

PRINCE GEORGE'S COMMUNITY COLLEGE

FACILITIES MASTER PLAN 2012-2022



TABLE OF CONTENTS

List of Figures and Tables

Acknowledgements

Glossary of Terms

0	Executive Summary	Page 6
	0.1 Purpose and Process	
	0.2 College Overview	
	0.3 Vision, Mission and Values	
	0.4 Education Programs	
	0.5 Planning Factors and Space Needs Analysis	
	0.6 Facilities Master Plan Principles and Recommendations	
1	Overview of the College	Page 17
	1.1 Introduction	
	1.2 History	
	1.3 PGCC Today	
	1.4 PGCC Going Forward	
	1.5 What Makes PGCC Unique	
2	Education Programs	Page 26
	2.1 Instructional Organization	
	2.2 Education Programs	
	2.3 Enrollment	
	2.4 Faculty and Staff	
3	Space Needs Analysis	Page 36
	3.1 Introduction and Overview	
	3.2 Space Inventory	
	3.3 Changes to Facilities/Space Inventory	
	3.4 Space Planning Factors	
	3.5 Space Needs Assessment	

4	Largo Campus Facilities Analysis	Page 49
	4.1 Site Analysis	
	4.2 Sewer, Water and Utility Systems	
	4.3 Heating, Cooling and Electrical Systems	
	4.4 Information Technology Systems	
	4.5 Forestation and Environmental Constraints	
	4.6 Vehicular Circulation, Transit and Bicycle Circulation	
	4.7 Parking	
	4.8 Buildings Analysis	
5	Extension Center Analysis	Page 133
	5.1 Laurel College Center	
	5.2 University Town Center	
	5.3 Westphalia Training Center	
	5.4 Skilled Trades Center	
	5.5 John E. Howard Elementary School	
	5.6 Joint Base Andrews	
6	Recommendations	Page 142
	6.1 College-Wide Strategic Recommendations	
	6.2 Largo Campus Planning Principles	
	6.3 Largo Campus Site Recommendations	
	6.4 Largo Campus Infrastructure Recommendations	
	6.5 Largo Campus Building Recommendations - Capital Projects	
	6.6 Largo Campus Maintenance and Infrastructure	
	6.7 Largo Campus Sustainability Recommendations	
	6.8 Largo Campus 2022 to 2032 Recommendations	
	6.9 Largo Campus Proposed Further Studies	
7	Implementation Strategies and Costs	Page 168
	7.1 Implementing the Facilities Master Plan	
	7.2 Costs	

LIST OF FIGURES AND TABLES

Sources: Unless otherwise noted, the source for tables and figures is the PGCC Office of Planning, Assessment and Institutional Research.

Figure 0.1	Largo Campus Existing Conditions Aerial	Figure 4.1	Largo Campus Existing Conditions Aerial
Figure 0.2	Largo Campus Illustrative Facilities Master Plan	Figure 4.2	Largo Campus Existing Conditions Site Plan
Table 0.1	Space Guidelines Application including funded projects	Figure 4.3	Largo Campus Existing Gateways and Views
Table 0.2	PGCC FMP Project Cost Summary	Figure 4.4	Largo Campus Existing MNCPC Zoning Districts
Table 1.1	Enrollment Characteristics: Fall 2012	Figure 4.5	Largo Campus Existing Open Space
Figure 1.1	PGCC Location Map	Figure 4.6	Largo Campus Existing Pedestrian Linkages
Figure 1.2	PGCC Organizational Chart	Figure 4.7	Largo Campus Existing Topography
Figure 2.1	PGCC Academic Affairs Organization	Figure 4.8	Largo Campus Existing Sewer and Water
Figure 2.2	PGCC WDCE Organization	Figure 4.9	Largo Campus Existing Site Utilities
Figure 2.3	Credit Hour by Academic Division	Figure 4.10	Largo Campus Existing Storm Water
Table 2.1	Historical Enrollment Headcount Trends (Fall 2006-2012)	Figure 4.11	Largo Campus Existing Forestation and Environmental Constraints
Table 2.2	Current Credit Enrollment Distribution (2012)	Figure 4.12	Largo Campus Existing Vehicular Entry Circulation
Table 2.3	Current Non-Credit Enrollment Distribution (2012)	Figure 4.13	Largo Campus Existing Vehicular Exit Circulation
Table 2.4	Comparative Summary: Day and Evening On-Campus Credit Hour Generation (Fall 2012)	Figure 4.14	Largo Campus Existing Parking
Table 2.5	Faculty and Staff	Figure 4.14	Existing Parking Inventory
Figure 3.1	Current Inventory by Location	Figure 4.15	Largo Campus Existing Building Usage
Table 3.1	FICM Classification System	Figure 4.16	Largo Campus Existing Building Conditions
Table 3.2	PGCC Space Inventory by Location, Fall 2013	Figure 4.17	Largo Campus Constraints & Opportunities
Table 3.3	Credit Enrollment Planning Factors (as of the Fall Term)	Table 4.1	Largo Campus Existing Pad-Mounted (Oil-filled) Transformers (Fall 2013)
Table 3.4	Continuing Education Enrollment Planning Factors (as of the Fall Term)	Table 4.2	Largo Campus Existing Parking Inventory (Fall 2013)
Table 3.5	Credit Faculty as of the Fall Term	Table 4.3	Largo Campus Existing Needs Analysis
Table 3.6	Credit Faculty by School as of the Fall Term	Table 4.4	Largo Campus Alternate Parking Needs Analysis
Table 3.7	Staff as of the Fall Term	Figure 6.1	Largo Campus Illustrative Facilities Master Plan - Concepts
Table 3.8	State Planning Guidelines Data Summary	Figure 6.2	Largo Campus Illustrative Facilities Master Plan - Design Elements
Table 3.9	Space Guidelines Application Including Funded Projects	Table 6.1	Largo Campus Parking Impacts
Table 3.10	Space Utilization for Credit Instruction (M-F, 8am to 5pm)	Table 6.2	Space Inventory Including Proposed Capital Projects
		Table 7.1	PGCC FMP Project Costs

ACKNOWLEDGEMENTS

PGCC Facilities Master Plan Steering Committee Working Group

Oretha Bridgwaters-Simms	Board Chair
Alonia C. Sharps	Chief of Staff
Bill Blank	Technology Services – Infrastructure Planning Manager
David Buonora	Workforce Development and Continuing Education – Assistant to Vice President
Henry Dickson	Administrative Services - Facilities Planning and Programming
Mara Doss	Academic Affairs - Senior Academic Administrator to Vice President
David Mosby	Administrative Services of Facilities Management
Marcus Winder	Student Services - Program Coordinator, Student Conduct & Community Standards

PGCC Senior Team

Charlene M. Dukes	President
Sandra F. Dunnington	Vice President for Academic Affairs
Thomas E. Knapp	Vice President for Administrative Services
Tyjaun A. Lee	Vice President for Student Services
Joseph L. Martinelli	Interim Vice President for Workforce Development and Continuing Education
Joseph G. Rossmeier	Vice President for Technology Services
Alonia C. Sharps	Chief of Staff

PGCC Board of Trustees

Oretha Bridgwaters-Simms
 C. Michael Walls, Esquire
 Sidney L. Gibson
 Aimee E. Olivo
 Samuel J. Parker, Jr.
 Elizabeth Susie Proctor
 Lynn Loughlin Skerpon, Esquire
 Floyd E. Wilson, Jr.
 Kevoy J. Young

Facilities Master Plan Consultant Team

Architect – Cho Benn Holback + Associates
 David Benn, LEED AP, Principal
 Anath Ranon, AIA, Project Manager
 Michael Crowley, Designer
 Emily Childs, Designer
 Planning and Engineering – Whitman Requardt & Associates, LLP
 Jack Nye, AICP, Academic/Facilities Planner
 Brad Jones, PE, Civil Engineer
 Il Kim, PE, Electrical Engineer
 Craig Hossfeld, PE, Mechanical Engineer
 Adrienne Eiss, Transportation Planner
 Steve Harr, PE, Transportation Engineer
 Scott Dombrowski, Graphic Artist
 Information Technology - USSI
 Reginald Sheppard, RCDD, CTS, CSI, Principal
 Cost Consultants - TCT Cost Consultants
 Martin Miller, Managing Director

GLOSSARY OF TERMS, ABBREVIATIONS

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

BVE: Bound Volume Equivalent. The physical space required to accommodate a variety of library materials in amounts equal to one single typical book.

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 a specific subject or discipline by equipment or room configuration.

Contact Hour: A unit of measure that represents an hour of scheduled instruction given to students. Also referred to as clock hour.

Core Space: Space necessary because of existence of the institution or program without regard to other factors.

CR: Credit

Credit Hour: A unit of measure representing the equivalent of an hour (50 minutes) of instruction per week over the entire term. It is applied toward the total number of hours needed for completing the requirements of a degree, diploma, certificate, or other formal award.

Facilities: Any physical structure or space required by the institution for the performance of its programs and related activities.

Facilities Inventory: Room-by-room and building-by-building listing of assignable spaces, their primary use, their size and their capacity.

FICM: Facilities Inventory and Classification Manual

FT: Full Time

FTDE or FTDES: Full-Time Day Equivalent Student. The total number of on campus credit hours taught before 5:00 p.m. during a given semester, divided by 15.

FTE or FTES: Full-Time Equivalent, Full-Time Equivalent Student. The total number of on campus credit hours taught during a given semester, divided by 15.

FTEF: Full-Time Equivalent Faculty. A base factor statistic equal to full-time faculty plus 25% of all part-time faculty.

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.

HCS: Head Count Students

HEGIS: Higher Education General Inventory Survey (HEGIS) series

HVAC: Heating, ventilation, and air conditioning systems.

Infrastructure: Physical assets with a long useful life that are normally stationary in nature and can be preserved for a significantly greater number of years than most capital assets. Examples of infrastructure assets include roads, bridges, tunnels, drainage systems, water and sewer systems, dams, and lighting systems.

LEED: Leadership in Energy and Environmental Design

MHEC: Maryland Higher Education Commission

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 those spaces defined as structural, mechanical, service and circulation areas.

On-Campus: Refers to PGCC's Largo campus only.

OPAIR: PGCC Office of Planning, Assessment, and Institutional Research

PT: Part Time

SCH or WSCH: Student Contact Hour. A measure of scheduled interface time between students and teacher. Usually expressed in terms of Weekly Student Contact Hour (WSCH), which is the number of hours per week of required interface.

EXECUTIVE SUMMARY

0.1 PURPOSE AND PROCESS

The purpose of the Facilities Master Plan (FMP) is to create a vision and framework to guide the future development of facilities at Prince George's Community College (PGCC) over the next decade and beyond, including exploring the ramifications of enrollment growth at all locations. While the FMP concentrates on the main campus at Largo, it also sets forth strategic recommendations for the entire College. In addition, the Maryland Department of Budget and Management (DBM) and the Maryland Higher Education Commission (MHEC) both use the FMP in their review process for capital project funding requests from colleges and universities.

Implementation of the FMP concept plan for the Largo Campus will result in campus development that achieves a greater presence in the community and is sensitive to the surrounding environment. Implementation of the FMP will also accomplish:

- A stronger institutional identity marked by prominent campus edges and gateway buildings.
- A compact academic core with an integrated network of outdoor spaces and pathways.
- A more pedestrian friendly campus.
- Preservation and expansion of green spaces and environmentally sensitive areas on campus.
- Meeting the projected ten year facility/space needs of the College.

More specifically, the FMP has been developed in accordance with "Smart Growth" principles and identifies the location, scope of work, and budget magnitude for future facility projects generated in response to immediate and long term needs. This FMP is holistic; it also addresses programmatic relationships, the creation of open spaces, pedestrian connections, landscape features, parking and service areas, utility issues, public safety, environmental stewardship, and other issues.

MHEC requires that all public state higher education institutions update or

complete a new FMP, minimally every five years. However, the College is permitted to update it annually as needs warrant or as desired. The previous PGCC FMP was completed in 2008.

In developing the FMP, a collaborative process was undertaken to facilitate participation and input from College stakeholders representing all organizational units. To lead the process, a Steering Committee was formed consisting of faculty, staff and administrative leaders, representing all organizational divisions and constituencies of the College, as well as the Chairperson of the Board of Trustees. The Steering Committee was responsible for providing guidance, oversight and direction to the consultant team in the development of a creative FMP that embraces the larger community. A smaller Working Group was created by the Steering Committee and charged to work directly with the consultant team in collecting data and information, and in reviewing draft sections of the FMP to provide feedback in developing a complete draft of the FMP for presentation to the Senior Team and Board of Trustees.

The planning process was undertaken in three phases over six months. The first phase involved gathering information, making observations, completing stakeholder interviews and analyzing data. Input from more than 100 faculty, staff, administrative, student and trustee stakeholders was collected to inform the consultant team on challenges facing the College, as well as opportunities to be explored. The input, data, and observations were documented and analyzed to create a needs assessment and provide a basis for the development of the draft FMP.

The second phase consisted of formulating planning principles and conceptual site design options, which were then presented to the College for discussion, feedback, and direction. After receiving and applying this feedback, implementation strategies were drafted for consideration, discussion and selection. These items were synthesized into a draft FMP.

The final phase of the process involved presenting the draft FMP to the President and Senior Team and the Board of Trustees for review and discussion. Feedback was collected from both groups and incorporated into the final FMP.

0.2 COLLEGE OVERVIEW

The Prince George's Community College (PGCC) was founded in 1958 in Largo, Maryland, and is a public, open-admissions, two-year degree-granting institution serving the local residents and business community. Over the past 55 years, PGCC has become the fourth largest community college in Maryland with 44,000 students enrolled annually, and has grown and evolved to meet the educational and work force training needs of Prince George's County and the region. In addition to the Largo Campus, the College has also expanded to six extension center sites.

Prince George's County is an important and robust part of the Washington, D.C., Maryland and regional economies. The population and job market in Prince George's County are projected to grow over the next decade. The County is positioned to capitalize on the region's large federal presence, diverse workforce, strong educational institutions and high median incomes. Its location is one of many building blocks for sustained job creation and economic prosperity. The current economic development outlook in the County is very positive as illustrated by a number of new development projects that are underway. These projects include the MGM National Harbor Casino, the Development in Westphalia, the new Prince George's County Hospital, and other potential development projects along the Blue, Green and Orange Metro lines. All of these projects will impact the College's programming and enrollment.

A specific example of how one of these projects will impact PGCC is the recent decision by Dimensions Healthcare System to construct a new \$650 million regional medical center at the Largo Town Center Metro Station. This development sets the stage for the advancement of the county's healthcare and life sciences cluster and is expected to become a "hotspot" in the county for medical and biopharmaceutical research, health care services, and health-related education and training. It creates an enormous opportunity to catalyze job growth and will spur increased demand for educational programs in various health care areas currently offered at PGCC.

As a result of several factors including: its location, the role of being a first choice institution by more than 50% of County residents, and the workforce demand generated by the robust regional economy; PGCC was named as one

of the 50 fastest growing public two-year colleges in the nation (*Community College Week*, 2012). This trend is projected to continue over the next decade and has positioned the College for a projected enrollment growth of 21% through 2022.

Simultaneous with undertaking enrollment growth, the College will continue to improve the student experience, the quality of educational offerings, and degree completion rates. This will be achieved in part by implementing pathways designed to promote student retention, progress and completion. Advancement in these areas has been made. The College's progress was recognized in 2013 by the *League for Innovation in the Community College*, which awarded PGCC with an *Innovation of the Year Award* in the *Leadership and Organization* category. However, more progress in this area is needed, as acknowledged in the most recent PGCC Strategic Plan, *Envision Success FY 2014 – FY 2017* and as required by the *Maryland College and Career Readiness and College Completion Act of 2013* (aka SB 740).

0.3 VISION, MISSION AND VALUES

This FMP must advance the PGCC Vision and Mission in a way that embodies the values of the College. The College's stated vision, mission and values are summarized below:

Vision

Prince George's Community College will be the community's first choice for innovative, high quality learning opportunities.

Mission

Prince George's Community College transform students' lives. The College exists to educate, train, and serve our diverse populations through accessible, affordable, and rigorous learning experiences.

Values

Prince George's Community College values learning centeredness in an environment that emphasizes high standards, collaboration and engagement, and pride in the leadership and accomplishments of all members of the college community. As a learning community, we value:

1. Excellence: We strive to ensure quality outcomes through rigorous

learning and training programs designed to develop the mind as well as build character.

2. **Success:** We believe all individuals have the potential to realize their goals.
3. **Diversity:** We promote opportunities to expand our world view through exposure and greater understanding of all peoples, cultures, and lifestyles.
4. **Respect:** We treat every person with the same humanity and courtesy that we expect for ourselves.
5. **Professionalism:** We believe all individuals will approach their responsibilities ethically, fairly and with high standards.
6. **Lifelong Learning:** We promote learning and development at all stages of life. We believe learning takes place at all times both inside and outside of the classroom. We honor and embrace all forms of learning both formal and informal.

0.4 EDUCATION PROGRAMS

PGCC offers more than 200 academic and workforce development programs of study, including a wide range of transfer, career, continuing education and personal development education programs through a mixture of face-to-face and on-line programs. Students can earn associate degrees, certificates, letters of recognition and professional licenses. Course offerings are provided at the main Largo Campus, as well as at six extension centers: Laurel College Center, University Town Center, Westphalia Training Center, Skilled Trades Center, Joint Base Andrews and John E. Howard Elementary School. More than 900 students graduate each year with an associate degree or certificate.

The College currently offers more than 80 credit programs in the transfer and career areas. In addition to the Largo Campus and extension centers, programs are offered at various off-campus sites throughout Prince George's County. For credit programs include the Associate of Arts (A.A.), Associate of Science (A.S.), Associate of Applied Science (A.A.S.), and Associate of Arts in Teaching (A.A.T.) degrees and certificates and letters of recognition in specialized areas. The College also offers a vast array of eLearning courses that support 11 online

degree programs and six certificate programs.

PGCC also offers a wide variety of noncredit workforce development, continuing education, and community education programs. These courses and programs are designed to meet the learning needs of County residents, businesses, government agencies and a variety of special populations with unique and special learning needs. More than 500 courses, workshops and special programs are offered each year at more than 60 locations throughout the County.

As part of a first-of-its-kind in Maryland, PGCC offers dual enrollment for any Prince George's County high school student that meets admission requirements. Through dual enrollment these students may earn college credits while still in high school under the program.

Expanding on the dual enrollment program, the College created the first Middle College High School in the state of Maryland in 2011, known as the Academy of Health Sciences. The Academy is focused on preparing students to enter one of the College's clinical programs in the Health Sciences Division or transfer to a four-year college or university to pursue additional educational offerings related to health sciences. Community interest in the Academy is very high. In 2013, PGCC received more than 2,500 applications for enrollment in the program for only 100 available spots.

