding signage through the campus.

# TECHNOLOGY

In order for Bowie State University to move forward with the development of their technology systems, one of the first things that should be undertaken is the development of detailed technology systems standards for all systems that are in operations at the University. This includes standards for pathways (ductbank, conduits, cable tray, etc.) and spaces (telecommunications rooms sizes and locations), cabling (outside plant and inside plant, copper, fiber, connectivity, racks, redundancy, etc.), voice and data network (switches, wired and wireless, phones, redundancy, etc.), physical security (access control, intrusion detection, video surveillance systems, blue light phones, etc.), instructional (interactive white boards, flat screen displays, network access, inputs, controls, sound, speech reinforcement, digital signage, etc.), and other supporting and emerging systems like Distributed Antenna Systems (DAS) that are becoming increasingly important on today's university campuses. These technology systems standards can and should then be used to update existing systems, but also be used as a basis for design for any new construction or major renovation that is part of the University's Facilities Master Plan.

The active components of the voice and data network at BSU are respectable, and the University continues to enhance their network by increasing wireless access, implementing wired connections where necessary, and conscientiously working to provide good, available, and dependable connectivity to students and faculty throughout campus. The Vice President & CEO of the Department of Technology understands that the University has challenges, but states that good progress is being made. Furthermore, BSU is halfway through transforming their active network infrastructure and has recently re-built their active network components with redundant core switches (in Thurgood Marshall Library) and increased campus connectivity. The critical challenges to the network remain:

- stability and availability of the network;
- greater throughput (migrating to 10G and higher speeds);
- greater back-up and failover capabilities;
- information security.

While this network continues to grow and react to the different communities on campus, the supporting cable backbone is still a challenge, with 1G fiber links to only some of the campus facilities. The University needs to ensure that the Library will continue to be the center for all major IT systems (cabling, voice, data) and the necessary redundancies are in place to safeguard that the network will remain operational. Consideration should be given to having a second network "node" that can provide more overall network redundancy and guard against a potential single point of failure, such as a severely destructive event in the Library. If the Library remains the single network node, other contingencies should be considered. The University already has (2) core switches in the Library that provide the necessary redundancy for that portion of the network. However, the optical fiber backbone is not redundant. Therefore, BSU should consider designing and implementing a redundant optical fiber cable to each building. This should then be well documented detailing this backbone infrastructure, including specific information on ductbank and conduits, manholes, hand holes, quantity and types of cables, connectivity, termination points, etc. across the entire campus.

Instructional technology needs to improve significantly, especially in older buildings where active teaching still occurs on a regular basis. Instructional technology standards should be established and then implemented so that every instructor has access to the most current teaching technologies in all classrooms on campus. Not only should the instructional technology support traditional classroom methodologies, it should also support newer methodologies, such as problem-based learning, Bring Your Own Device

(BYOD), etc. Since many emerging instructional technologies are network centric, BSU may want to consider moving the responsibility for support for instructional technology under the Information Technology Department, as well as investing in a program that gets teachers much needed instruction on these systems so they can take advantage of the available instructional technologies. This is occurring at many other colleges and universities. In order for it to occur at BSU, appropriate funding must be made available.

BSU needs to look at other emerging technologies as well. One of the more notable among these is the Distributed Antenna System (DAS). A DAS is a network that provides in-building coverage for a variety of systems, most notably cellular phones and public safety radios. New buildings are now being designed and constructed to meet new LEED and green building standards, and several areas of these building have also changed, particularly the use of low-E glass in windows in place of traditional glass windows. While in the past, when one received poor cellular signal in a building, one would move toward the window. However, this no longer works. The new low-E glass now reflects and effectively blocks the signal, significantly affecting in-building service. BSU should consider working with an integrator who can then work with the wireless carriers (Verizon, AT&T, Sprint, T-Mobile, etc.) and the University to provide access to the wireless infrastructure via a combination of towers, small cell solutions (SCS), and antennas that will enable proper in-building coverage and capacity.