All of the College's programs and services are supported by an extensive computing and network environment, including pervasive wireless network access and security systems throughout all facilities.

Although many of the educational program areas have experienced growth in recent years it is expected that Sciences, Technology, Engineering and Mat (STEM), Health Science and a number of continuing education programs will see the highest rates of growth over the next decade in response to growth in specific workforce demand areas of Prince George's County.

0.5 PLANNING FACTORS AND SPACE NEEDS ANALYSIS

Facility space is the biggest physical asset an educational institution possesses and is crucial in supporting educational programs and the teaching and learning paradigm. It is critical to effectively assess the quantitative and qualitative condition of each facility. This assessment is meant to determine the ability of

existing facilities to meet the current and projected needs of the College, as they relate to supporting the institutional mission, strategic goals, and growth initiatives.

The quantitative analysis is based on primary planning factors from Fall 2012 through Fall 2022 that include existing and projected credit enrollment, faculty and staff employees, and library collections. The data for these planning factors are used to compare the existing space inventory of the College with Maryland space allocation guidelines for community colleges to determine existing and projected space quantity needs.

Primary planning factor assumptions made by the college that formed the basis of the quantitative space analysis include:

- Enrollment has grown substantially since 2008. A significant growth rate of 21% is projected through 2022.
- Full time equivalent faculty has increased significantly since 2008. A small growth rate in faculty equivalents of 3% is projected through 2022.
- Full time equivalent staff has seen a slight increase since 2008. A significant growth rate in staff equivalents of 26% is projected through 2022.
- The traditional hardcopy paper media collection will continue to shrink, while electronic media such as on-line resources, DVD's, CD's, etc. will increase substantially. The total bound volume equivalent collection is projected to increase by 32% through 2022.

Other planning assumptions made by the college projected for 2022 include:

- On-line instruction will continue at 15% (and possibly greater) of the total credit hours produced.
- Student to faculty ratio for credit classes will remain at 21:1.
- Full time to part time student ratio will remain at 30:70.
- The credit hour production of each of the five Academic Divisions will grow. However, it is anticipated that a greater percentage of this growth will occur in STEM and the Health Sciences.

In applying the state space guideline allocations to determine projected future space needs, previously funded projects at the Largo Campus were included in the existing College space inventory. These projects include: Facilities Manage-

ment renovation/addition, Lanham Hall renovation/addition, Former Childtime renovation/adaptive reuse, Queen Anne addition/renovation and Culinary Arts new construction. With this adjustment to the existing space inventory and based on growth in the planning factors outlined previously, PGCC is projected to incur a total institutional space deficit of 43,562 NASF through 2022.

This projected total space deficit for the College includes both projected surpluses and deficits by space category (see Table 0.1). Space surpluses are projected in classrooms and library stacks. Space deficits are projected in the following categories: office, laboratory (including substantial deficits in open laboratory), student study, athletic and physical education, food service and shop/storage.

In addition to the quantitative study, a qualitative analysis was conducted, which included collection of a wide range of data, including facility age, condition, and utilization, as well as information gathered from interviews with College stakeholders and visual inspections. Observations derived from this analysis include:

- A majority of buildings on campus are 30 years of age, have not had a comprehensive renovation and are in need of renewal.
- Five academic buildings are more than 30 years of age and have not been renovated to achieve the necessary configurations and flexibility or to provide the instructional technology required to adequately support the current paradigm of teaching and learning styles.
- Most academic buildings have little or no informal student study and collaboration space outside of the instructional spaces.
- Most instructional spaces could be utilized better through more effective scheduling.
- PGCC is currently undertaking a detailed space utilization analysis for the Largo Campus. The purpose of the report is to develop strategies and recommendations for improving the scheduling and utilization of spaces to optimize usage.

0.6 FACILITIES MASTER PLAN PRINCIPLES AND RECOMMENDATIONS

0.6.1 College-wide Strategic Recommendations

In addition to facilitating efficient growth and addressing facility and space issues, the following recommendations are meant to enable the PGCC to fulfill its mission, vision, and advance the strategic plan:

1. Identify and commit to the strategic location of programs and enrollment
 - The Largo Campus has adequate land and infrastructure resources and is operationally best equipped to accommodate substantial growth. A large majority of planned enrollment growth should be directed to the Largo Campus.
 - University Town Center and Laurel College Center should continue to grow as needed to accommodate demand, as lease space is available and as growth is economically sustainable.
 - The facility at the Westphalia Training Center provides capacity to expand the types of courses and trades that are taught at the Skilled Trades Center. Consideration should be given to evaluating the skilled trades offerings at each of these locations.
 - As long as it can be economically sustained, Andrews Joint Base extension center should continue to provide programs at current levels and primarily through online instruction.
 - The John E. Howard Elementary School should continue to support Culinary Arts until the new Culinary Arts Center is built and occupied at the Largo Campus.
 - A feasibility study, including identification of potential sites and academic offerings, should be completed for a new South County and/or North County extension center or campus. In the North County, Laurel College Center recently expanded to a full floor of leased space in the building it occupies. University Town Center will nearly double in NASF by the Fall 2014. PGCC has the option to buy the Westphalia Training Center property for a South County location. However, it is located away from the population centers of the North County where there has been significant growth in enrollment. The College needs to decide whether to locate a potential new campus in the north county, where there are larger population centers and anticipated population growth, or in the south county, where there is a smaller population and less anticipated growth. A south county location might have the advantage of capturing much of the student “bleed” into nearby campuses of the College of Southern Maryland, yet it has the disadvantage of being located away from the population centers of the north county where there has been growth in enrollment. National Harbor has been discussed as a possible South County location.
2. Develop a stronger physical identity for the extension centers to integrate with the Largo Campus and expand the PGCC brand into the community, while creating a welcoming environment for visitors and students.
 - New campuses or extension sites should be directed to existing and/or future transit oriented developments (TOD) areas. New facilities, either purchased or leased, should be located within a 10 minute walk of a transit center whenever possible.
 - Ensure that institutional support facilities are developed to keep pace with College growth in instructional facilities.
3. For the Largo Campus, use capital and facility projects and funding to:
 - An approach similar to that of retail establishments is recommended. This approach will entail developing a standard welcoming configuration and design for the public entry space of each extension center. The design would include standard materials for flooring, walls, ceiling and lighting, as well as furniture and signage. This College wide identity extends into the graphics developed for signage. These graphics should be coordinated with the branding of the Largo Campus as well as printed material distributed by PGCC. The College should develop a design concept that is consistent with the College mission and will serve the program for the next five to ten years.
 - Upgrade or construct flexible, active and engaging instructional spaces equipped with technology to support the teaching/learning paradigm (Flipped Classroom) and face-to-face and on-line instructional program needs.

- Continue right-sizing instructional space configuration, size and station capacity to best support curriculum requirements and current teaching/learning paradigm, as well as improve space utilization and campus operations.
- Capitalize on opportunities to renovate and reconfigure existing inefficient spaces to be reused for other purposes, alleviating space deficiencies.
- Add or expand facilities to support large meetings, events, and productions that support the student experience and provide opportunities that enhance the quality of life for faculty, staff and the community.
- Develop informal and convenient student study and learning spaces in academic buildings across campus. In the process, create opportunities for students and faculty to interact and engage outside of class.
- Implement and increase the use of renewable energy and sustainable products to become more energy efficient, reduce operational expenses and make campus more sustainable. This effort should be coordinated with achieving LEED certification, or higher (such as LEED Silver, Gold or even Platinum) for capital projects.
- Address and offset deferred maintenance backlogs and reduce the level of daily maintenance.
- Address internal building and ambient campus ADA compliance issues.
- Use existing under-utilized space on campus to accommodate the “swing/surge” space requirements for future capital projects that require temporary dislocation of occupants.
- Capitalize on the forthcoming detailed space utilization study to inform detailed facility programming for future capital renovation and new construction projects.
- Contract with a licensed landscape architect to complete a comprehensive Landscape Master Plan for the campus.

0.6.1 Largo Campus Planning Principles

Planning principles have been developed to create a framework and serve as a guide in developing the FMP recommendations. Future facility programs developed in support of new capital projects should be assessed for how the proposed project addresses and/or is consistent with these principles. The planning principles include:

1. Reinforce the core.
 - Make the academic core a walkable, identifiable, convenient, attractive place by clustering new buildings amongst the existing buildings to form a compact, connected, cohesive campus that is enhanced by special places.
2. Make the best use of limited land by developing more density. This can be achieved by constructing three or more story buildings, where possible.
3. Create a new active, inviting face along Maryland Route 202.
 - Take advantage of gateway sites at the corner and entrances to the campus to provide new buildings, at least three stories, to create an attractive and engaging edge between the campus and the community.
4. Connect and reinforce green space throughout the campus.
 - Make the most of campus amenities like the south quad, the picnic grove, and the tree lined inner ring.
 - Reinforce and extend the green, parkway-type character along Campus Way South to the corner to provide a park-like face to the campus on that side.
 - Expand the south quad to the proposed Health and Wellness Center to increase the size of the academic core.
 - Provide site furniture to help make more pleasant, informal outdoor meeting spaces.
 - Connect the woods and the athletic fields to the center of campus to help integrate landscape /pedestrian walks and promote usage of these areas.

- Include landscape and other site infrastructure and utility improvements as part of individual capital building projects.
5. Create a more pedestrian friendly campus by eliminating vehicular-pedestrian conflicts.
 - Redevelop the inner ring road as a tree-lined pedestrian/service path, and reconfigure the outer ring road to make it a handsome tree lined boulevard.
 6. Intercept parking at entries.
 - Provide parking structures at campus entries to encourage drivers to park before circulating through campus.

0.6.2 Largo Capital Project Priorities, Implementation, and Cost

The location of recommended capital projects, in priority order, has been illustrated in Figure 0.2. Complementing the plan is Table 0.2 that identifies the magnitude of construction cost for each project. The plan has been developed and ordered to facilitate implementation logistics and phasing of projects to maintain campus functionality during construction. It is anticipated that some of the projects will not be constructed in the ten year planning period due to funding constraints.

At this time the College will continue to lease space at all existing extension centers, except at Skilled Trades which is owned by PGCC. As opportunities to purchase existing extension center sites arise, the College will consider this option if it is determined to have enough benefit programmatically and financially. The planned enrollment growth identified in the FMP can be accommodated by land and facilities currently owned at the Largo Campus or leased at extension centers. Opportunities for new extension center sites should be evaluated on a case by case basis regarding the lease versus own issue.

0.6.3 Proposed Further Studies

The following studies are recommended:

- Landscape and Beautification Plan to include native and low-maintenance plants.
- Environmental Study to investigate potential development on protected areas.

- Architectural campus standards.
- Signage plan.
- Feasibility Study for new North County and/or South County campus.
- Sustainability Plan.
- Archaeological surveys (where required.)



KEY

1. KENT HALL
 2. ACCOKEEK HALL
 3. BLADEN HALL
 4. BLADEN HALL
 5. LARGO STUDENT CENTER
 6. CHESAPEAKE HALL
 7. LANHAM HALL
 8. MARLBORO HALL
 9. QUEEN ANNE FINE ARTS
 10. NOVAK FIELD HOUSE
 11. R. L. BICKFORD NATATORIUM
 12. CONTINUING EDUCATION
 13. STEEL BUILDING
 14. FORMER CHILDTIME CHILDREN'S CENTER
 15. FACILITIES MANAGEMENT
 16. TRACK and PRACTICE SOCCER FIELD
 17. GOLF RANGE
 18. TENNIS COURTS
 19. RACQUETBALL COURTS
 20. FACILITIES MANAGEMENT SHOPS/AUTO BAY
 21. WAREHOUSE
 22. BASEBALL DIAMOND
 23. SOFTBALL DIAMOND
 24. PICNIC GROVE
 25. TEMPORARY BUILDINGS 1 AND 2
 26. TEMPORARY SERVICES BUILDING TS
 27. TEMPORARY SERVICES BUILDING TO
 28. TEMPORARY SERVICES BUILDING TZ
 29. CENTER FOR ADVANCED TECHNOLOGY
 30. CENTER FOR HEALTH STUDIES
 31. TEMPORARY BUILDING 3
 32. MAIN SOCCER FIELD
- A. NORTH QUAD
B. SOUTH QUAD

Figure 0.1 Largo Campus Existing Conditions Aerial

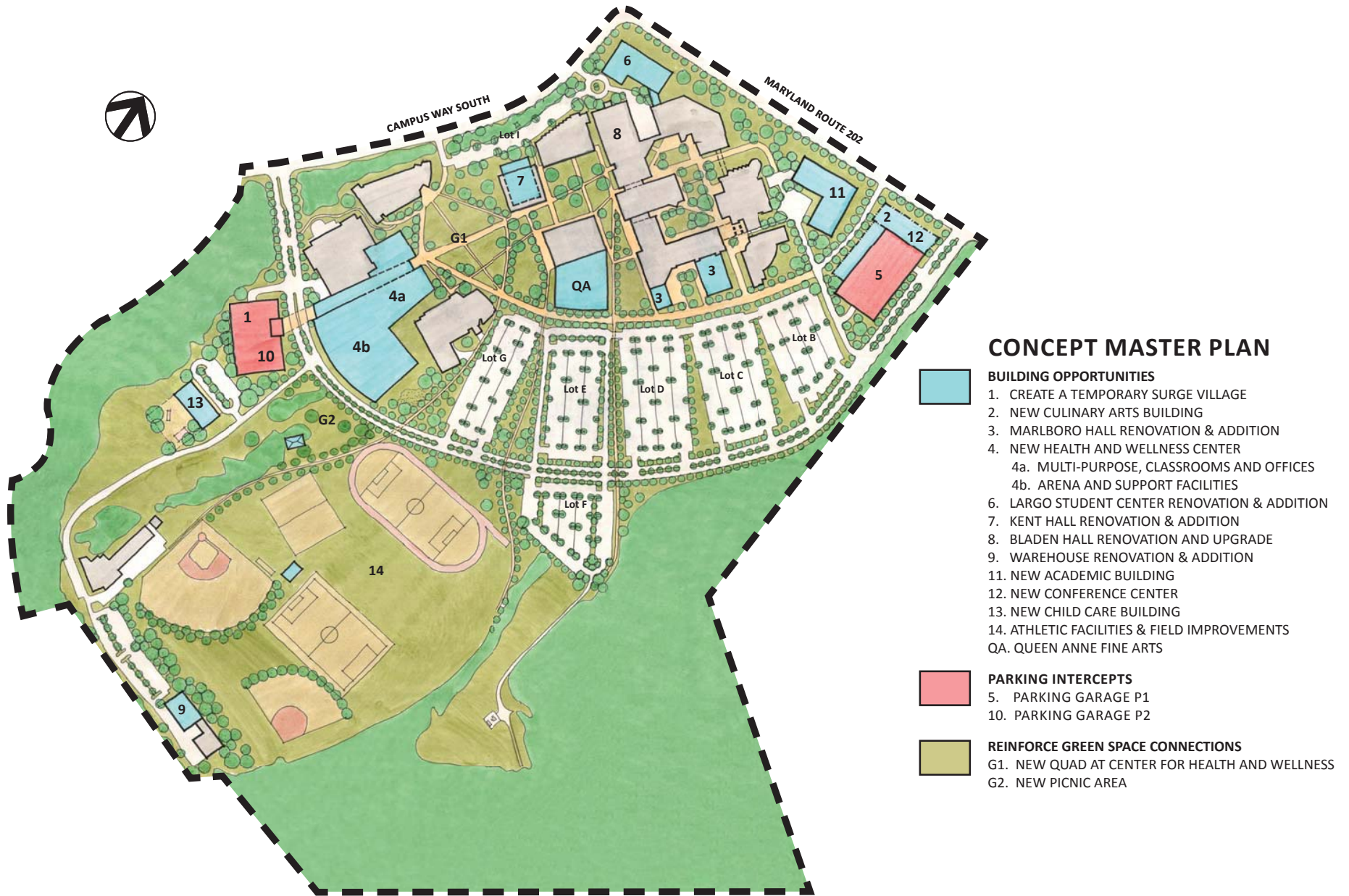


Figure 0.2 Largo Campus Facilities Master Plan

HEGIS/FICM CODE	HEGIS/FICM CATEGORY	Need Current 2012	Inventory Current 2012	Surplus/ (Deficit) 2012	Need 10 Years 2022	Inventory 10 Years 2022	Surplus/ (Deficit) 2022
100 (110-115)	CLASSROOM	63,284	84,175	20,891	86,248	105,553	19,305
200	LABORATORY	138,817	141,212	2,395	189,190	168,080	(21,110)
210-15	Class Laboratory	119,661	132,392	12,731	163,083	156,870	(6,213)
220-25	Open Laboratory	19,156	8,820	(10,336)	26,107	11,210	(14,897)
250-55	No Allowance						
300	OFFICE	164,839	162,340	(2,499)	223,932	190,974	(32,958)
310-15	Office/ Conf. Room	161,808	153,242	(8,566)	220,074	181,176	(38,898)
320-25	Testing/Tutoring	3,031	9,098	6,067	3,858	9,798	5,940
350-55	Included w/ 310						
400	STUDY	40,914	47,557	6,643	55,268	57,843	2,575
410-15	Study	28,506	19,247	(9,259)	38,850	29,533	(9,317)
420-30	Stack/Study	8,863	24,145	15,282	11,727	24,145	12,418
440-55	Processing/Service	3,545	4,165	620	4,691	4,165	(526)
500	SPECIAL USE	73,332	69,590	(3,742)	93,192	69,838	(23,354)
520-23	Athletic	64,610	60,228	(4,382)	81,160	60,628	(20,532)
530-35	Media Production	7,722	9,362	1,640	11,032	9,210	(1,822)
580-85	Greenhouse	1,000	0	(1,000)	1,000	0	(1,000)
600	GENERAL USE	63,805	78,510	14,705	80,203	86,481	6,278
610-15	Assembly	18,122	28,167	10,045	21,432	31,113	9,681
620-25	Exhibition	3,031	2,426	(605)	3,858	4,026	168
630-35	Food Facility	23,226	14,894	(8,332)	31,651	17,094	(14,557)
640-45	No Allowance						
650-55	Lounge	8,295	11,832	3,537	11,304	12,832	1,528
660-65	Merchandising	3,131	8,757	5,626	3,958	8,982	5,024
670-75	No Allowance						
680-85	Meeting Room	8,000	12,434	4,434	8,000	12,434	4,434
700	SUPPORT	30,068	37,218	7,150	40,564	41,053	489
710-15	Data Processing	2,921	11,617	8,696	4,162	9,778	5,616
720-25	Shop/ Storage	22,143	21,402	(741)	29,594	22,154	(7,440)
730-35	Included w/ 720						
740-45	Included w/ 720						
750-55	Central Service	4,561	3,453	(1,108)	6,216	8,375	2,159
760-65	Hazmat Storage	443	746	303	592	746	154
800	HEALTH CARE	1,112	1,244	132	1,443	1,244	(199)
900	No Allowance						
050-090	No Allowance						
	Total NASF:	576,171	621,846	45,675	770,040	721,066	(48,974)

Table 0.1 Space Guideline incl. previously funded projects (Facilities Management, Lanham, Queen Anne, Culinary Arts)

SEQUENCE		Reno, Add Demo, New	Master Plan 2022 GSF	Change GSF	Cost
3	Marlboro Hall site work	RENO, ADD	148,656 50,000	18,500	\$57,370,240
3a	Steel Bldg - Sculpture & Ceramics site work	DEMO	0 16,000	(4,866)	\$40,330
4a, 4b	Health and Wellness Center site work, New Quad	NEW	133,000 430,000	133,000	\$50,527,500
4b	Continuing Education site work	DEMO	0 35,000	(15,320)	\$134,580
4b	Novak Field House site work	DEMO	0 85,000	(35,616)	\$316,504
5	Parking Garage 1 site work inner & outer ring roads	NEW	850 sp 595,000		\$29,998,200
6	Largo Student Center site work	RENO, ADD	114,116 90,000	45,000	\$33,081,980
7	Kent Hall site work	RENO, ADD	45,738 50,000	15,000	\$14,872,730
8	Bladen Hall renovate upper floors only	RENO	101,136 60,682	0	\$12,136,320
9	Warehouse Building site work	RENO, ADD	19,290 50,000	10,000	\$2,119,000
10	Parking Garage 2 site work	NEW	750 sp 115,000		\$22,994,500
10	Former Childtime/Surge site work	DEMO	0 35,000	(12,826)	\$118,369
10	Temp TO	DEMO	0	(7,141)	\$34,867
10	Temp TS	DEMO	0	(2,821)	
11	New Academic Bldg site work	NEW	109,000 100,000	109,000	\$69,275,000
12	Conference Center site work	NEW	35,000 40,000	35,000	\$17,155,000
13	Child Care Bldg site work	NEW	16,100 50,000	16,100	\$6,940,000
14	Athletic Facilities Improvements site work	NEW	5,000 10,000	5,000	\$4,800,000
			728,636	308,010	\$321,915,120

Table 0.2 PGCC FMP Project Cost Summary

1 OVERVIEW OF THE COLLEGE

1.1 INTRODUCTION

Founded in 1958, Prince George’s Community College (PGCC) is a public, open-admissions, two-year degree-granting institution serving the residents and business community of Prince George’s County, Maryland. PGCC, along with the University of Maryland, College Park and Bowie State University, are the major educational institutions located in the County. In combination these institutions provide a ready supply of skilled workers to support the growing economies of the County and region.

1.2 HISTORY

PGCC was founded in 1958 by the Board of Education of Prince George’s County on the recommendation of a Lay Advisory Committee, which had been appointed by the Board. The College first held classes in September of 1958 offering a full program of first year courses in business administration, liberal arts, engineering, and teacher education. A faculty of twelve, in addition to the Dean and Director of Personnel-Admissions Officer, served the initial enrollment of 185 students. Suitland High School facilities were obtained for temporary use by the College.

On June 10, 1960, the College awarded the Associate in Arts degree to nine graduates at its first commencement. By 1960 the College had doubled its original size. The faculty had grown to include 24 members and the student body numbered 355. During the 1960-1961 academic year, the Community College Lay Advisory Committee was appointed by the Board of Education and the Board of Trustees of Prince George’s Community College was created being identical in membership to the Board of Education of Prince George’s County. Effective June 1, 1961, the Board of Trustees changed the name of the Office of Dean to that of President.

During the 1963-1964 academic year, plans for a permanent campus at Largo which consisted initially of a four-building complex (Bladen Hall, Kent Hall, Queen Anne Fine Arts, and Novak Field House) situated on 150 acres was ap-

proved by the Board of Trustees. The first academic classes were held at the Largo location during the 1967 Summer Session. The Maryland Legislature, during the 1969 session, authorized the creation of a separate Board of Trustees for PGCC. The new seven-member Board was appointed by the Governor and took office in July 1969. In July 1975, an elected student member was added to the Board increasing its membership to eight. In May 2009, Governor Martin O’Malley signed legislation that added the eighth appointed board member, thereby bringing the number of board members to nine. The ninth board member was installed in February 2011.

PGCC and Prince George’s County Public Schools opened the first middle college high school in the state of Maryland in July 2011. The Academy of Health Sciences @ PGCC is located in Lanham Hall, on the campus of PGCC. The four-year program blends high school and college work through the use of dual enrollment credits. At the completion of the four-year program, students will meet all requirements for a high school diploma and an associate’s degree.

Over the past 55 years, credit and non-credit program offerings have grown and evolved to meet the educational and work force training needs of the County and region. The development of the physical environment of the Largo campus and the six extension centers has mirrored the changing character and population centers of the County from a suburban/rural setting to more urban/suburban environment.

1.3 PGCC TODAY

Today, PGCC enrolls more than 44,000 (credit and non-credit) students representing 128 countries throughout the world. As a comprehensive institution serving a broad constituency, PGCC is the fourth largest of Maryland’s 16 public two-year colleges that offers a wide range of transfer, career, continuing education and personal development education programs. The College offers more than 200 academic and workforce development and continuing education programs of study, and transfer and scholarship opportunities to four-year colleges and universities. Students can earn associate degrees, certificates, and letters of recognition, through a mixture of face-to-face and on-line programs. These programs are offered at the Largo Campus (main campus) and six extension centers. Figure 1.1 provides the location of the Largo Campus and the extension centers.

Enrollment is characterized by a student body that is 62% female, more than 90% are people of color and the average age is 28 years. More than 70% of PGCC students are part-time and the student body age ranges from the youngest, in the Academy of Health Sciences and Dual Enrollment students from local high schools, to senior citizens taking advantage of credit and non-credit courses as lifelong learners. Figure 1.2 provides a profile of the student body characteristics on campus today.

Presently, the College is governed by a nine-member Board of Trustees. Eight members are appointed to a five-year term by the Governor of Maryland with the advice and consent of the Senate. For each academic year a student is selected to serve as a voting member and is chosen through a comprehensive application and selection process, coordinated by the Office of College Life Services.

The Board is responsible for setting institutional policy and selecting the President of the College who has overall operational authority and responsibility for the institution. The President shares administrative responsibility with the Chief of Staff to the President and five divisional Vice Presidents. This group collectively comprises the "Senior Team" which administers the day-to-day operations of the College.

Faculty, staff and students have the opportunity to actively participate in the governance of PGCC through the College-wide Forum and various ad hoc committees. The College-wide Forum is a deliberative and broadly representative body which exists to recommend general policies and procedures, with particular attention to educational objectives and those matters that affect the common interests of employees and students, to the President.

Figure 1.3 provides a detailed outline of the organizational structure of the college

1.4 PGCC GOING FORWARD

Named as one of the 50 fastest growing public two-year colleges in the nation by *Community College Week* in 2012, PGCC is the first choice of more than 50% of Prince George's County residents. PGCC and Prince George's County is an important and robust part of the Washington, D.C., state of Maryland and regional economies and both are projected to grow over the next decade. The County is positioned to capitalize on the region's large federal presence,

diverse workforce, strong educational institutions, and high median incomes. Its location is one of many building blocks for sustained job creation and economic prosperity. The current economic development outlook in the County is very positive.

These factors combined with the need to increase the number of Marylanders with a postsecondary education and middle level skills to meet Maryland workforce demand, has positioned the College for substantial enrollment growth over the next decade. Growth is anticipated in both credit and non-credit producing programs and courses to support student matriculation, transfer to a four year degree program and workforce training. To effectively plan for and accommodate this anticipated growth PGCC determined that it was prudent to complete a new Facilities Master Plan (FMP) at this time.

To be effective, development of the FMP must advance the PGCC Vision and Mission.

Vision: Prince George's Community College will be the community's first choice for innovative, high quality learning opportunities.

Mission: Prince George's Community College transforms students' lives. The college exists to educate, train, and serve our diverse populations through accessible, affordable, and rigorous learning experiences.

Values: Prince George's Community College values learning centeredness in an environment that emphasizes high standards, collaboration and engagement, and pride in the leadership and accomplishments of all members of the college community. As a learning community, we value:

1. Excellence: We strive to ensure quality outcomes through rigorous learning and training programs designed to develop the mind as well as build character.
2. Success: We believe all individuals have the potential to realize their goals.
3. Diversity: We promote opportunities to expand our world view through exposure and greater understanding of all peoples, cultures, and lifestyles.
4. Respect: We treat every person with the same humanity and courtesy that we expect for ourselves.
5. Professionalism: We believe all individuals will approach their responsibilities ethically, fairly and with high standards.

6. Lifelong learning: We promote learning and development at all stages of life. We believe learning takes place at all times both inside and outside of the classroom. We honor and embrace all forms of learning both formal and informal.

In addition to advancing the Vision and Mission, the FMP must be responsive to the strategic goals established by the College (as outlined in *Envision Success FY 2014 – FY 2017*). These strategic goals and priorities represent the collaborative effort of the PGCC community to develop a strategic direction focusing efforts on enhancing student success, institutional effectiveness and reaching for the College Vision and Mission. The Plan lays out goals and priorities. The four strategic goals and their specific initiatives are:

Goal 1: Enhancing pathways that guide students to achieve their academic, career and personal goals.

- A. Improve the front door experience.
- B. Implement pathways designed to promote student retention, progress and completion.
- C. Expand innovative models for delivery of courses, programs and services.

Goal 2: Cultivating a welcoming and responsive learning environment.

- A. Promote and foster a collegiate experience.
- B. Expand investment in learning environments to support retention, progression and completion.
- C. Expand positive interaction and cultural awareness amongst student, faculty and staff.

Goal 3: Fostering local and regional partnerships.

- A. Partner with local K-12 institutions to enhance college and career readiness.
- B. Cultivate current and potential partnerships to respond to the diverse community and workforce.
- C. Leverage public and private funding partnerships to support the strategic focus.

Goal 4: Promoting and supporting a collaborative institutional culture for communication, decision-making and governance.

- A. Increase engagement of all faculty and staff in current and new communication modalities.
- B. Increase the engagement of all students in current and new communication.
- C. Increase the use of data in decision making.
- D. Broaden opportunities for students, faculty and staff feedback and input in decision making processes.
- E. Increase engagement of students, faculty and staff in the governance structure of the College.

1.4.1 Maryland College and Career Readiness and College Completion Act (aka SB 740)

This legislation, enacted on July 01, 2013, is comprehensive in nature and was developed in response to the following:

- Many countries have surpassed the United States in the percentage of young adults with a postsecondary degree.
- By 2018, two-thirds of all jobs in Maryland will require some postsecondary education.
- Governor Martin O'Malley has set the goal that at least 55% of Maryland's adults aged 25 to 64 years will hold at least an associate's degree by 2025.
- Nearly two-thirds of high school graduates who enroll in a community college and one-quarter of high school graduates who enroll in a four-year institution require remediation.

The following is a summary of the goals and requirements of the legislation that need to be considered by PGCC going forward.

High School Curriculum and Graduation Requirements

Beginning with the 2016 - 2017 school year, Maryland State Department of Education (MSDE) must, in collaboration with local school systems and public community colleges, develop and implement transition courses or other instructional opportunities to be delivered in grade 12 to students who have not yet achieved college and career readiness by the end of grade 11.

Maryland Higher Education Commission (MHEC) Coordinating Responsibilities and State Education Goals

MHEC will coordinate institutions of higher education throughout the State to ensure achievement of: (1) that at least 55% of Maryland's adults who are age 25 to 64 hold at least an associate's degree by year 2025; and (2) that all degree-seeking students enrolled in a public community college earn an associate's degree before leaving or transferring.

Transfer Agreement, Reverse Transfer Agreement, and Associate's Degree Incentives

MHEC, in collaboration with the public institutions of higher education, must develop and implement statewide transfer and reverse transfer agreements. A transfer agreement whereby at least 60 credits of general education, elective, and major courses earned at any community college in Maryland toward an associate's of art or an associate's of science degree must be transferrable to any public four-year higher education institution in Maryland for credit toward a bachelor's degree and whereby at least 30 credits earned at any public four-year higher education institution in the State toward a bachelor's degree are transferrable to any community college in the Maryland for credit toward an associate's degree by July 1, 2016.

MHEC and each public institution of higher education must implement incentives for students to obtain an associate's degree before enrolling in a public four-year institution of higher education.

Near Completers

A "near completer" is defined as an individual who has completed some college credits, but does not have a college degree and is no longer attending an institution of higher education. MHEC, in collaboration with institutions of higher education, must create a statewide communication campaign to identify "near completers" in Maryland and to encourage them to re-enroll in an institution of higher education to earn a degree. Specifically, the campaign must focus on "near completers" who earned a minimum grade point average of 2.0 on a scale of 4.0 while in college and earned either at least 45 credit hours at a community college or at least 90 credit hours at a four-year institution of higher education.

MHEC must develop and implement a plan that would provide an incentive to (1) a "near completer" to re-enroll and earn a degree, and (2) a college to identify and graduate "near completers." The incentive plan must use all available resources, including institutional funds, private-sector funds, and State funds.

Degree Plan

A "degree plan" is defined as a statement of the course of study requirements that an undergraduate student enrolled in a public higher education institution must complete to graduate from the institution. Each degree-seeking undergraduate student enrolled at a community college must file a degree plan with the institution on entering the institution. Each undergraduate student who transfers to a public four-year institution with at least 45 credit hours of course work must file a degree plan with the institution during the student's first semester at the institution. The degree plan must also follow a pathway to a degree as described below.

Pathways to a Degree

Each public institution of higher education in Maryland must: (1) Develop a pathway system whereby public institutions of higher education establish graduation progress benchmarks for each academic major, and for the general education program for students who have not declared a major; (2) Require the pathway for each first-time, degree-seeking student to include credit-bearing mathematics and English courses in the first 24 credit hours; and (3) Require the pathway for each degree-seeking student enrolled in a developmental course in mathematics, reading, or English concurrent with or in the semester immediately following completion of the developmental course. Students who are in danger of falling behind the program benchmarks must be required to consult with an academic advisor before registration.

Standard Number of Credit Hours

Beginning with fall 2015, the standard number of credits for an associate's degree from a public community college is 60 credit hours. The standard number of credits does not apply if (1) the degree program is defined as more than a two-year associate's degree; (2) professional accreditation requires a higher number of credit hours or requires course work that cannot be completed in

60 credits; or (3) certification requirements result in a need for credit hours in excess of 60. The institutional governing board, in consultation with MHEC, may approve additional exceptions to the credit hour requirements.

Dual Enrollment

A public institution of higher education may not charge tuition to a dually enrolled student. For each dually enrolled student who is enrolled in a public school in a jurisdiction, the local board of education must pay for up to four courses in which the student is enrolled, while a student is in a public secondary school in Maryland.

Conclusion

The magnitude of impact that this sweeping legislation will have on PGCC is not completely known. However, it is anticipated that it will increase student enrollment, the demand for academic advising services and college administrative support personnel, and the corresponding instructional, office and student support space. In addition, parking facilities may be impacted by additional dual enrollment students depending on the location and time of courses and support services offered to meet demand.

1.4.2 Prince George's County General Plan

Plan Prince George's 2035, includes comprehensive recommendations for guiding future development within the County including designated Regional Transit Centers, Neighborhood Reinvestment Areas, and Rural and Agricultural Areas. The plan contains recommended goals, policies and strategies for: Land Use; Economic Prosperity; Transportation and Mobility; Natural Environment; Housing and Neighborhoods; Community Heritage, Culture, and Design; Healthy Communities; and Public Facilities. Plan implementation through prioritization of strategies, measuring short- and long-term success, public engagement, intergovernmental coordination, and public-private partnerships are also described.

Excerpts of the findings from *Plan Prince George's 2035*, relating to PGCC, to be considered and planned for in the PGCC FMP are summarized below.

Location, Location, Location

Prince George's County is in an enviable position. Linked to the nation's capital by a dense transit and road network (including the I-95/495 and I-295 corri-

dors), it is an important part of Washington, D.C.'s robust regional economy.

It is positioned to capitalize on the region's large federal presence, diverse workforce, strong educational institutions, and high median incomes. Prince George's County is also strategically located in between Washington, D.C. and Baltimore. Its location is one of many building blocks for sustained job creation, social equity, and economic prosperity.

Federal Hubs

In 2012 there were approximately 27,000 federal employees and a range of federal facilities in the county. Seeing as the presence of the federal government is an important source of high paying jobs, key opportunities have been missed. Prince George's County has neither captured its proportionate share of federal leases, particularly for office space, nor has it been successful in promoting spinoff development associated with its federal facilities. Several initiatives will help alter these trends. The Defense Base Realignment and Closure (BRAC) activity has directed several thousand new jobs to Joint Base Andrews (JBA), potentially expanding the base's footprint even further. A HUD Community Challenge Grant has funded the preparation of an action plan to identify market-driven strategies and development incentives to attract federal and spin-office tenants as well as mixed income housing along the southern Metro Green Line. The JBA Joint Land Use Study Implementation Committee is working on a range of issues, including ways to promote base-related economic development. And lastly, a site adjacent to the Greenbelt Metro Station has submitted a bid to house the new headquarters for the FBI, which could bring upwards of 11,000 new jobs.

Major Infrastructure Investment – the Purple Line

The proposed 16-mile, \$2.2 billion Purple Line light rail transit system is the largest transportation infrastructure investment in Prince George's County. It is envisioned to have 21 stations, 11 of which are in Prince George's County.

As a major new east-west connector between New Carrollton and Bethesda in Montgomery County, it will enhance mobility and reduce travel times for thousands of area residents. It will serve as a critical economic driver by linking existing employment centers with emerging development areas and by leveraging public investment.

Economic Catalyst—Regional Medical Center

The August 2013 decision by Dimensions Healthcare System to construct a new \$650 million regional medical center at the Largo Town Center Metro Station sets the stage for the advancement of the county's healthcare and life sciences cluster. The center is expected to become a "hotspot" for medical and biopharmaceutical research, health care services, and health-related education and training. It creates an enormous opportunity to catalyze job growth.

Emerging Industry Clusters

Four existing and emerging industry clusters have the potential to accelerate economic growth through spin-off development and job creation in the county. These clusters are in business support services, health care and life science, information, communication, and electronic industries, and federal government leasing opportunities. Six submarkets in the county contain concentrations of these industries. The College Park/Riverdale Park submarket rates highest in terms of its overall and office-specific investment opportunities. The Greenbelt/Berwyn Heights and the Largo—Capital Beltway Corridor submarkets also score well in terms of their office development potential.