Bowie State University has the same challenges as many other institutions of higher learning in Maryland. As it continues to grow and expand, its students, faculty, and staff continue to demand excellent wired and wireless voice, data, and instructional services. While BSU continues to focus on upgrading and providing these services throughout the University, a better plan needs to be established and implemented, especially as it relates to campus-wide technology systems standards. With proper systems standards, appropriate systems, instructional, and training funding, and a plan to implement them throughout campus, BSU will be well on its way to understanding their current systems, as well as being able to deliver what is essential and required by today's knowledgeable and ever-demanding end users.

# SUSTAINABILITY

#### THE BOWIE STATE UNIVERSITY COMMITMENT

The University completed and published its Climate Action Plan in 2009. In addition, President Burnim, on behalf of the University, is a signatory to the American College & University Presidents Climate Commitment. As written in the 2009 Climate Action Plan, "The University's aim is to be recognized as a leader in operations, teaching, and campus events related to sustainability". The University is currently updating its Climate Action Plan, for 2016.

Building on the 2009 Climate Action Plan, the University established a Climate Commitment Coordinating Committee ("C4"), adding a yearly sustainability fee to other student fees, Earth Week activities, expanded recycling, solar energy charging tables, developed a Green Ambassador student group, entered into a food recovery partnership with Thompson Hospitality (the campus food service vendor), and other sustainability partnerships with Verizon, Johnson Controls, Toyota Green Initiative, and ABM Janitorial Services, and was recognized by the Building Green Initiative as one of the top ten greenest HBCUs nationally. In addition, all new buildings and major renovations are required to achieve at least a Silver LEED rating.



#### MASTER PLAN RECOMMENDATIONS

The Facilities Master Plan fully supports the University's sustainability commitment. All projects envisioned in the master plan are expected to embrace the University's sustainability goals. Sustainable strategies which have been incorporated into the master plan include:

- Providing for integrated storm water management consistent with new State of Maryland regulations: to be incorporated in each new project and throughout the campus.
- Improving intra-campus pedestrian connections, discouraging use of vehicles for intra-campus transportation.
- Clarifying way-finding to reduce unnecessary driving.
- Retaining natural wooded areas to maximum extent, limiting impervious development and maintaining natural habitat. Replacement of forested areas.
- Creating wildlife corridor along the edge of the campus center, linking habitat from the campus to the northern wetlands.

- Fully respecting the extensive, natural woodlands leading to the Patuxent National Wildlife Research Refuge, retaining and reinforcing natural habitat.
- Safeguarding natural wetlands and environmentally sensitive areas.
- Develop the campus in relatively high density, avoiding unnecessary extensions of infrastructure.
- Re-using existing buildings where possible; renovating buildings in lieu of new construction, provided the existing buildings do not present infeasible renovation possibilities
- Building on previously developed areas, limiting impervious development.
- Encouraging multi-story buildings, minimizing building footprints and corresponding additional unnecessary impervious area.
- Retaining and improving the existing athletic fields rather than re-configure them.
- Recommending development of shuttle services outside campus, discouraging use of private vehicles. Facilitate the introduction, and then support Zip-Car presence on campus.
- Encourage the expansion of car-share program to reduce the land area devoted for private car parking.
- Providing for alternative fuel vehicle priority parking and re-fueling stations.
- Supporting the commitment to LEED Silver level construction for future new construction and renovation projects.
- Continuing replacement and upgrade of lighting with more energy-efficient systems and fixtures.
- Continue to explore, and then implement, solar photovoltaic arrays. Possible locations include parking lots, such as Lot D.
- Supporting the proposed town center envisioned in the Bowie State University MARC Station Sector Plan. Consistent with the State's smart growth policies, reinforcing development of the new town center where significant infrastructure is already present or convenient, tying the planned development with campus expansion to a "west" addresses both expected campus expansion and regional development.
- Establishing and facilitating strong linkage to the town center, especially strengthening pedestrian and bicycle connections (Bowie Heritage Trail and WB&A Trail).
- Enhancing connections to the existing MARC Station and advocate for MARC station relocation as envisioned in the MARC Station Sector Plan to encourage reduced pedestrian travel times and increased use of the rapid transit line.
- Supporting student activities and initiatives related to sustainability.