National Harbor

Strategically located at the I-295 and the Capital Beltway interchange, National Harbor is a 350-acre, mixed-use waterfront development, featuring five hotels, a range of upscale dining and shopping options, Class A office space, and condominiums and townhouses. Attracting over eight million visitors a year, the site is a major destination and revenue generator in Prince George's County.

Industrial Sector

Industrial activities accounted for 32 percent of the county's employment base or approximately 68,000 jobs in 2013. Established and economically healthy industrial areas are vital generators of higher wage jobs with good benefits and upward mobility for residents with less formal educational. The industrial sector is also important because it is more likely to hire county residents and accommodates activities critical to county and municipal operations - local start-ups and innovation, and back offices supporting other sectors such as finance, insurance, and tourism. There is the potential to capitalize on the industrial sector as an economic engine through expanding into promising new fields, such as the green economy and high-tech, information-intensive

subsectors. These processes are essential to maintaining a diverse and healthy county economy.

More detailed projections and recommendations from the plan include:

1. It is projected that between 2010 and 2020 the population of Prince George's County will grow by 36,300 or 4% and jobs by 35,200 or 10%.
2. The projected growth in occupations across the primary industry clusters in the county reflect both high and low skilled occupations. A number of major occupational groupings, representing a mix of high and low skilled occupational groups, stand to increase at a higher growth rate than overall job growth. These include:
 - Computer and mathematical science (high skilled).
 - Business and financial operations (high skilled).
 - Protective service (low skilled).
 - Building and grounds cleaning and maintenance (low skilled).
 - Personal care and service (low skilled).
3. Other fast growing low skilled occupational groups include:
 - Construction and extraction.
 - Installation, maintenance, and repair.
 - Health care support.
 - Community and social services.
 - Healthcare practitioners and technicians.
4. Recommended Policy 10, Develop and maintain a skilled workforce to attract and support business growth and improve the county's economic competitiveness.
 - Prioritize science, technology, engineering, and math education in public schools and at the Prince George's County Community College.
 - Establish workforce-based partnerships, including internships, apprenticeships, and work study programs to connect students to future employers, particularly in targeted industry clusters.
 - Establish and secure federal, state and private grants and resources to

support age-appropriate career and technical training, counseling, and placement programs focused on the skill requirements of small businesses, targeted industry clusters, and the county's industrial sector.

5. Recommended Policy 11, Nurture emerging industries, such as the green business sector, with potential to become strong economic engines and job generators.
 - Strategically identify sectors that have significant growth potential and could capitalize on the county's competitive advantages and assets.
 - Assess the need for strategic technical and financial support and incubator and workforce training programs.

Both the County and the College are planning for population and job growth, as well as enrollment growth, respectively. PGCC will play a very important role in revising existing and developing new educational and training programs to be responsive to the projected workforce needs of the County. PGCC should continue to work closely with the County to coordinate the growth of existing educational programs and the development of new programs (and corresponding facilities) in order to support workforce education and training initiatives. Priority should be given to educational areas and programs focused on science, technology, engineering, math and health disciplines.

1.5 WHAT MAKES PGCC UNIQUE

Although all colleges share similarities, they are each unique in their own ways. Among programs and distinctions that make PGCC unique are:

1. In 2012, PGCC was named as one of the 50 fastest growing public two-year colleges in the nation by *Community College Week*.
2. PGCC was recognized as an "Achieving the Dream" institution in 2013
 - *Envision Success* (the formal name of the institutional priority and completion agenda at PGCC) has been recognized by the League for Innovation in the Community College for the 2013 Innovation of the Year Award in the Leadership and Organization category. As one of only 42 recipients nationwide, the college has been recognized for outstanding innovations that serve the nationwide pool of community colleges and their students. The goal of the PGCC strategic plan is to

ensure that students complete degrees, certificates, and preparation courses for certifications and licensures. It addresses three major components—time, choice, and structure—while emphasizing quality, rigor, and relevance in an environment of broad engagement.

3. PGCC was named as a National Center of Academic Excellence in Information Assurance.
 - A distinction jointly sponsored by the National Security Agency and the U.S. Department of Homeland Security, PGCC is the lead institution for the national Cyber Watch program, which provides specialized curricula developed in partnership with cyber industries and government agencies to help prepare students for opportunities in cyber technology careers.
4. PGCC is the first Community College in Maryland to have a Middle College High School partnership in the Health Sciences (also known as the Academy of Health Sciences).
 - The Academy is focused on preparing high school students to enter one of PGCC's Health Sciences Programs or transfer to a four-year college or university to pursue additional educational offerings related to health sciences. The Academy's rigorous, innovative four-year program combines high school and college courses through dual enrollment credits. Students are introduced to college courses in their freshman year of high school. By 12th grade, college courses are the foundation of the program. At the time of graduation from the Academy, students will have met the requirements for a high school diploma and an associate's degree.
5. PGCC serves more students of color than all other Maryland community colleges combined. In 2012 more than 90% of the 44,000 students enrolled at PGCC were of color.

Characteristic	Number	Percent of Total
Full Time-Part Time		
Full Time	4,059	29%
Part Time	9,765	71%
Total	13,824	
Gender		
Female	8,657	63%
Male	5,167	37%
Ethnicity		
African-American/Black	10,495	76%
American Indian	44	0%
Asian or Pacific Islander	513	4%
Hispanic/Latina	1,070	8%
White	737	5%
Other	965	7%
Age		
17 & Under	796	6%
18 - 19	2,754	20%
20 - 29	5,665	41%
30 - 39	2,312	17%
40 - 59	1,945	14%
60+	352	2%

Table 1.1 Enrollment Characteristics: Fall 2012

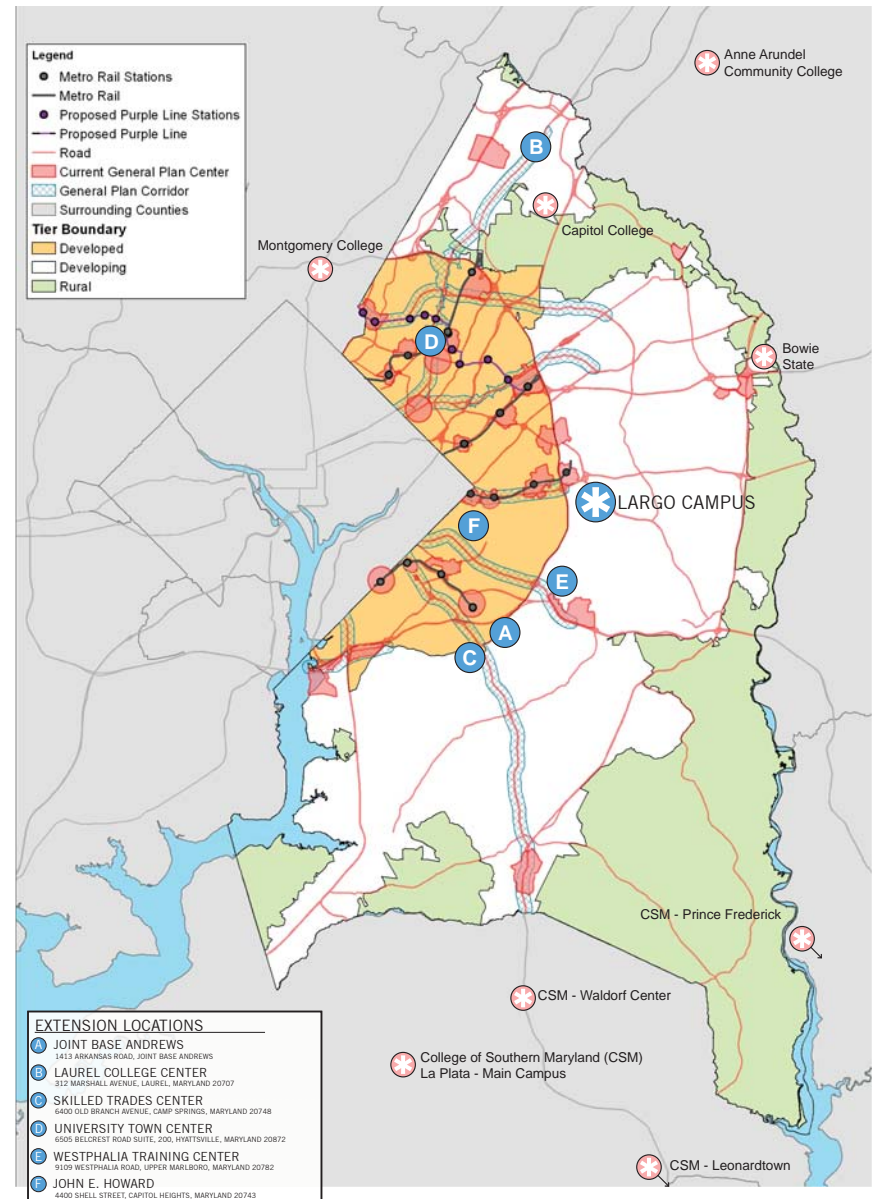


Figure 1.1 PGCC Location Map

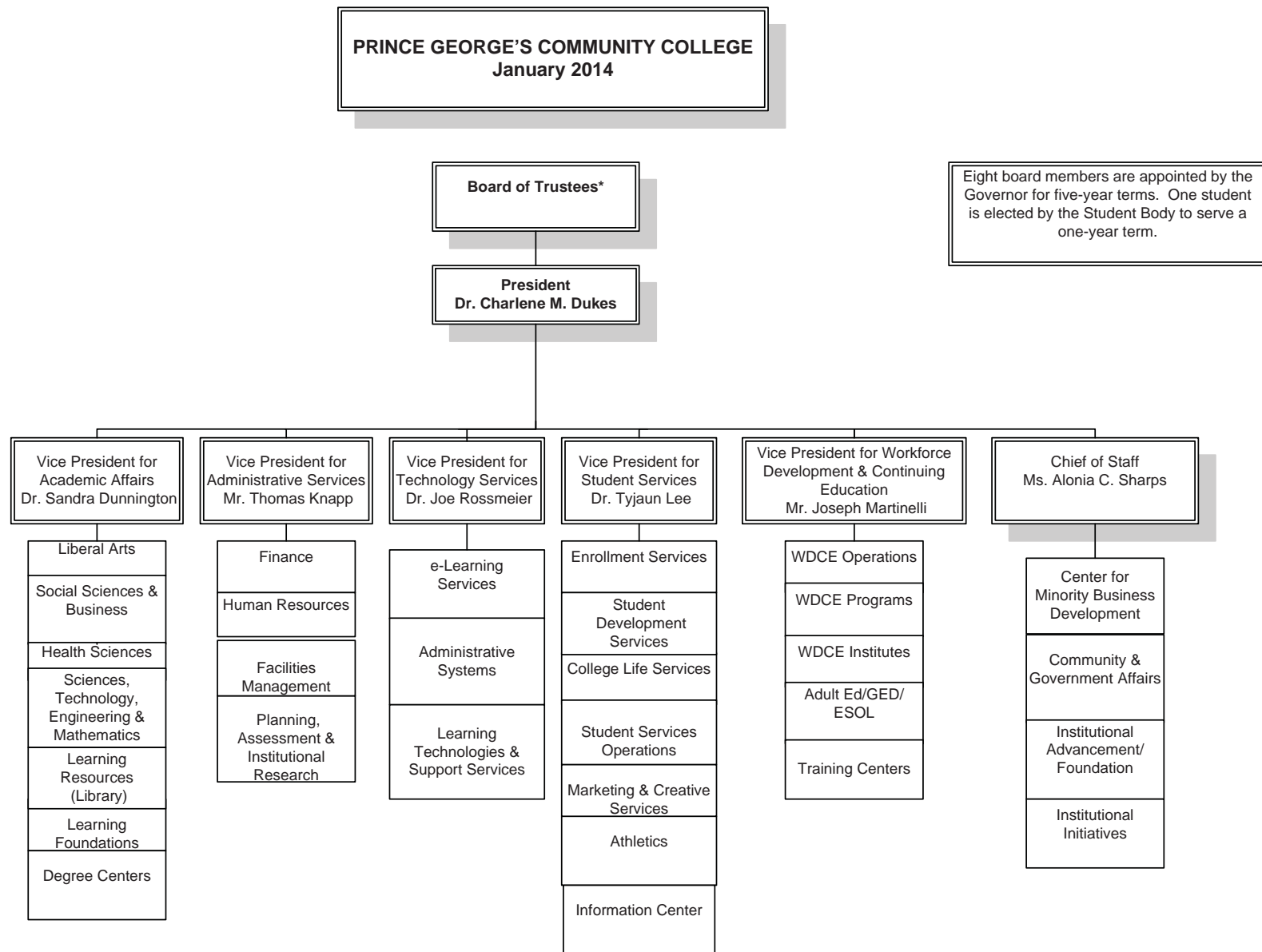


Figure 1.2 PGCC Organizational Chart

2 EDUCATION PROGRAMS

2.1 INSTRUCTIONAL ORGANIZATION

Prince George's Community College (PGCC) is organized to specifically meet the demands and challenges of the vibrant and diverse population of Prince George's County, while also being highly responsive to the needs of the business community. The College is organized into two instructional areas - Academic Affairs and Workforce Development and Continuing Education (WDCE). Academic Affairs develops and manages all credit curricula, programs and courses, while WDCE oversees non-credit and continuing education and training.

2.1.1 Academic Affairs

With more than 245 full-time faculty, approximately 700 adjunct faculty, roughly 150 staff members, and 10 academic administrators, the College serves more than 18,000 credit students annually. Academic Affairs is responsible for serving the holistic learning needs of students in over 150 degree, certificate, and letter of recognition programs through five academic divisions, 20 academic departments, the College Library, and various academic support centers and tutoring labs. These programs and services are available at the Largo Campus, the Laurel College Center, University Town Center, and Joint Base Andrews extension centers. In keeping with the goal of fostering student engagement in a learning-centered environment, Academic Affairs reviews existing programs and develops new programs and services to respond to the educational, personal, and career goals of learners as well as the workforce development needs of employers.

Academic Affairs is led by a Vice President and comprised of five academic divisions and the Learning Resources Division (Library). Each academic division is headed by a Dean and includes discipline specific departments that offer instructional programs. The organization and reporting structure of Academic Affairs is illustrated in Figure 2.1.

2.1.2 Workforce Development and Continuing Education (WDCE)

The WDCE area provides a wide variety of noncredit workforce development, continuing education and community education programs. These courses and programs are designed to meet the learning needs of the County including local residents, businesses, government agencies and a variety of special populations with special learning needs. More than 500 WDCE courses, workshops and special programs are offered each year at more than 60 locations throughout the County. More than 23,500 students are enrolled in noncredit WDCE learning offerings.

WDCE is led by a Vice President and includes two educational divisions. Each division is headed by a Dean. The organization and reporting structure of WDCE is illustrated in Figure 2.2.

2.2 EDUCATIONAL PROGRAMS

PGCC offers a wide range of degree, transfer, workforce development, continuing education and personal development education programs. These programs include the Associate of Arts (A.A.), Associate of Science (A.S.), Associate of Applied Science (A.A.S.) and Associate of Arts in Teaching (A.A.T.) degrees as well as credit certificates and letters of recognition in specialized areas. The College currently offers more than 150 programs in the credit transfer and career areas plus an array of non-credit courses and community service programs. In addition to programs offered at the Largo Campus, programs are offered at various off-campus sites throughout Prince George's County.

2.2.1 Associate Degree Programs

As part of the educational experience, the College prepares its graduates for careers in the global economy and to become productive members of society. Associate degree programs require completion of a minimum of 60 credits and other established requirements for graduation. Programs are designed to provide the first two years of baccalaureate education in preparation for transfer (transfer programs) in addition to programs of study designed to prepare the students for direct entry into the workforce (career programs). The College offers 58 transfer and career programs leading to associate degrees; 23 career programs leading to certificates of proficiency; and six career programs which award letters of recognition.

Associate degree curricula in A.A., A.S., and A.A.T. programs often parallels requirements in the first two years at a four-year college or university with students needing only two additional years of study to complete a Baccalaureate degree. The Associate of Arts (A.A.) degree focuses on the liberal arts, humanities, science, math, technology, the social sciences and fine arts. Scientific and technical studies are the focus of students pursuing the Associate of Science (A.S.) degree. The Associate of Arts in Teaching (A.A.T.) degree focuses in early childhood education, elementary education and secondary education

The Associate of Applied Science (A.A.S.) degree focuses on specific occupational areas, and is intended to provide students with entry-level employment skills, instruction for employed students seeking to upgrade skills, and training for students preparing for a career change.

The College is fully accredited by the Middle States Commission on Higher Education with specific programs approved or accredited in:

1. Paramedic A.A.S. and Certificate

Accredited by the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoA EMSP) through the Commission on Accreditation of Allied Health Programs (CAAHEP) and approved by the Maryland Institute for Emergency Medical Services Systems (MIEMSS), The Emergency Medical Services Board.

2. Health Information Management A.A.S.

Accredited by the Commission of Accreditation for Health Informatics and Information.

3. Management Education (CAHIM) Nuclear Medicine A.A.S. and Certificate.

Accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT).

4. Nursing LPN Certificate.

Approved by the Maryland Board of Nursing.

5. Nursing RN A.S.

Accredited by the Accreditation Commission for Education in Nursing (ACEN), formerly the National League for Nursing Accrediting Commission

(NLNAC) and approved by the Maryland Board of Nursing.

6. Radiography A.A.S.

Accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT).

7. Respiratory Therapy A.A.S.

Accredited by the Committee on Accreditation for Respiratory Care (Co-ARC).

2.2.2 Transfer Programs

Transfer programs are designed to prepare students for the upper division of a four-year college or university upon completion of an Associate of Arts, Associate of Science, or Associate of Arts in Teaching degrees. According to the 2013-2014 Catalog, the College offers transfer programs in the following areas:

Associate of Arts Degree (A.A.)

- African-American Studies
- Art
- Arts and Sciences
- Biology
- Chemistry
- Communication
- Communications/Public Relations/Journalism
- Communication/Speech
- Communication/Writing
- Criminal Justice
- Dietetics
- Economics
- English
- Food Science
- General Studies
- Health Education
- Historical Fieldwork and Research
- International Studies
- Mass Communication
- Mathematics
- Music
- Philosophy
- Physical Education
- Pre-Law

- Psychology
- Sociology
- Theatre
- Women's Studies

Associate of Science Degree (A.S.)

- Accounting
- Business Administration
- Computer Science
- Engineering
- Environmental Studies
- Forensic Science
- Information Science
- Nursing, RN

Associate of Arts in Teaching Degree (A.A.T.)

- Elementary Education/Elementary Special Education
- Secondary Education - Chemistry
- Secondary Education - English
- Secondary Education - Mathematics
- Secondary Education - Physics
- Secondary Education - Spanish

2.2.3 Career Programs

Career programs are designed to meet increasing demands for technicians, skilled workers and craftsmen for employment in industry, business and government. These programs provide students with technical skills necessary for employment and career advancement in their chosen field. According to the 2013-2014 Catalog, the following career programs lead to Associate of Applied Science degrees, certificates, and letters of recognition:

Associate of Applied Science Degree (A.A.S.)

Accounting
Business Management
Computer Engineering Technology
Construction Management
Correctional Services
Criminal Justice
Culinary Arts
Cybercrime Investigation
Early Childhood Education
Electrical Construction Technology
Electronic Engineering Technology
Electronic Service Technology
Engineering Technology
Fire Science
Health Information Management
Hospitality Services Management
Human Services
Information Security
Information Technology
Marketing Management
Medical Assisting
Meeting and Event Management
Nuclear Medicine Technology
Paralegal/Legal Assistant
Paramedic
Police Science
Radiography
Residential Property Management
Respiratory Therapy
Space Engineering Technology
Technical Studies
Visual Communication

Certificate

A+Preparation
Accounting
Animation/Hyper Media
Animation and Screen-Based Design
Cisco CCNA Preparation
Computer-Aided-Drafting
Computer Graphics
Computer Programming
Computer Service Technology
Construction Management
CPA Preparation
Criminal Justice
Culinary Arts
Cybercrime Investigations
Database Systems
Dietetics
Disaster Recovery and Risk Management
Early Childhood Special Education
Electrical Construction Technology
Electronic Analysis and Repair
Emergency Medical Technician – Intermed.
Entrepreneurship
Environmental Studies
Emergency Medical Technician
General Management
Graphic Design
Health Care Management
Hospitality Services Management
Human Resources Management
Illustration
Information Security
Information Security Management
International Management

Marketing Management
Mastery in Early Childhood Education
Media Production
Medical Coding/Billing Specialist
Meeting and Event Management
Nuclear Medicine Technology
Network Systems Administrator
Nursing (LPN)
Paralegal/Legal Assistant
Paramedic
Police Academy
Proficiency in Infant and Toddler Development
Proficiency in School Age Care & Management
Public Administration
Purchasing and Contracting
Residential Property Management
Small Business Management
Sports Management
Supervisory Management
Systems Administrator
Technical Support Specialist
Technology Core Concepts
Theatre and Entertainment
Transfer Studies
Web Management

Letter of Recognition

Accounting
Accounting and Taxation
Business Management
Construction Management
Disaster Recovery and Risk Management
Early Childhood Special Education
Entrepreneurship Management
Food Service Management
Health Care Management
Hospitality Services Management
Human Resource Management
International Management
Lodging Management
Meeting and Event Management
Ornamental Horticulture
Public Administration
Purchasing and Contracting
Real Estate
Supervisory Management
Women's Studies

2.2.4 Non-Traditional Studies

PGCC students have a variety of opportunities to earn college credits through nontraditional course formats and individualized programs. These formats are oriented toward self-directed students who either have encountered obstacles in meeting their educational goals through conventional academic scheduling, or prefer the flexibility afforded through these options. Through non-traditional course formats, students can access a broadened learning environment, develop a more productive relationship with academic faculty, and pursue a personalized approach to study tailored to fit their individual situation and learning style. Examples of non-traditional learning formats include: online courses, hybrid web courses (combined classroom and online), interactive television courses, and intensive one-week workshops.

In addition to the program formats offered by PGCC, various statewide programs are available to County residents at other Maryland community colleges. County students enrolled in these programs are eligible for in-county tuition rates at the host institution. In addition, Maryland residents who do not live in the County are eligible for in-county tuition if they are formally admitted to one of the following PGCC Statewide Instructional Programs in:

- Forensic Science (A.S.).
- Nuclear Medicine (A.A.S. and Certificate).
- Theatre and Entertainment Technology (Certificate).

2.2.4 Dual Enrollment and the Academy of Health Sciences (aka Middle College)

The College offers dual enrollment for any Prince George's County high school student that meets admission requirements. Through dual enrollment these students may earn college credits while still in high school under the requirements of the College and Career Readiness and College Completion Act of 2013. As a result of this legislation, dual enrollment for the county's high school students is expected to increase 10-fold over the next several years.

As part of its dual enrollment offerings, the College created the first Middle College High School in the state of Maryland in 2011 known as the Academy of Health Sciences. The on-campus high school opened in the summer of 2011 with a bridge program for 100 rising 9th grade students and is in the process of growing to a targeted student enrollment of 400. Since 2011, the Academy of Health Sciences has added a new class of 100 students each year and currently has a total enrollment of 303 students.

The Academy is focused on preparing students to enter one of the College's clinical programs in the Health Sciences Division or transfer to a four-year college or university to pursue additional educational offerings related to health sciences or Sciences, Technology, Engineering and Mathematics. The Academy's rigorous, innovative four-year program combines high school and college courses through dual enrollment credits. Students are introduced to college courses in their first year. By 12th grade, college courses are the foundation of the program. At the time of graduation from the Academy, students will have met the requirements for a high school diploma and an associate's degree.

Community interest in the Academy is very high. In spring 2013, PGCC received more than 2,500 applications for enrollment in the program for only 100 available seats.

2.2.5 Workforce Development and Continuing Education (WDCE)

The WDCE area provides a wide variety of noncredit workforce development, continuing education and community education programs. These courses and programs are designed to meet the learning needs of the County including local residents, businesses, government agencies and a variety of special populations with special learning needs. More than 500 WDCE courses, workshops, and special programs are offered each year at more than 60 locations throughout the County. To provide these learning solutions, WDCE partners with dynamic, knowledgeable instructors, businesses, local governments and nonprofit community services agencies. Admission to WDCE programs is open to all students 16 years of age and older, unless the class is specifically designed for a limited age group. Unless otherwise stipulated, there are no educational prerequisites for most courses. WDCE courses and programs are organized under four units, each focusing on the learning needs of a specific target population. These units are:

1. Workforce Development/Center for Business and Industry Training (CBIT) provides career-oriented workforce development solutions for individuals across a broad range of experience and capabilities. PGCC has worked collaboratively with hundreds of local firms and government agencies over the years to improve employee recruitment and retention, implement new technology, upgrade worker skills, improve productivity, and enhance their bottom line. In addition, PGCC Workforce Development Institutes provide businesses, government agencies and educational institutions a collaborative forum for action planning to address county and regional business needs, as well as address emerging economic and workforce development trends. The Institutes advocate for resources, responsive and proactive workforce development programs, and best practices, and assist businesses in the recruitment, development, and retention of a highly skilled workforce. The six institutes are: Computer and Information Technology, Construction and Energy, Hospitality and Tourism, Human Services, Public Safety and Security, and Transportation and Distribution.

2. Continuing Education/Open Enrollment provides a diverse selection of cultural, educational, and practical noncredit classes and certifications for county residents across the entire spectrum from birth through seniors.
3. Adult Education helps adults develop the basic academic and life skills necessary to earn a high school diploma, speak, understand, read and write English, enhance their participation as community and family members, and succeed in the workplace.
4. Community Partnerships works to provide support services to students to assist them as they pursue their education as well as programs for specific populations such as seniors, summer youth, and developmentally disabled children and youth.

2.2.6 Licensing and Certification

Employers rely on a highly skilled workforce to be successful. Individuals who hold industry-recognized credentials are in high demand in the marketplace. To address this need, PGCC has enhanced the number of programs it offers which lead to a professional license or certificate. Of the 16 community colleges in Maryland, PGCC has some of the highest enrollments in programs leading to licensing or certification by state and national organizations. In total, WDCE offers over 50 programs that can lead to a professional credential.

2.3 ENROLLMENT

2.3.1 Historical Enrollment

From 2006 through 2012, the total student enrollment, including full time and part time, fluctuated up and down throughout the decade. Although down slightly from a peak total headcount in 2010, the College experienced an 18% net increase in total headcount over the period to 13,824 students in 2012. During this period the mix of full-time to part-time students has remained relatively stable with part-time students comprising approximately 70% of the enrollment. During this period more than 90% of enrollment each year was comprised of students of color with an average age around 28 years. Table 2.1 provides the historical student enrollment data since 2006.

2.3.2 Current Enrollment

In Fall 2012, a total of 5,492 full time equivalent (FTE) students generated 119,229 credit hours in face to face and on-line day and evening for-credit classes at PGCC. Of this total the Largo Campus generated 84,749 or 71% of the total credit hours for all campuses and 83% of the day credit hours for all campuses. On-line courses represented 15% of the total credit hours generated at all campuses. Table 2.2 summarizes credit enrollment distribution for the Largo Campus, the extension centers, and on-line students.

In 2012, a total of 943 FTE students generated 78,603 weekly student contact hours (WSCH) in face to face day and evening non-credit classes at PGCC. In addition, on-line non-credit courses generated 1,401 WSCH or 2% of the total. Table 2.3 summarizes non-credit enrollment distribution for the Largo Campus, the extension centers and on-line students.

Approximately 80% of the Largo Campus enrollment is concentrated during the day, while the extension centers enroll almost 60% of their students during the evening hours. Not surprisingly, the Largo Campus generates 83% of the total PGCC credit hour production and the extension center produce 57% of the total non-credit WSCHs.

One means to identifying the current academic thrust of an institution is the credit hour distribution among academic divisions. For purposes of establishing baseline data to provide an appropriate rationale for educational space planning, using the space guideline application methodology accepted as the standard tool for justifying the need for facility improvement projects, analysis of credit hour distribution by academic division is fundamental to determining quantitative indicators of space needed. See Table 2.4.

Figure 2.3 provides a summary of the percentage of credit hours before 5 p.m. (day) of Fall 2012 by academic division. The Liberal Arts Division generates the largest amount of credit hours at 32% of the total. However, it should be noted that almost one fifth of all day credit hours on the Largo Campus are for developmental classes. As a supplement, the list below provides an overview of the departments and disciplines in each Academic Division.

Health Sciences Division

Allied Health
Nursing
Health, Nutrition, & Physical Education
Nursing

Liberal Arts Division

Art, Music & Philosophy
Communication and Theatre
English
History, Political Science, Geography, & Anthropology
Language Studies

Sciences Technology Engineering and Math (STEM)

Biological Sciences
Information and Engineering Technology
Mathematics
Physical Sciences and Engineering

Learning Foundations Division

Academic Enrichment
Developmental English/Reading
Developmental Mathematics

Social Science and Business

Business Studies
Hospitality, Tourism & Culinary Arts
Psychological and Sociological Sciences
Public Safety & Law
Teacher Education

2.4 FACULTY AND STAFF

During the 2012 – 2013 school year the College employed 799 full-time faculty, administrative, and support staff and 1,843 part-time faculty and staff. The current ratio of full-time equivalent students to full-time equivalent faculty at the Largo Campus for day and evening classes is 21.1 to 1 (11,935 FTES /565 FTEF.) Table 2.5 provides a summary of faculty, staff and administrative personnel by category and classification.

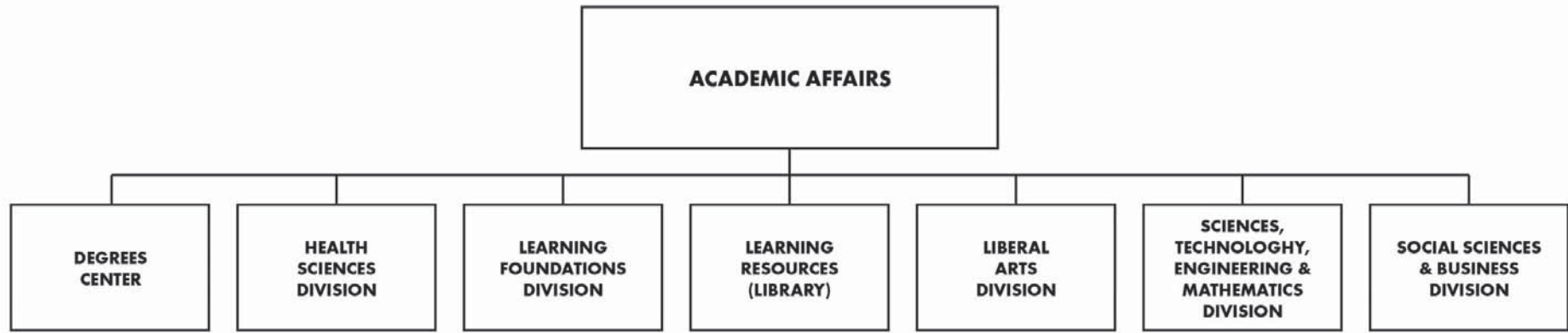


Figure 2.1 PGCC Academic Affairs Organization

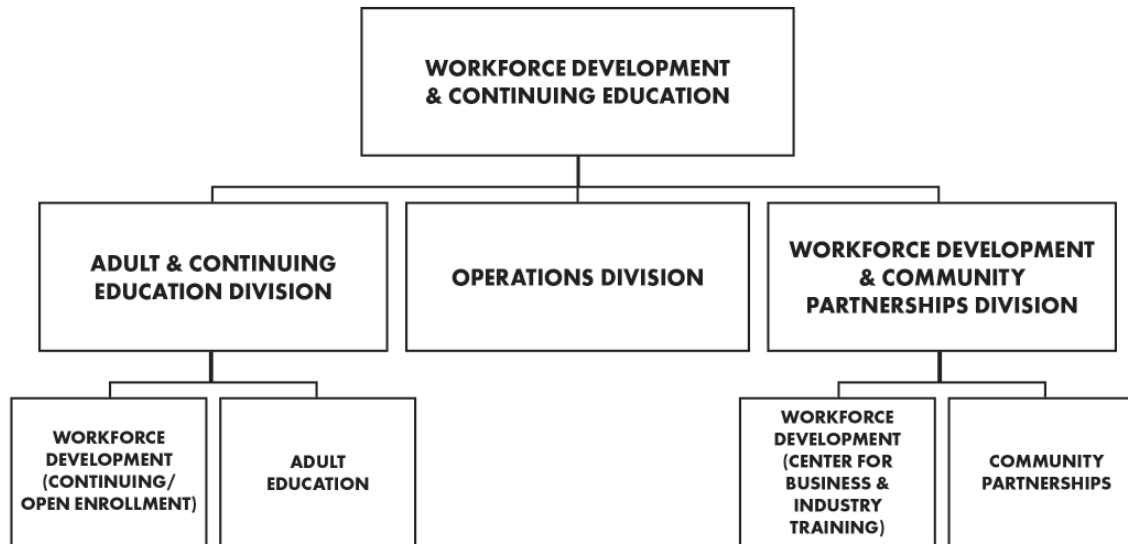


Figure 2.2 PGCC WDCE Organization

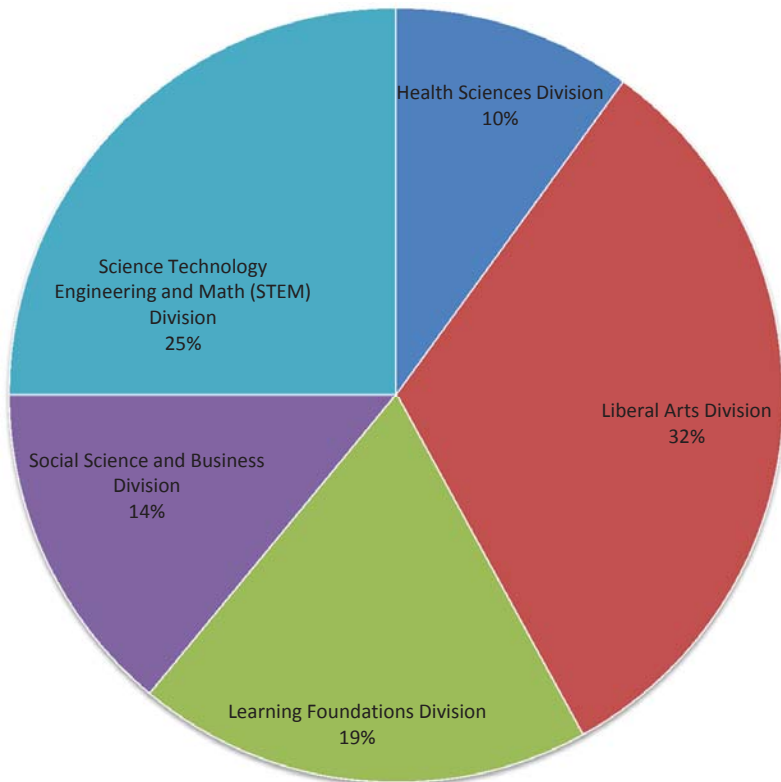


Figure 2.3 Credit Hour by Academic Division

Fall Semester	Full-Time Headcount	Part-Time Headcount	Total Headcount	Total FTE
2006	3,027	8,795	11,822	6,254
2007	3,007	8,854	11,861	6,346
2008	3,071	9,039	12,110	6,398
2009	4,405	9,280	13,685	7,855
2010	4,637	10,177	14,814	8,502
2011	4,620	10,027	14,647	8,456
2012	4,059	9,765	13,824	7,832
% Change	33%	12%	18%	26%
Average Annual Enrollment	3,832	9,420	13,252	7,378

Table 2.1 Historical Enrollment Headcount Trends (Fall 2006-Fall 2012)

Location	Total Credit Hours	Percent of Total	Day Credit Hours (Before 5)	Percent of Total Credit Hours	Total Day Credit FTES
Largo Campus	84,749	71%	68,212	83%	4,547
Extension Centers	16,060	13%	9,559	12%	637
Distance (online)	18,420	15%	4,605	6%	307
Total PGCC	119,229	100%	82,376	100%	5,492

Table 2.2 Current Credit Enrollment Distribution (Fall 2012)

Location	Total Weekly Student Contact Hours (WSCH)	Percent of Total WSCH	Total Day WSCH (Before 5)	Percent of Total WSCH	Total Day FTE
Largo Campus	33,177	41%	24,481	31%	249
Extension Centers	45,426	57%	32,475	41%	694
Distance (online)	1,401	2%	350	1%	23
Total PGCC	80,004	100%	57,306	73%	966

Table 2.3 Current Non-Credit Enrollment Distribution (Fall 2012)

Generations	Largo Campus		Extension Centers & On-line		PGCC Totals	
	Credit Hrs	FTES	Credit Hrs	FTES	Credit Hrs	FTES
Credit Hours/FTES: Day	68,212	4,547	14,164	944	82,376	5,492
Credit Hours/FTES: Evening	16,537	1,102	20,316	1,354	17,891	1,193
Total	84,749	5,650	34,480	2,299	100,267	6,684
% Day	80%	80%	41%	41%	82%	82%
% Evening	20%	20%	59%	59%	18%	18%

Table 2.4 Comparative Summary: Day and Evening On-Campus Credit Hour Generation (Fall 2012)

Total Campus Faculty and Staff 2012 (Actual)				Largo Campus Faculty and Staff 2012 (Actual)				
Category	FT	PT	Total	FTEF	FT	PT	Total	FTEF
Faculty (Credit)	240	698	938	414	240	619	859	395
Faculty (Non-Credit)	2	701	703	177	2	672	674	170
Sub-Total Faculty	242	1,399	1,641	591	242	1,291	1,533	565
Administrative	61	0	61	61	61	0	61	61
Professional Staff	239	174	413	282	227	166	393	268
Support Staff	257	270	527	325	252	260	454	317
Sub-Total Staff	557	444	1,001	668	540	426	966	646
Total Faculty and Staff	799	1,843	2,642	1,259	782	1,717	2,499	1,211
Percent of Total (%)				98%	93%	95%	95%	96%

Table 2.5 Faculty and Staff (Fall 2012)

3 SPACE NEEDS ANALYSIS

3.1 INTRODUCTION AND OVERVIEW

The purpose of the space needs analysis is to quantitatively and qualitatively assess existing facilities and to determine their ability to meet the current and projected needs of the College as it relates to mission, strategic goals and growth. The analysis compares PGCC's existing space inventory with Maryland space allocation guidelines (hereinafter referred to as Space Guidelines) for community colleges to determine existing and projected space quantity needs. Data on facility age, condition and utilization along with information gathered from interviews with campus constituents and visual inspections have been used to establish qualitative space issues on campus.