# **DESIGN GUIDELINES**

#### CAMPUS LANDSCAPING AND SITE DESIGN

Objectives:

- Create a cohesive, uniform landscape character and sense of place on campus
- Create a comfortable pedestrian scale environment throughout the campus
- Preserve and enhance the existing woodland character of the campus perimeter
- Organize and define campus circulation and highlight important entrances, gateways and gathering spaces
- Enhance and maintain biodiversity and establish connectivity with the ecological context

Strategies

- 1. Use consistent tree species to define the main pedestrian corridors core to provide a uniform landscape character
- 2. Use groupings of ornamental tree plantings to highlight entrances, gateways and gathering spaces
- 3. Emphasize planting of major shade trees throughout campus
- 4. Provide tree planting in parking lots
- 5. Plant drought resistant plant types suitable to the soil conditions
- 6. Identify wildlife habitat and riparian corridors and protect habitat and natural systems on campus
- 7. Avoid the removal of mature trees and other alterations of sensitive topography and vegetation

#### LANDSCAPE MANAGEMENT

Objectives:

- Maintain healthy planting soils for optimal plant growth
- Develop low cost , non-toxic maintenance practices
- Enhance and maintain biodiversity
- Minimize use of potable water for irrigation

Strategies:

- 1. Compost campus landscape material and apply compost to planting beds
- 2. Apply organic fertilizers and compost teas to maintain microbiological health of the soil
- 3. Cut back perennial plants in the spring to allow winter interest
- 4. Choose plant material that does not need to be trimmed & pruned

#### STORM WATER MANAGEMENT

Consistent with State of Maryland Storm Water Management Regulations, construction projects must "...rely less on single BMPs for all development projects and more on mimicking existing hydrology through total site design policies". This change will result in smaller, less obtrusive facilities that are an integral part of site design and reflect the landscape character of the campus.

Objectives:

- Restore the hydrological process to its natural function
- Preserve and protect the existing wetlands and stream valleys which surround the campus

• Create visible water systems that can educate the campus community

#### Strategies

- 1. Retrofit existing and design new parking lots to incorporate vegetated swales, infiltration/flowthrough planters, rain gardens and permeable paving
- 2. Disconnect building downspouts
- 3. Design campus landscapes to incorporate storm water management facilities as features
- 4. Consider pervious paving options for hardscape applications
- 5. Consider green roofs for new building construction
- 6. Strategically open/enhance views into existing wetlands and stream valleys
- 7. Provide educational signage to describe the hydrological process and functions

#### BUILDINGS

Three primary zones are identified in the existing campus diagram in this facilities master plan:

- 1. Athletic, including athletic buildings and fields, at the north end of campus
- 2. Residential, including historic buildings in the central area of campus
- 3. Academic, administrative and support buildings, comprising the bulk and academic core of the campus, located in the south half +/- of campus

In addition, at the far southwest corner, the area near the MARC station is "transit"

The character of these zones are not dissimilar, a bit eclectic, and include buildings ranging in age from 1921 (Harriet Tubman Residence Hall) to new (Center for Natural Science, Mathematics and Nursing, now under construction). The campus developed slowly until the 8-year period 1967-1976, when five new building / expansion projects totaling nearly 500,000 square feet were constructed, representing half of all occupied non-residential buildings on campus today. In chronological order of completion, these buildings included:

- Crawford Science Building
- James Physical Education Complex
- MLK Communication Arts Center
- Thurgood Marshall Library
- Henry Administration Building

The scale of these buildings varies from 32,000 square feet (Henry Administration) to 167,000 square feet (Marshall Library). Except for Crawford, the buildings are "modern" in design, and three in particular are very large (James, MLK, Marshall). These buildings came to dominate the campus aesthetic and still are a major factor in the perception of BSU's built environment. Two – MLK and Henry – are faced in concrete; the others are brick. Two – MLK and Crawford – are recommended to be demolished. This will mitigate the overall influence of these five buildings.

Newer buildings have since changed and continue to change the character of the campus, introducing a newer, articulated aesthetic and more modest scale. These buildings include:

- Center for Learning and Technology
- Computer Science Building
- Center for Business and Graduate Studies
- Fine and Performing Arts Center
- Student Center
- Center for Natural Science, Mathematics and Nursing

These more recent buildings have tended to incorporate: glazed curtain wall, red brick and punched openings, references to the more historic buildings on campus, and banded masonry accents. All of these buildings have been constructed without significantly sloping roofs as are found on several of the residence halls.

In contrast to the variation in architectural styles of the buildings, the campus is generally unified, thanks in large part to the landscaping and site improvements that knit the buildings together. The buildings are like an extended family, with corresponding identities and common bonds. It is not the intent of this plan to discourage architectural statements in future buildings that are unique, as long as the rationale responds to programmatic requirements and the architecture respects the existing context.

Scale of the buildings varies, from the one-story McKeldin Gym, to the six-story Alex Haley and Christa McAuliffe and Towers residence halls. Towers is recommended for demolition. Most buildings in the academic core are 2-3 stories. A north-south longitudinal section through the campus would show medium height buildings to the north and south, punctuated by the taller residential facilities in between. This plan suggests keeping this low-high-low scale. Future academic buildings should generally be limited to 3 stories in height. If prescribed footprints and programs suggest a fourth floor, the additional story should present 3 floors to the main campus quadrangles, allowing the fourth floor to open to grade on the west for buildings on the west side of campus and on the east for buildings on the east side of campus. Massing of all buildings should be modulated to avoid large perceived bulk in any building. Sloped roofs are acceptable, as are roofs with only nominal slopes.

Face brick, generally red range similar to existing buildings, contrasting with other neutral masonry materials such as stone, cast stone, or manufactured stone should be considered for the opaque portions of the buildings. Other facing materials such as pre-finished metal panels may be considered but should not be a predominant material in any building. Windows may be designed as punched masonry openings and/or curtain wall. Use of aluminum or stainless steel for windows, doors and trim is encouraged: aluminum in clear anodized or fluoropolymer finishes.

All buildings shall accommodate disabled persons, allowing access through the same main entrances that able-bodied persons would use. And, all building projects shall conform to University System of Maryland standards, including LEED Silver sustainability designation.

The 1910 Goodloe House, 3,000 square feet of pleasantly scaled and proportioned 1916 domestic architecture, the oldest and most historic building owned by Bowie State University, is located off-campus, across Maryland Route 197, and is not considered contextual to the current and planned campus facilities.

#### SITE AMENITIES

Site amenities found on the main campus quad south of the Henry Administration Building – benches and lighting – should serve as standards for future site development for projects on the main camps quad. For other areas on campus, the site amenities adjacent to the Center for Business and Graduate Studies – benches, waste containers, and lighting – should serve as standards for future site development, either stand-alone or as part of future construction projects. The unit pavers for walkways found in the main campus quad and in the primary east and west promenades should be incorporated into future site pedestrian ways.

# CAMPUS DEVELOPMENT AND IMPLEMENTATION

The proposed Campus Master Plan provides the framework for future development of academic, administrative, residential and athletic facilities around pedestrian oriented open spaces, with conveniently located parking and public transportation access. The plan accommodates a logical, sequential phased development over a more than ten year period. The master plan strives to respect and build upon the successful aspects of the campus environment.

#### CAMPUS ORGANIZATION AND SITE DESIGN

The location of proposed buildings follows the existing organization of campus districts – academic and administrative, residential, and athletic.

- The future Humanities Building and future academic building replace the MLK Building, maintaining a building edge along Henry Circle. The future Humanities Building will provide large assembly space for the university community. The Humanities Building will anchor the southern terminus of the Western Promenade. The position of this building will reinforce pedestrian connections to the existing MARC station as well as to the proposed relocated MARC station.
- Robinson Hall is renovated to include, among other functions, the Admissions Office, allowing
  convenient access at the front of the campus, and a good location to begin a campus tour with
  prospective students and parents.
- A future academic building will replace the existing Facility Maintenance and Office Building. This building will frame the campus gateway experience by framing the east-west pedestrian connection north of the Student Union. This building will also help frame a new campus quad east of McAuliffe Residential Building.
- A new Public Safety Facility will anchor the improved intersection of the Loop Road and Jericho Park Road. This facility will replace Goodloe Apartments.
- A future Research / Incubator Building will be located at Route 197 at the campus entrance. The facility, similar to the Center for Business and Graduate Studies, will provide space to help foster business, research and academic partnerships. This building will afford Bowie State University additional visibility from Route 197.
- Two new Residence Halls are located west of McKeldin Gym, forming a new residential quad along the northern end of the Western Promenade. This residential community will provide shared common space with food service opportunity.
- A new larger and more appropriately scaled Residential Hall will replace Kennard Residence Hall. The new Residence Hall will help create a sense of enclosure and physical separation between Holmes Plaza and West Courtyard. This Residential Hall will continue to preserve residential life in the heart of the campus and reinforce the residential presence between the academic core to the south and athletics to the north.
- The James Physical Education Complex will be expanded to the east providing additional sense of enclosure to Holmes Plaza. When the Towers Residential Hall is demolished a new quad will be created between James Physical Education Complex and Haley Residential Hall.
- A future field house will be located east of the existing track, providing additional indoor recreational and athletic facilities. This facility anchors the northern end of the Eastern Promenade.
- McKeldin Gymnasium will be renovated and expanded to provide an on-campus fitness facility for residents, an important component of residential life. The expanded McKeldin will front on the new West Promenade residential quad and the existing Holmes Plaza.