3.2 SPACE INVENTORY

The PGCC space inventory is organized and formatted consistent with the taxonomy set forth by the National Center for Educational Statistics in its 2006 edition of the Postsecondary Education Facilities Inventory and Classification Manual (FICM) and the Higher Education General Information Survey (HEGIS) series. The FICM and HEGIS provides standards for categorizing and measuring space, including net assignable square feet (NASF) and non-assignable square feet, which when added equal the gross square feet (GSF) of a building. The State of Maryland and the Maryland Higher Education Commission (MHEC) have adopted these standards for inventorying and measuring space. Table 3.1 summarizes the classification system used and Table 3.2 provides a space inventory summary by category and campus location.

PGCC currently has 631,854 NASF/944,300 GSF of permanent space, based on the July 01, 2013 capital improvement program submission to MHEC, which is defined by MHEC as space generally dedicated to the College. Permanent space is located at the Largo Campus, as well as the University Town Center (UTC) and Joint Base Andrews (JBA) extension centers. In addition to permanent space, the College uses 80,932 NASF/ 89,759 GSF of overflow space located at the Skilled Trades (ST), Laurel College Center (LCC), Westphalia (WPH)

and John E. Howard Elementary School (JH) extension centers. Overflow space is generally defined as shared space with other organizations and serves overflow conditions that can't be accommodated in permanent facility space. Overflow space is not included in the PGCC space inventory when comparing it to Maryland space guidelines for calculating existing and projected space deficits/surpluses. PGCC also has a number of temporary buildings at the Largo Campus, including T1, T2, T3, TO, TS and TZ. This temporary space is also not included in the PGCC space inventory.

The Largo Campus is home to 96% of PGCC space classified as permanent, 87% of total facility space (permanent plus overflow) and houses 99% of all facility space owned by the College. Table 3.2 breaks down the total NASF of PGCC by campus. As the main campus for PGCC, Largo houses a majority of instructional and office facilities and serves as the primary College resource for:

- Study space and library collections.
- Special use facilities (i.e., athletic, physical education, etc.).
- General use facilities (i.e., theatre, food service, etc.).
- Support facilities (i.e., network and telecommunications, trades/maintenance shops, central storage, etc.).
- Health care facilities.

The focus of the extension centers is on instruction (60% non-credit and 40% credit) with a large majority of space used as classrooms and laboratories with some office support.

3.3 CHANGES TO FACILITIES/SPACE INVENTORY

Changes to the total space inventory (permanent and overflow) will occur with the implementation of several capital projects that have been approved and have funding in hand as of the date of this FMP report. These projects are funded solely by or through a combination of funds from the State, the County and/or the College. In addition, funding is also provided by some of the landlords who own the lease space at the College's extension centers. The projects are in various stages of design, construction or leasing and include:

1. Largo Campus Facilities Management renovation/addition is State/County funded (5,412 NASF/8,244 GSF).

2. Largo Campus Lanham Hall renovation/addition is State/County funded (7,530 NASF/15,080 GSF).
3. Largo Campus Former Childtime renovation/adaptive reuse is College funded (10,008 NASF/12,826 GSF).
4. Largo Campus Culinary Arts new construction is County funded (12,750 NASF/19,500 GSF).
5. Largo Campus Queen Anne addition/renovation is State and County funded (75,321 NASF/136,545 GSF).
6. University Town Center additional lease space is College funded (42,470 GSF).
7. Laurel College Center additional lease space is College funded (7,684 GSF).

3.4 SPACE PLANNING FACTORS

The need for facility space is driven by student enrollment, faculty and staff, and library collections. Each of these is calculated in hours of instruction and the number of students, employees, and library volumes to be accommodated over the planning period (2012 to 2022), respectively.

In assessing the sufficiency of space quantity, the planning factors used are:

- Credit enrollment—headcount students, total full-time equivalent (FTE) students, full-time day equivalent students (FTDE), and lecture and lab weekly scheduled contact hours (WSCH).
- WDCE enrollment—FTE students and lecture and lab WSCH.
- Faculty and staff—full-time, part-time, and FTE.
- Library collections—physically bound volume equivalents (PBVE's).

3.4.1 Credit Enrollment

Headcount enrollments and FTE enrollments are the primary measures of student population. Although the headcount is 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. The enrollment projections focus upon academic activities and programs expected to occur during the day hours of

8 a.m. to 5 p.m. between Monday and Friday. Students enrolled during these hours are referred to as FTDE students.

However, it is useful to analyze trends in headcount enrollments with particular attention given to the mix of full-time versus part-time students. Full-time students have more needs for space compared to part-time students and a change in the ratio of full-time to part-time could impact the FTE generation and overall space needs.

The College anticipates an increase of student enrollment over the next decade. Total headcount is expected to increase from an actual count of 13,824 in Fall 2012 to a projected total of 16,701 or a 21% increase in Fall semester 2022. The corresponding increase in FTDEs will be from 4,561 to 6,216 over the same period.

The following projections of enrollments for Fall 2012 through Fall 2022 are the outcome of extrapolations of data previously developed and presented. These projections represent the recommendations developed by PGCC in furthering the institutional mission. Projections are presented in such a manner as to satisfy the requirements of MHEC and the State of Maryland.

Table 3.3 summarizes the total distribution of projected enrollments and contact hours for the Fall semester 2022 in comparison with fall semester 2012 enrollments.

3.4.2 Continuing Education and Workforce Development Enrollment

Continuing education and professional studies programs are important and are a significant part of instructional offerings at PGCC. Table 3.4 provides an overview of existing and projected enrollment.

3.4.3 Faculty and Staff

The College anticipates maintaining its current student/faculty ratios during the planning period. Tables 3.5 and 3.6 provide a summary of credit faculty and a breakdown of credit faculty by academic division.

Table 3.7 provides a breakdown of existing and projected staff personnel for the planning period.

3.4.4 Library Collections

Accokeek Hall serves as the library and currently houses 88,630 PBVEs. This total is projected to grow by 32% over the planning period to 117,270 PBVE's. The number of compact disks and DVDs is expected to increase significantly while bound and unbound periodicals and video cassettes are anticipated to decrease substantially during the planning period. While the number of books is planned to increase to support instructional programs, many of the other traditional print based materials will be reduced or eliminated.

3.5 SPACE NEEDS ASSESSMENT

The State of Maryland requires the application of their Space Guidelines for assessing the quantitative sufficiency of space, both current and projected, for community colleges. The Space Guidelines are based on the space planning factors described in Section 3.4. Most of the space categories have a specific guideline which is applied to the space planning factor data to calculate space allowance by FICM/HEGIS category. Table 3.8 is a summary of the space planning factors data that will be used in the application of the Space Guidelines.

Table 3.9 provides a snap shot of the College's current inventory, including funded projects referenced in Section 3.3, compared to the guidelines applied to Fall 2012 space planning factors and for those space planning factors projected for Fall 2022.

The Space Guidelines (Table 3.9) includes changes to the inventory from funded capital projects listed in Section 3.3. The model is based on the following assumptions:

- Planned growth in credit and non-credit FTDE enrollment maintaining on-line instruction at a 15% (and possibly greater) share of the total student credit hours generated.
- Maintaining the current full-time to part-time student ratio.
- Continuing a student/faculty ratio of 21:1.
- A continued FT staff to faculty ratio of 1.28:1.
- A projected PBVE increase of 32% in library collections.

Existing and projected space allocation calculations are used as a planning tool

for evaluating future scenarios and to provide a broad overview of campus needs. Quality of space is not considered in the application of Space Guidelines. These guidelines are intended to provide a basis for making capital project recommendations, but not intended to represent detailed project programming. Observations from analysis of Table 3.9 include:

- A projected total institutional space deficit of 48,974 NASF for 2022 based on currently funded capital projects.
- Surpluses in:
 - Current and projected classroom space.
 - Current and projected general stack space.
 - Current general use space, though they are projected to decrease to a small overage.
- Deficits in:
 - Projected laboratory space, including substantial deficits in open laboratory.
 - Projected student study space.
 - Current office space, which is projected to grow substantially.
 - Current special use (athletic primarily) space, which are projected to grow substantially.
 - Current food service space, which is projected to grow substantially.
 - Current shop/storage space, which is projected to grow substantially.

3.5.1 Utilization

Facility space is a valuable institutional resource and is an important asset in supporting teaching and learning, and student development. Enrollment management is a significant component of facilities planning. Class scheduling and size directly impact the utilization of space. If rooms can be utilized more efficiently, class sizes can be maximized, and room scheduling for classrooms and laboratories can be managed more effectively resulting in an increased capacity using existing space. Maryland has established standards for classroom and class laboratory room and student station utilization for community colleges.

In accordance with MHEC goals, PGCC would ideally schedule classrooms from Monday through Friday, between the day hours of 8 a.m. and 5 p.m., a minimum of 27 of the 45 day hours per week or at a 60% utilization rate for credit instruction. In addition, PGCC would fill a minimum of 66.7% of the student stations for each class scheduled in the specific room.

In accordance with MHEC goals, PGCC would ideally schedule laboratories from Monday through Friday, between the day hours of 8 a.m. and 5 p.m., a minimum of 18 of the 45 day hours per week or at a 40% utilization rate for credit instruction. In addition, PGCC would fill a minimum of 60% of the student stations for each class laboratory scheduled in the specific room.

An institutional analysis of average room and station utilization by academic building for the Largo Campus is provided as Table 3.10. Several observations can be made from the analysis that present strategic opportunities to better utilize space assets, both in terms of room scheduling and student station occupancy on campus. However, these observations must be considered with caution as the data analysis only addresses quantitative factors and doesn't take into account the many qualitative issues that can affect the scheduling and utilization of rooms. For example, the poor design or condition of a space or the lack of instructional technology may prevent full use of specific space(s), thus resulting in under-scheduling. In addition, a space may be under-utilized because it is not sized appropriately to align and support the type of class being taught, such as holding an English seminar for 18 in a general purpose classroom for 45. Qualitative issues will be explored further in the next section.

Currently, the College employs a distributed space scheduling approach with individual instructional divisions leading and managing the effort. A general building analysis of Fall 2013 scheduling data for credit classes during day hours from Monday through Friday yielded observations about room and student station utilization that include:

- Various classrooms on campus could be more effectively scheduled and utilized.
- Various laboratories on campus could be more effectively scheduled and utilized.

- Some classes are scheduled outside of or overlap the typical scheduling matrix hours used for Monday, Wednesday and Friday and Tuesday and Thursday, creating inefficiency.
- Early morning and late afternoon hours are under-scheduled and under-utilized.
- Fridays are generally under-scheduled underutilized for most of the day.

A detailed space utilization analysis for the Largo Campus is currently underway and will yield specific information on individual instructional rooms and reasons why certain buildings, floors or rooms may at times be under-scheduled and/or under-utilized. Analysis will include assessment of the current scheduling policies and processes with the goal of making recommendations to better coordinate with capital projects and other facility upgrades to improve space utilization to the extent possible.

3.5.2 Qualitative Assessment

At the heart of determining the quality of campus space, and more specifically instructional space, is an analysis of how effectively space is meeting the intended function. General observations can be made based on the age, condition, general utilization of the building and input from campus staff as to how effectively space is being used. Observations about the quality of existing space include:

- More than 55% of campus buildings (13 of the 23 buildings) are 30 years of age or older and have not been renovated. Many of the existing building systems are at the end of their functional life and interior finishes are worn and difficult to maintain. These conditions create a substantial deferred maintenance back log that should be addressed through capital and facility renewal projects.
- Five academic buildings were designed and constructed more than 30 years ago and have not been renovated. These include Lanham, Queen Anne, Marlboro, Novak and Sculpture/Ceramics. The configuration and condition of these buildings does not adequately support the current teaching/learning paradigm. Classrooms in these buildings and others are designed primarily for a lecture set up to support the "Sage on the Stage" teaching style. These spaces typically do not provide flexibility for

reconfiguring furniture and using instructional technology to support group and interactive learning in the “Flipped Classroom” teaching style where the faculty member becomes a “Coach on the Side.” Instructional spaces configured in this way can support increased student engagement and group discussion.

- Most academic buildings, regardless of age, have little or no informal student study and learning space for use in student-to-student, student-to-faculty and/or small group engagement outside of the classroom or laboratory.
- There is no dedicated faculty/staff lounge space on campus for sharing of ideas outside of the classroom/workplace or to allow social interaction in building a stronger campus community.

3.6 SPACE ANALYSIS FINDINGS AND CONCLUSIONS

Capital projects developed in this FMP should be coordinated with other campus facility renewal projects to address and respond to both quantitative and qualitative spaces issues. Space analysis findings and conclusions from Table 3.9 include:

1. A total institutional space deficit of 48,974 NASF is projected by 2022 due to enrollment and faculty/staff growth. More specifically, this projected condition includes:
 - Current and projected classroom space surpluses. One option to consider is conversion of some classrooms to other needed uses such as open laboratories, student study spaces, offices, etc. as a way to manage space imbalances.
 - Though not accounted for in Table 3.9, the planned removal of Temporary Building TZ will slightly reduce the number of classrooms.
 - Projected deficit in laboratory space, including substantial deficits in open laboratory and laboratory storage space.
 - Current office and meeting space deficits are projected to grow substantially, especially for adjunct faculty. In addition to faculty and staff offices, there is a substantial need for additional administrative meeting space.
 - Projected deficits in student study space. Both the library in Accokeek and other academic buildings on campus should be evaluated and/or programmed for provision of student study space to provide campus coverage.
2. Current indoor athletic space deficits are projected to grow substantially.
3. Current food service space deficits are projected to grow substantially.
4. Current deficit in shop/storage space is projected to grow substantially.
2. Many classrooms and some class laboratories could be more effectively scheduled and utilized. A detailed space utilization analysis is currently being completed for the Largo Campus to determine specific information on individual instructional rooms and reasons why certain buildings, floors or rooms may be under-scheduled and/or under-utilized.
3. Deficiencies in study space, open laboratories, and tutoring facilities will constrain the ability of the College to meet its *Envision Success FY 2014 – FY 2017* plan and the related goals for retention, academic progress, and program completion and hinder the ability of the College to fully support students academically, especially in core areas as the sciences, mathematics, writing, and reading.
4. Additional space is needed to support and accommodate the planned growth of the Academy of Health Sciences. The funded Lanham Hall project will address the current size of the program, but will not address the long-term projected growth.
5. The athletic and physical education facilities are aged and do not meet the flexible needs of today's community college. The emphasis on exercise and healthy lifestyles will continue to increase demand for such facilities. In addition, the College and the community it serves have needs for flexible spaces to support large gatherings such as graduations, alumni meetings, career fairs, and the like.
6. Demonstration, instructional and general use dining facility/food space is limited to Largo Student Center and is generally inadequate to serve campus. The funded Culinary Arts project will address the demonstra-

tion/educational component of this issue, but the College will still have a shortage in actual dining facility space.

7. The College lacks Performing Arts facilities including significant performance space and back-of-house facilities—sound, light, and costume shops, set and costume storage, make-up, dressing room, and green room facilities; for example - to support the production of performances, whether College offered or sponsored. The funded Queen Anne Fine Arts Center project will address these issues.
8. Facilities designated as meeting rooms are more like shared conference room facilities in the Largo Student Center, which creates competition and conflicts of use between student and non-student groups. The few conference rooms are in high demand from students, faculty and staff, as well as outside community and user groups. The College also lacks professional quality conference facilities with appropriate break-out and support spaces for use by non-student groups.
9. The College should continue to monitor and determine how best to manage their space needs for hazardous materials and general storage in the future. Surplus furniture is currently stored in classrooms as well as in the shipping containers near the Warehouse, since the existing Warehouse cannot accommodate all the storage space needs.
10. A majority of campus buildings were designed and constructed more than 30 years ago and have not been renovated. This has resulted in:
 - Building systems that are at the end of their functional life and difficult to service and interior finishes that are worn and difficult to maintain. These conditions create a substantial deferred maintenance back log that should be addressed through capital and facility renewal projects.
 - Many classroom spaces on campus that are still spatially configured and equipped with instructional technology geared to support the traditional lecture style teaching paradigm. These spaces typically do not provide flexibility for reconfiguring furniture to support group and interactive learning in the “Flipped Classroom” teaching style to support increased student engagement, interactive learning and group discussion.
 - Existing instructional buildings that have little or no informal student

study space for student-to-student, student-to-faculty and/or small group engagement outside of the classroom.

- No dedicated faculty/staff lounge space on campus for sharing of ideas outside of the classroom/workplace or to allow social interaction in building a stronger campus community.
- Accessibility in many of the existing facilities being inadequate.