- A new football stadium is proposed in its current location and features new stands, public bathrooms, concessions and ticketing. New decorative fencing will provide structure and enclosure around the stadium. A plaza at the southwest corner of the stadium will serve as a terminus for the East Promenade and monumental stairs adjacent to the future field house. Convenient parking will be provided to better serve visitors less able to walk from the campus. Together these features will create a football venue appropriate for a collegiate team.
- The softball field is re-oriented to provide improved orientation and a more generous, comfortable setting. The slope between the track and softball field will be shaped to create a nature seating area with views around the backstop and infield of the softball field. A pathway traversing the slope along the track & field will provide easy access between the stadium and the West Promenade.
- The Maintenance Facility and Offices are relocated to a site outside the Loop Road, on the northwest corner. This is a more suitable location for the maintenance operations and storage, rather than its current location at an important campus entrance.
- Two new practice fields will be located within the Athletic precinct of the campus. A practice field north of the Loop Road and east of the proposed Maintenance Facility and Offices will provide the trail connector between the Bowie Heritage Trail and WB&A Trail. The shared parking between the Maintenance Facility will help mitigate parking demand for this practice location. The other practice field will be located southeast of the Stadium. This field will be connected by a trail and bridge connection to the southern end of the stadium and a path connection to the new quad north of the Student Common.

#### VEHICULAR CIRCULATION AND PARKING

- The Master Plan illustrates two significant proposals to the major roadway system. To facilitate traffic movement, turning circles are proposed along Jericho Park Road at the intersection with the main entrance road and with the east end of the Loop Road.
- On the southwest portion of the campus, it is recommended that Bowie State reacquire the MARC parking lot in order to complete the Loop Road in a consistent fashion. All campus parking then remains inside the loop road, and can be configured efficiently with pedestrian considerations.
- Campus Drive will be reconfigured as an important campus entrance, providing clear sequence from the Jericho Park Road to a monumental campus drop-off adjacent the Student Union. This road way will reuse the median portion of Loop Road and extend this street design to the proposed drop-off. Secondary access and drop-off to the Fine and Performing Arts Center will be preserved and the eastern portion of the Loop Road will terminate perpendicularly into the realigned Campus Drive, eliminating confusion for visitors.
- Parking Lots K, J and J1 will be reconfigured to improve the clarity of vehicular movement, reduce
  pedestrian and vehicular conflicts and maintain parking capacity. Parking Lot K will be reduced in size
  adjacent to the Computer Science Building to enhance the pedestrian experience from the East
  Promenade to the Fine and Performing Arts Center. Parking Lot J-1 will be expanded south to the
  proposed Security Building. A future parking structure is envisioned on Lot J-1 if additional parking
  demand requires it.
- Two new surface parking lots will be developed north of the new academic building adjacent to the Student Commons. These parking lots will replace Parking Lot I and H and provide additional parking spaces for the University. These parking lots will provide residential parking, but also serve athletic events.
- Structured parking will be provided, if necessary, at Parking Lot D to provide the parking needs for a growing residential and academic facilities concentrated on the west side of campus.
- Surface parking lot B will be expanded inward to the campus to fill the void created by the demolition of MLK building. Access to this parking lot will be restricted to few locations with a landscape edge along Loop Road.