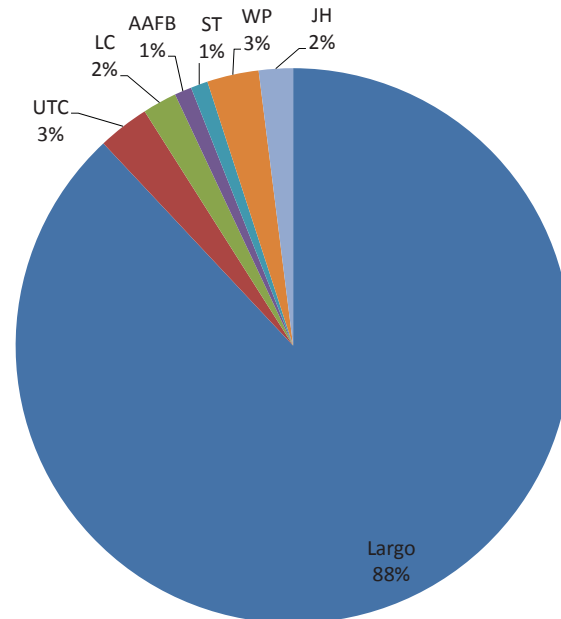


Figure 3.1 Current Inventory by Location

FICM/HEGIS CODE	FICM/HEGIS CATEGORY	Description
100	CLASSROOM	General purpose classrooms, lecture halls, recitation rooms, seminar rooms, and other spaces used primarily for scheduled non-laboratory purposes.
200	LABORATORY	Rooms or spaces characterized by special purpose equipment or a specific configuration that ties instructional or research activities to a particular discipline or a closely related group or disciplines, including class labs, opens labs, and research labs
300	OFFICE	Offices and conference rooms specifically assigned to each of the various academic, administrative, and service functions
400	STUDY	Study rooms, stacks, open stack reading rooms, and library processing spaces
500	SPECIAL USE	Military training rooms, athletic and physical education spaces, media production rooms, clinics, demonstration areas, field buildings, animal quarters, greenhouses, and other room categories that are sufficiently specialized in their primary activity or function to merit a unique room code
600	GENERAL USE	Assembly rooms, exhibition space, food facilities, lounges, merchandising facilities, recreational facilities, meeting rooms, child and adult care rooms, and other facilities that are characterized by a broader availability by faculty, students, staff, or the public than are special use areas
700	SUPPORT	Computing facilities, shops, central storage areas, vehicle storage areas, and central service space that provide centralized support for the activities of a campus
800	HEALTH CARE	Facilities used to provide patient care (human and animal)
900	RESIDENTIAL	Housing facilities for students, faculty, staff, and visitors to the campus
0	UNCLASSIFIED	Inactive or unfinished areas, or areas in the process of conversion
FICM/HEGIS NON-ASSIGNABLE CODES		
FICM CODE	FICM CATEGORY	Description
WWW	CIRCULATION	Non-assignable spaces required for physical access to floors or subdivisions of space within the building, whether directly bounded by partitions or not
XXX	BUILDING SVCS	Non-assignable spaces used to support its cleaning and public hygiene functions
YYY	MECHANICAL	Non-assignable spaces designed to house mechanical equipment and utility services and shaft areas

Source: Facilities Inventory and Classification Manual (FICM), 2006

Table 3.1 FICM Classification System

FICM CODE	FICM CATEGORY	LARGO	LAUREL CENTER (LC)	SKILLED TRADES (ST)	JOHN E. HOWARD (JH)	WESTPHALIA (WP)	UNIVERSITY TOWN CTR (UTC)	AAFB
100	Classroom	82,660	6,623	411	7,282	2,891	9,720	2,412
200	Laboratory	133,867	3,599	1,800	0	14,406	6,004	2,002
300	Office	166,179	1,743	303	1,581	3,046	2,715	766
400	Study	46,801	0	0	0	0	756	0
500	Special Use	69,590	0	0	0	0	0	0
600	General Use	77,268	281	184	3,457	0	1,367	0
700	Support	36,937	0	0	0	0	477	0
800	Health Care	1,244	0	0	0	0	0	0
90	-	10,008	0	0	0	0	0	0
NASF	-	624,554	12,246	2,698	12,320	20,343	21,039	5,180
GSF	-	933,451	17,240	4,122	16,344	26,392	31,150	5,360

Source: PGCC Facilities Management Department per July 01, 2013 CIP submission to MHEC

Table 3.2 PGCC Space Inventory by Location (Fall 2013)

	2008	2009	2010	2011	2012	5-yr change	2022	10-yr change
HCS	12,110	13,685	14,814	14,647	13,824	14%	16,701	21%
SCH	95,976	117,826	127,535	126,836	117,943	23%	160,905	36%
CR Load per HCS	7.93	8.61	8.61	8.66	8.53	8%	9.63	13%
On-campus Day SCH	64,745	79,830	84,029	84,298	77,771	20%	104,483	34%
% Day	67%	68%	66%	66%	66%	-	65%	-
FTE Students	6,398	7,855	8,502	8,456	7,863	23%	10,727	36%
FTDE Students*	4,316	5,322	5,602	5,620	5,185	20%	6,216	20%
% Day with Online FTE	67%	68%	66%	66%	66%	-	58%	-
Lecture WSCH	49,756	60,658	63,803	63,913	59,249	19%	84,629	43%
Lab WSCH	6,912	7,837	8,657	9,132	8,514	23%	11,122	31%
Total WSCH	56,668	68,495	72,460	73,045	67,763	20%	95,751	41%
WSCH/SCH Ratio**	1.14	1.17	1.16	1.15	1.15	-	1.09	-
% Lecture WSCH	88%	89%	88%	87%	87%	-	88%	-

*Includes percentage allowance of online FTE students

** WSCH/SCH Ratio compares Total WSCH and On-campus Day SCH

Table 3.3 Credit Enrollment Planning Factors (as of the Fall Term)

	2008	2009	2010	2011	2012	5-yr change	2022	10-yr change
FTE CE Students	1,264	1,291	1,304	1,321	1,373	9%	1,524	11%
FTDE CE Students	833	865	901	935	966	0.16	1,072	0.11
% Day	66%	67%	69%	71%	70%	-	70%	-
On-line	14	22	20	28	23	64%	26	13%
Campus	256	236	293	274	342	34%	379	11%
Off-campus	1,008	1,055	1,011	1,047	1,031	2%	1,145	11%
Total WSCH (Day)	49,741	57,473	49,372	49,512	57,306	15%	63,610	11%

Table 3.4 Continuing Education Enrollment Planning Factors (as of the Fall Term)

	2008	2009	2010	2011	2012	5-yr change	2022	10-yr change
FT Faculty-CR*	234	241	240	242	240	3%	303	26%
PT Faculty-CR	500	540	565	565	537	7%	718	34%
FTE Faculty-CR	263	255	255	314	346	32%	356	3%
% FT	32%	31%	30%	30%	31%	-	30%	-

*Includes FT Librarians

Table 3.5 Credit Faculty (as of the Fall Term)

School	2012			2022		
	Full-	Part-	Total	Full-	Part-	Total
Health Sciences	41	105	146	49	146	195
Liberal Arts	70	138	208	87	186	273
LF	23	89	112	29	128	157
SS & Business	44	86	130	57	138	195
STEM	62	119	181	80	119	199
Library	3	0	3	4	0	4
TOTAL	243	537	780	306	717	1023

Table 3.6 Credit Faculty by School (as of the Fall Term)

	2008	2009	2010	2011	2012	5-yr change	2022	10-yr change
FT Staff	744	773	792	793	783	5%	982	25%
PT Staff	1,183	1,163	1,224	1,186	1,178	0%	1,483	26%
FTE Staff	1,040	1,064	1,098	1,090	1,078	4%	1,353	26%
Staff/CR Faculty(FT)	3.1	3.2	3.3	3.3	3.3	-	3.2	-
% FT	39%	40%	39%	40%	40%	-	40%	-

Table 3.7 Staff (as of the Fall Term)

	ACTUAL Fall 2012	PROJECTED Fall 2022
Credit Headcount Students	13,824	16,701
Credit FTE Students	7,863	10,727
Day FTE-Credit	4,561	6,216
Day FTE-Noncredit	966	1,072
Day FTE-Total	5,527	7,288
WSCH-Lecture-Credit	57,013	77,701
WSCH-Lecture-Noncredit		
WSCH-Lecture Total	57,013	77,701
WSCH-Lab-Credit	20,525	27,973
WSCH-Lab-Noncredit		
WSCH-Lab Total	20,525	27,973
FT-Faculty*	246	335
FT-Librarian	3	4
PT-Faculty	704	959
FTE Faculty	425	579
FT-Staff	543	740
Planning Headcount	2,765	3,768
BVE	88,630	117,270

Source: PGCC Facilities Management Department

Table 3.8 State Planning Guideline Data Summary

HEGIS/FICM CODE	HEGIS/FICM CATEGORY	Need Current 2012	Inventory Current 2012	Surplus/ (Deficit) 2012	Need 10 Years 2022	Inventory 10 Years 2022	Surplus/ (Deficit) 2022
100 (110-115)	CLASSROOM	63,284	84,175	20,891	86,248	105,553	19,305
200	LABORATORY	138,817	141,212	2,395	189,190	168,080	(21,110)
210-15	Class Laboratory	119,661	132,392	12,731	163,083	156,870	(6,213)
220-25	Open Laboratory	19,156	8,820	(10,336)	26,107	11,210	(14,897)
250-55	<i>No Allowance</i>						
300	OFFICE	164,839	162,340	(2,499)	223,932	190,974	(32,958)
310-15	Office/ Conf. Room	161,808	153,242	(8,566)	220,074	181,176	(38,898)
320-25	Testing/Tutoring	3,031	9,098	6,067	3,858	9,798	5,940
350-55	<i>Included w/ 310</i>						
400	STUDY	40,914	47,557	6,643	55,268	57,843	2,575
410-15	Study	28,506	19,247	(9,259)	38,850	29,533	(9,317)
420-30	Stack/Study	8,863	24,145	15,282	11,727	24,145	12,418
440-55	Processing/Service	3,545	4,165	620	4,691	4,165	(526)
500	SPECIAL USE	73,332	69,590	(3,742)	93,192	69,838	(23,354)
520-23	Athletic	64,610	60,228	(4,382)	81,160	60,628	(20,532)
530-35	Media Production	7,722	9,362	1,640	11,032	9,210	(1,822)
580-85	Greenhouse	1,000	0	(1,000)	1,000	0	(1,000)
600	GENERAL USE	63,805	78,510	14,705	80,203	86,481	6,278
610-15	Assembly	18,122	28,167	10,045	21,432	31,113	9,681
620-25	Exhibition	3,031	2,426	(605)	3,858	4,026	168
630-35	Food Facility	23,226	14,894	(8,332)	31,651	17,094	(14,557)
640-45	<i>No Allowance</i>						
650-55	Lounge	8,295	11,832	3,537	11,304	12,832	1,528
660-65	Merchandising	3,131	8,757	5,626	3,958	8,982	5,024
670-75	<i>No Allowance</i>						
680-85	Meeting Room	8,000	12,434	4,434	8,000	12,434	4,434
700	SUPPORT	30,068	37,218	7,150	40,564	41,053	489
710-15	Data Processing	2,921	11,617	8,696	4,162	9,778	5,616
720-25	Shop/ Storage	22,143	21,402	(741)	29,594	22,154	(7,440)
730-35	<i>Included w/ 720</i>						
740-45	<i>Included w/ 720</i>						
750-55	Central Service	4,561	3,453	(1,108)	6,216	8,375	2,159
760-65	Hazmat Storage	443	746	303	592	746	154
800	HEALTH CARE	1,112	1,244	132	1,443	1,244	(199)
900	No Allowance						
050-090	No Allowance						
Total NASF:		576,171	621,846	45,675	770,040	721,066	(48,974)

Table 3.9 Space Guideline Including Previously Funded Projects (Facilities Management, Lanham, Queen Anne, Culinary Arts)

	Room Utilization	Student Station Utilization
Accokeek Hall		
Classrooms	29%	57%
Labs	18%	73%

Bladen Hall		
FL 2 Classrooms	56%	63%
Labs	44%	50%
FL 3 Classrooms	56%	53%
Labs	24%	49%

Center for Advanced Tech		
FL 1 Classrooms	38%	47%
Labs	44%	35%
FL 2 Classrooms	53%	86%
Labs	34%	55%
FL 3 Classrooms	43%	63%
Labs	25%	44%

Center for Health Studies		
FL 1 Classrooms	38%	38%
Labs	49%	68%
FL 2 Labs	48%	45%

	Room Utilization	Student Station Utilization
Chesapeake Hall		
FL 1 Classrooms	50%	35%
FL 2 Labs	78%	79%
FL 3 Labs	32%	74%

Continuing Education Building		
Classrooms	20%	74%
Labs	46%	51%
FL 2 Classrooms	52%	58%
FL 3 Classrooms	55%	68%

Lanham Hall		
FL 2 Labs	37%	72%
FL 3 Classrooms	25%	56%
Labs	23%	100%

Marlboro Hall		
FL 1 Classrooms	50%	35%
Labs	46%	51%
FL 2 Classrooms	52%	58%
FL 3 Classrooms	55%	68%

*MHEC guidelines target classrooms to be scheduled 60% of the business week day hours with 67% of the student stations filled.

**MHEC guidelines target laboratories to be scheduled 40% of business week day hours with 60% of the student stations filled.

Table 3.10 Space Utilization for Credit Instruction (M-F, 8am to 5pm, Fall 2013)

4 LARGO CAMPUS FACILITIES ANALYSIS

4.1 SITE ANALYSIS

4.1.1 Introduction

Issues pertaining to the Prince George's Community College (PGCC) campus at Largo include the physical layout and organization of the campus, how buildings are used with regard to the educational programs, and the conflicting programmatic adjacencies which detract from the academic experience, effectiveness, and efficiency.

Existing and proposed extension centers are discussed in Chapter 5. Review of existing information, a visual site evaluation and interviews with the PGCC Facilities Management staff served as the foundation for documenting and analyzing existing conditions.

4.1.2 Location

The PGCC Largo Campus is located on a 150-acre site in Maryland near the geographic center of Prince George's County, and only minutes from the nation's capital. The Largo Campus is bound by residential development to the north across Maryland Route 202 and to the west across Campus Way South, to the east by Largo High School, and to the south and west by residential townhouse developments. See Figure 4.1 - Existing Conditions Aerial. The street address for the entire campus is 301 Largo Road in Prince George's County and consists of tax account number 1536960. The property is zoned R-R (Rural Residential), located in tax map grid 075A1, WSSC grid 201SE09, assessment district 13, planning area 73, and planning analysis zone 255C. See Figure 4.4 - Existing MNCPC Zoning Districts.

4.1.3 Organization

The campus consists of four primary groupings of buildings; for these purposes, called the north, south and far south group of buildings, plus the facilities/storage building group. The north group surrounds a hard paved quad with some landscaping; the south group surrounds a grassy quad with mature trees, and the far south group surrounds a parking lot. Athletic fields and

structures are located in the southeast zone of campus. A series of large parking lots sweep in an arc from the far south building group toward the northern edge of campus; these lots essentially separate the main building groups from the athletic fields, as well as from a forested area located in the south-eastern portion of campus. See Figures 4.1 - Existing Conditions Aerial and Figure 4.2 - Existing Conditions Site Plan.

The north and south group of buildings form the core of campus, although a newer "core" is starting to develop around the far south group of buildings, consisting of the Center for Health Studies, Novak Field House, R. I. Bickford Natatorium and Center for Advanced Technology.

4.1.4 Views, Vistas and Gateways

Views onto campus from the two main roadways, Maryland Route 202 and Campus Way South, generally reveal a suburban scale, with low-to-moderate height groupings of buildings. Typically the back of each building is facing these main roads. There are no structures that stand out as a gateway or major entry. Instead, the campus entries are simply identified by controlled signals and signage. Upon entering the north side of campus from Maryland Route 202, either by the inner or outer ring roads, the main vista is parking lots and temporary buildings. The gentle downward slope of these two ring roads at the entry point from Maryland Route 202 provides an opportunity for creating a better and more memorable entry sequence by careful positioning of new building structures at or near this location. See Photos 4.1 through 4.4, and Figure 4.3 - Existing Gateways and Views.

4.1.5 Open Space

Significant portions of the Largo Campus are well landscaped; primarily the south quad and peripheral spaces further south. The other significant areas of green space consist of the athletic fields to the southeast, the forested parcel along the eastern edge of campus and the stream valley running along the northwest edge of the athletic fields.

- Traditional Quads: There are two traditional quads (north quad and south Quad) and one open space that has the potential to become a defined quad. (1) The north quad is a large paved open space with small planted areas, and several college mascot sculptures. The contained feeling from physical links between the surrounding buildings isolates this quad from



Photo 4.1- Entry/exit from Maryland Route 202 and Outer Loop Road



Photo 4.2 - View from Maryland Route 202 at Inner Loop Road



Photo 4.3 - View from corner of Maryland Route 202 and Campus Way South



Photo 4.4 - View along Campus Way South towards Maryland Route 202



Photo 4.5 - View of north quad



Photo 4.6 - View of south quad, looking towards Accokeek



Photo 4.7 - View of north quad



Photo 4.8 - View of south quad, looking towards Bladen



Photo 4.9 - View of athletic fields

the rest of campus. It is not possible to get from the north quad to the south quad without walking around Marlboro Hall or walking into Bladen Hall and then back out to the south quad. Benches are currently scattered in a random pattern throughout the quad and have little or no shading. (2) The south quad is an open grassy space containing mature trees with high canopy, few benches, and good visibility to building entries. The feeling of openness and connection at building edges makes it a very pleasant space. (3) A new or emerging open space sits to the south of the original academic core and is separated from the south and north quads by the Inner Ring Road. The edges of this spaces are defined by the Center for Advanced Technology, Center for Health Studies, and the athletic facilities. Currently parking occupies its center. See Photos 4.5 through 4.8 for views of the quads and athletic fields.

- **Perimeter Open Spaces:** these spaces are located along the edges of the campus defined by Campus Way South and Maryland Route 202. They are used primarily for parking and services.
- **Transitional Space:** There are areas on campus that share some of the characteristics of the traditional quads and perimeter open space. They function as gathering spaces, but are not as well defined as the north and south quads. These spaces include (1) the green space to the south of Kent and Queen Anne Fine Arts Center and (2) the space east of Marlboro Hall. These spaces are highly visible from the Inner Ring Road that loosely defines their outer edges. The space south of Kent and Queen Anne is comprised of lawn and mature trees. The space east of Marlboro Hall contains a paved plaza and drop-off.
- **Athletic Fields:** The athletic fields are located on the southern portion of the campus and are defined by the outer ring road to the north and the woodlands to the east. The fields are bisected by a wooded valley access road used to get to the Facilities Management Building. Most of the athletic facilities lie east of the stream valley and include the following: seven regulation-size tennis courts, two youth-size tennis courts and tennis practice area, baseball field, softball field, practice fields for soccer and football, a performance soccer field with running track, and a driving range for golf credit classes. On the west side of the steam valley are a practice softball fields and abandoned basketball courts. The College

is currently renovating the tennis courts and they should open in April or May 2014. The athletic fields are open for use by residents from surrounding communities. See Photo 4.9.