- A new parking lot will be located parallel to the Loop Road northwest of the track. This parking area will provide parking to residences and for athletics.
- New tree planting is recommended for both new and existing parking lots. Parking lot islands can be utilized for bio-retention as well as tree planting.
- The proposed vehicular and pedestrian tunnel to connect to the proposed Village Center and new MARC Station is shown to align with the new western gateway between the new Humanities Building and parking garage.

#### PEDESTRIAN CIRCULATION AND CAMPUS OPEN SPACES

- Existing parking Lot K east of the Computer Science Building will be reduced in size to create an important pedestrian connection between the Fine and Performing Arts Center and the East Promenade.
- A significant green open space is proposed in the new residential quad to provide casual recreation space for residence and McKeldin Gym.
- A significant green open space is proposed north of the Student Center along the east side of McAuliffe Residential Community. As the space continues north the open space transitions into a wildlife corridor between the Stadium and new practice field. The wildlife corridor provides natural drainage and ground water recharge functions as well as habitat for species.
- The West Promenade is extended to the north, along the relocated tennis courts and connecting to the practice field, Maintenance Facility and trail connection linking to the WB&A Trail and Bowie Heritage Trail.
- The East Promenade will extend north along the face of the new Field House, terminating on monumental stairs descending down to the Bulldog Stadium Plaza.
- Completion of the pedestrian system around the Loop Road will provide safe walking and jogging circuit.
- The pedestrian connection to the Village Center should be emphasized, with traffic calming features at the intersection with the Loop Road.

#### WAYFINDING

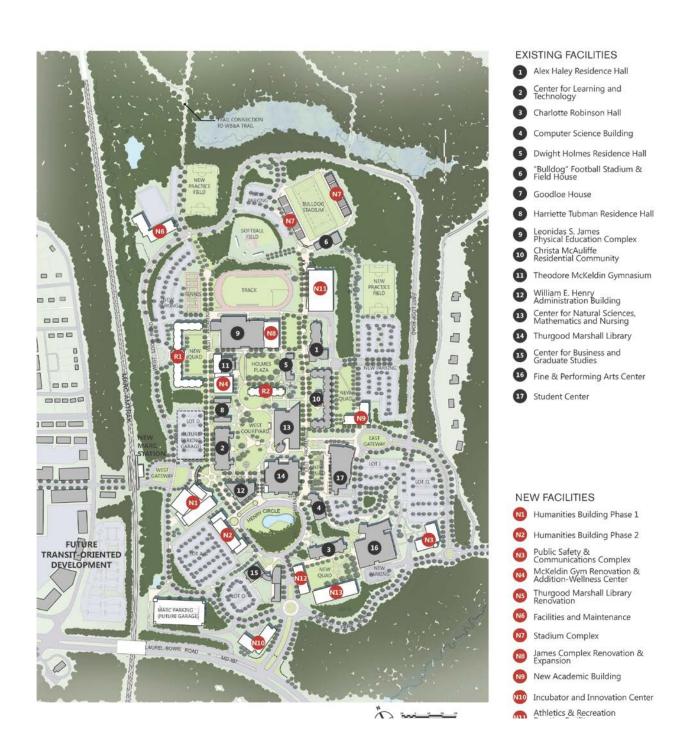
- Develop a comprehensive wayfinding master plan for the campus to coordinate the campus brand, signage and visual information to enhance the approach from all modes of travel and foster a sense of arrival and place on the campus. This document should identify a family of sign types to improve navigation to and throughout the campus.
- Visitor and accessible parking should be Identified and located conveniently within vicinity of destinations such as Student Center and Henry Administration Building. Update campus maps and identify on visitor and accessible parking on these maps.
- The proposed traffic circles on Jericho Park Road provide a visually direct location for welcome signs with directional information for key destinations. The realignment of East Loop Road to a new Student Center gateway will limit motorist decision points and improve the approach from Jericho Park Road.
- The common language of site furniture, lights and landscape forms should continue to be used to reinforce the identity of the campus or sub-regions of the campus.
- The extensions of East and West Promenade should use existing material palette and pattern to unify the Athletics area with the campus core.

The proposed campus development plan is on the following pages:

### DEVELOPMENT PLAN



### **DEVELOPMENT PLAN (Alternative)**



### AERIAL VIEW OF DEVELOPMENT PLAN