- **Stream Valley:** The stream valley is a unique open space east of the service road connecting the outer ring road and the stream on the northern perimeter. The area is a pleasantly landscaped lawn with groves of trees and picnic tables. The valley sits in a low point between the athletic fields and service road and is subject to minor flooding.
- **Forest:** The south-east portion of campus is dominated by a woodland area with the exception of a cellular tower and access drive. According the Maryland National Capital Planning Commission of Prince George's County (MNCPCPG), portions are considered regulated areas. One such regulated area corresponds with the stream/wetland that runs north/south and straddles the Largo High School property line.

See Figure 4.5 - Existing Open Space.

4.1.6 Pedestrian Linkages

The existing scale of the Campus lends to the potential walkability. It is approximately a 15 minute walk across the proposed academic core, i.e. between the Former Childtime Children's Center and the intersection of the outer ring road and Maryland Route 202 (one of two proposed locations for a new parking garage).

The north group of buildings are physically linked together, either internally or via pedestrian bridges which provide an easy way for students and faculty to get to class. The other interior pedestrian linkage occurs between Novak Field House and R. I. Bickford Natatorium, again facilitating pedestrian circulation between the two athletic facilities.

More traditional pedestrian linkages, through a grassy quad, are found between buildings in the south quad. For the most part, there are covered walkways along each building, providing coverage from inclement weather. To get between the south and north quads, most students and faculty walk through a "connector" space in Bladen Hall and another "connector" space between Marlboro and Bladen Halls.

For pedestrians walking from the core of campus over to the far south group

of buildings, there are pedestrian paths that cross the Inner Ring Road; most of the pedestrian-vehicle conflicts occur where pedestrian paths meet the Inner Ring Road. The Inner Ring Road circles the eastern edge of the academic core of buildings and separates the buildings from the array of parking lots to the east. As such, anyone traversing between the parking lots and the campus buildings must cross the Inner Ring Road where cars circulate to find parking. See Figure 4.6 - Existing Pedestrian Linkages.

4.1.7 Topography

The Largo Campus contains buildings ranging in first floor elevations from approximately 112 feet above sea level for the Warehouse near the southwest corner to 143 feet for the Largo Student Center in the Academic Core (or the area within the Inner Ring Road) near the corner of Maryland Route 202 and Campus Way South. The Academic Core and adjacent surface parking areas are relatively flat, containing average slopes between 2% and 4%. The upper portion of the Academic Core is approximately 10 feet below the corner of Maryland Route 202 and Campus Way South. This area ranges in elevation from approximately 150 feet along MD 202 to elevation 134 feet along portions of the Inner Ring Road. Both Maryland Route 202 and Campus Way South slope down to meet the outer ring road entrance points.

The southern portion of the campus, consisting of the area containing the R. I. Bickford Natatorium and the Center for Health Studies Building, is somewhat lower, ranging in elevation from 140 feet to 120 feet. This area also contains Parking Lot H, which has an approximate 4% slope. The large parking lots (Lots A through F) range in elevation from 156 feet adjacent to Maryland Route 202, in Parking lot A, to elevation 130 feet in Parking Lot F with slopes ranging from 1% to 5%.

The area of the athletic fields (including the Warehouse) is somewhat lower than the rest of campus with steeper slopes ranging from elevation 130 feet at the track to 110 feet near the Warehouse. Slopes in this area range from 1% to 4:1 (or 25%) along the access roadway to the Warehouse area. Figure 4.7 - Topography, illustrates the general topography of campus.

For the most part, the gentle campus slopes make it very walkable and creates favorable opportunities for new building sites and open/green spaces, as well as compliance with ADA requirements. The current right-in entry from south-

bound Maryland Route 202 slopes dramatically down into campus and frames vast areas of surface parking, which create an undesirable first impression for visitors. If this remains the primary gateway entrance to campus, opportunities should be studied for improving the aesthetic of the visitor arrival experience, as described in Chapter 6.

4.1.8 Constraints and Opportunities

The Largo Campus already has many positive characteristics that provide opportunities as well as challenges for future development. Include opportunities for:

- Building sites.
- Reinforcing and expanding green space and connections.
- Reducing the atmosphere of a “sea of parking” by greening parking lots and intercepting parking at entries.
- Improving vehicular circulation.
- Reducing or removing pedestrian-vehicle conflicts.

The constraints and opportunities on campus are summarized in Figure 4.17.

4.2 CENTRALIZED SEWER, WATER AND UTILITY SYSTEMS

4.2.1 Sanitary Sewer

Sewer service is provided by the Washington Suburban Sanitary Commission (WSSC). The campus is served by one ten-inch diameter sanitary sewer line. The primary system lines are illustrated on Figure 4.8 - Largo Campus Sewer and Water.

In the past the campus sanitary sewer system experienced back-ups due to the lack of a grease interceptor at the Largo Student Center dining facility. However, a grease interceptor was installed in August 2011 along the effluent sewer from the Largo Student Center. The facilities management staff has indicated that the grease interceptor has decreased the frequency but not eliminated sewer back-ups. In addition, grease interceptors were designed and installed as part of the capital building project to support food service in both the Center for Advanced Technology and the Center for Health Studies.

The original sewer main was installed in 1968. With the exception of the newly installed grease interceptors, no upgrades have been made to the sanitary infrastructure since the 2008 Facilities Master Plan. No further studies have been conducted to determine if the existing system is adequately sized to handle the existing or future sewage associated with campus development. The facilities management staff has indicated that they believe the existing sanitary infrastructure could be undersized if additional buildings are introduced and connected to the system. Architects and/or engineers are required to conduct a study for any new construction work and to coordinate with WSSC to determine the adequacy of the existing system.

4.2.2 Storm Drains & Storm Water Management

The Largo Campus is located on the Flood Insurance Rate Map (FIRM) #245208 0045 D; dated September 6, 1996. Based on review of the FIRM map, the entire campus is located in Zone C and is outside the limits of the 500-year flood plain.

An existing low lying area between the access road and the Facilities Management Building is prone to flooding. The area has been delineated on Figure 4.10 Largo Campus Storm Water. The topography indicates the presence of slopes between 0.8% and 2% in this area, positively draining toward an existing 24" culvert below the access road; however, water ponding has been observed in this area. The area of concern does not fall within the Federal Emergency Management Agency (FEMA) 100-year or 500-year flood plains.

Campus stormwater drains to three main storm drain systems, which have been identified on Figure 4.10 Largo Campus Storm Water. The largest system drains most of the campus buildings and some of the parking lots. This main system flows from east to west (picking up laterals from the north and south) and discharges along the southwest property line, adjacent to the Facilities Management Building. Several portions of the 72" reinforced concrete pipe (RCP) end section have broken off and are in need of repair. The outfall channel has become severely eroded and is also in need of remediation.

The second storm system drains most of the larger parking lots and discharges into a small creek just to the south of the soccer field and track. The outfall channel appears to be in good condition with some sediment deposits at the immediate outfall of the storm drain system.

The third system drains water flowing from the Accokeek Hall and Bladen Hall areas. The closed system combines with drainage from Campus Way and discharges to the north of Campus Way.

Many of the inlets located within the parking lots and access roads have become blocked by pavement overlays. These areas are currently prone to flooding, most likely due to blockage of the inlets.

Most of the campus storm drain system is in the process of being upgraded as part of the Circulation and Roadway Improvements Project. Storm drain improvements associated with the project include the following:

- Approximately 100 linear feet of new trench drain adjacent to the Facilities Management Building.
- Approximately 1,100 linear feet of new or replacement storm drain.
- Improvements to the outfall of the existing 72" RCP.
- Replacement of almost 40 inlets and catch basins.
- Several new inlets and manholes.
- Cleaning of sediment and debris from ten inlets.

The campus contains five existing above ground Storm Water Management (SWM) Facilities, which are identified on Figure 4.10 Largo Campus Storm Water. The facilities appear to be for water quality treatment and possibly channel protection volume. The first SWM facility is located to the east of Chesapeake Hall, between an access road and a parking lot for the temporary buildings. The facility contains a forebay and filtration area and appears to be serviceable and in working condition.

The second SWM facility is located to the east of Parking Lot F, adjacent to the access road and south of Parking Lot D. It contains a forebay and a surface sand filter with cleanouts. The facility appears to be in good working condition. The third SWM facility was recently installed with the High Technology Center. It contains a forebay and bio-retention area. The facility also appears to be in good working condition.

The other two SWM facilities are the most recent on campus and were completed with the Center for Health Studies project. These bio-retention facilities appear to be well maintained and in good working order.

4.2.3 Water System

Water service is also provided by WSSC. Two eight-inch diameter water line connections located along Maryland Route 202 feed the campus ring system. The primary system lines are illustrated on Figure 4.8 - Largo Campus Sewer and Water. Many portions of the existing water line main building service connection branches have been replaced or upgraded within the last decade. The facilities management staff indicated that several of the building connections have been replaced since the 2008 Facilities Master Plan.

4.2.4 Natural Gas

Natural gas is provided by the Maryland Division of the Washington Gas Company. Figure 4.9 - Largo Campus Site Utilities illustrates the natural gas lines throughout the campus. Other than recent connections to newly constructed buildings, no known upgrades have been made to the natural gas infrastructure in recent years.

4.2.5 Other Utilities

Other campus utilities include power, steam, and data/voice. A new fiber optic backbone was recently installed to serve the main campus as part of a capital project to install a duct bank ring and upgrade fire alarm and data/voice systems. The approximate locations of these utilities have been illustrated on Figure 4.9 - Largo Campus Site Utilities.

4.3 HEATING, COOLING AND ELECTRICAL SYSTEMS

4.3.1 Central Heating and Cooling Plant

The central heating and cooling plant is located in the north end of Bladen Hall and serves a portion of the academic core of the campus. Steam and chilled water are supplied to the various buildings via a combination of utility trenches and tunnels. Other buildings not connected to the central plant have self-contained heating/cooling systems or their own chillers and boilers.

4.3.1.1 Heating

Low pressure steam is supplied to the following buildings from the central plant located in Bladen Hall: Bladen Hall, Largo Student Center, Lanham Hall, Queen Anne Fine Arts Center, Kent Hall, Accokeek Hall, and Marlboro Hall.

The condensate return distribution piping was replaced in 2004. This replacement was necessitated by severe corrosion of the condensate system due to poor chemical treatment. Although effects of corrosion in the steam lines have not manifested, life expectancy of the steam lines was likely reduced due to poor chemical treatment and corrosion.

A utility tunnel system on the east side of campus is used to distribute steam to Queen Anne Fine Arts Center and Kent Hall. A 6" steam and 3" condensate line serve the Largo Student Center. A trench system containing a 10" steam and 2" condensate return crosses the north quad to provide heat to Lanham Hall.

A utility tunnel system is used on the west side of the academic core to distribute steam to Queen Anne Fine Arts Center, Kent Hall, Accokeek Hall, and Marlboro Hall. Steam leaves Bladen Hall to the west via an 8" main and 2-1/2" condensate return line. Expansion compensation in the tunnels is via expansion joints, some of which were replaced in 2004.

4.3.1.2 Cooling

Chilled water is distributed from the Central Plant in Bladen Hall to Queen Anne Fine Arts Center, Kent Hall, and Accokeek Hall via the same utility tunnel as the steam. These buildings are served by 6" chilled water supply and return lines.

4.3.1.3 Plant Equipment

The Central Plant in Bladen Hall contains two chillers, three boilers, and associated appurtenances. One of the chillers is an older screw machine and requires replacement. Additionally, the boilers are almost 20 years old and will require replacement soon. The lack of condensate return has caused use of increased make-up water in the boiler system and subjected the boilers to increased corrosion and wear.

The pumps and piping in the boiler room are almost 20 years old and need to be replaced or upgraded.

4.3.2 Electrical, General

The existing 15 kV distribution system for the campus was upgraded in 2013 and is distributed from the 15 kV switchgears located behind Lanham Hall. The

existing 15 kV distribution system upgrade included replacement of the 15 kV feeders, 15 kV switches, pad mounted step down transformers and service entrance equipment in the building. The existing 15 kV distribution system provides redundant dual ring feeds to each transformer for the campus buildings. Equipment and systems appear to be well maintained.

Most of the service entrance switchboard and panel boards were replaced as a part of the 15 kV distribution system upgrade, however, electrical systems in the building have not been upgraded. Older electrical equipment in the buildings is antiquated, and replacement components such as circuit breakers are not readily available.

There appears to be no overloading of the 15 kV distribution cable system, pad-mounted transformer, incoming service switchboards, feeders, or panel boards.

4.3.3 Electrical Distribution

The electrical distribution system was upgraded in 2012. The existing medium voltage electrical distribution system is a 13.2 kV, 3 phase, 3 wire, medium voltage (MV) system. The existing MV distribution system includes dual 15 kV radial feeders in concrete encased duct banks to pad mounted 15 kV primary switches and branch switches which in turn feed pad mounted step down transformers for the buildings.

The incoming electric service from PEPCO (the electric utility) is metered at 13.2 kV and terminated at a customer-owned 15 kV distribution switchgear located behind Lanham Hall.

Table 4.1 lists outdoor pad-mounted (oil-filled) transformers on the campus. All primary service is 13.2 kV, 3 Phase, 3 wire system.

There are no apparent overloading problems or equipment and cable problems.

The existing underground feeder cables are tested every two years by a Certified Testing Agency and their report is submitted to PEPCO for review. This program should continue.

4.3.4 Building Electrical Distribution Systems

The building distribution system includes incoming electric service from the pad-mounted transformers, incoming service switchboards, panel boards, and miscellaneous equipment.

Many of the buildings have 277/480 volt service switchboards with 277/480 volt panel boards and major equipment connections where transformers provide service to 120/208 volt panel boards. Some buildings have 120/208 volt services.

Older buildings, which have not been renovated, have switchboards manufactured by Federal Pacific Electric (FPE). Replacement components, such as circuit breakers, are not readily available and may be difficult and expensive to obtain, making these switchboards unreliable due to maintenance problems.

There are no apparent overloading problems or other equipment problems except in Lanham Hall, which has numerous nuisance tripping of the electrical systems.

Generally, equipment in the buildings is well-maintained and serviceable. There is a plan to upgrade incoming service switchboards in the older buildings.

4.3.5 Emergency Power

Most of the new and larger buildings on campus are served by either a dedicated or shared emergency generator to support life safety loads, including emergency lighting and fire alarm systems. Those buildings not served by a generator have battery backup to power the emergency lighting and fire alarm systems. The Largo Student Center, Lanham Hall, Kent Hall, Queen Anne Fine Arts, Bladen Hall, Chesapeake Hall, Accokeek Hall, Marlboro Hall, R. I. Bickford Natatorium, Center for Advanced Technology, and Facilities Management Building have generators to provide emergency power for life safety (lighting, exit signs, fire alarm systems, etc.) and elevators. Additionally, generator power serves the IT server rooms and associated HVAC in Kent Hall first floor and stacked telecom rooms in the Center for Advanced Technology.

The existing emergency generators consist of natural gas and diesel fueled generators. The following is the list of the natural gas generators:

- The emergency generator at the Bladen Hall is a 100 kW, natural gas, which serves the life safety loads for Bladen Hall, Largo Student Center and Queen's Anne Fine Arts Building.
- The emergency generator at the Lanham Hall is a 200 kW, natural gas, which serves the life safety loads for Lanham Hall and Chesapeake Hall.
- The emergency generator at the Natatorium is a 100 kW, natural gas, which serves the life safety loads for Natatorium and Novak Field House.
- Accokeek Hall has a dedicated 100 kW natural gas generator and Center for Advanced Technology has a 300 kW natural gas generator.
- Kent, Facility Management and Marlboro Hall has a dedicated natural gas generator.
- The Center for Health Studies has diesel generators on the roof.

Generators are exercised regularly (without load) and are serviced under a maintenance/service agreement.

4.3.6 Street and Parking Lot Lighting

The existing street and parking lot lighting includes concrete pole bases, poles, and luminaires. The poles are deteriorating (corroding at the pole shaft/base plate) and several have been toppled in high wind conditions and hit parked cars. All of the older poles are suspect.

The electrical distribution system consists of 480 volt conductors in underground rigid steel conduit. The conduits are deteriorating and causing conductor failures and lighting outages.

There is no apparent overloading of circuits.

As part of the Circulation and Roadway Improvements Project, street and parking lot lighting (poles, luminaires and distribution) will be upgraded, as will the IT/Telecommunication duct-bank system. The project includes upgrading lighting to provide proper levels of illumination throughout.

4.3.7 Building Lighting (Interior and Exterior)

Generally, lighting in the building interiors is linear fluorescent with small compact fluorescent, incandescent, and metal-halide lamps in special areas.

The lamps and ballasts in the older buildings were retrofitted to T-8 technology and electronic ballasts under a rebate program with PEPCO (the electric utility) many years ago.

The lamps and ballasts in the newer buildings are T-8 and T-5 technology. There are no PCB ballasts.

4.3.8 Special Systems - Security and Mass Notification, Fire Alarm

4.3.8.1 Security and Mass Notification

The College has had a Physical Security Plan for the Largo Campus on file since 2006. Since that time, several updates have been developed to reflect changes to the College's emergency plan. In September, 2012, the College President appointed an Emergency Preparedness Management Committee (EPMC) to plan and analyze all activities designed to prepare for and respond to emergencies and will evaluate their effectiveness for disaster mitigation, preparedness, and response and recovery at Prince George's Community College and all of its locations.

All members were advised to enroll in the *IS-100.HE Introduction to the Incident Command System, ICS-100 for Higher Education* to better understand standard emergency procedures and nomenclature. Special emphasis was placed on becoming familiar with the protocol of the Incident Commander position when First Responder agencies arrive at the College.

EPMC members are currently drafting a new multi-hazard emergency preparedness plan. This plan will follow the Homeland Security guidelines for developing such a plan. Committee members have discussed a Hazard Risk Assessment Model which identifies 22 different threats, events, or hazards. The EPMC has also begun studying how to conduct a live on-premise crisis situation that will involve the county's First Responder Team.

Several members also attended *FEMA's L0363 Multi-Hazard Emergency Planning for Higher Education* training and an *Active Shooter Incident Workshop* conducted by the Maryland Fire and Rescue Institute.

For 2014, the College has applied to host a three day session of the *FEMA/ Homeland Security L0363 Multi-Hazard Emergency Planning for Higher Education* training. Additional ongoing training workshops will be conducted for the College's employees. The College has also included a security and emergency response session in the new hire onboarding orientation program. For 2015, the College plans to create a new full-time position to manage the College's emergency preparedness planning.

The EPMC has met with several of the County's First Responders team to better understand the role of each unit in the event of a crisis at the College.

The College began the installation of video surveillance, e-door access control, and intercom systems in the College's facilities in 2006 and this process continues as new buildings are constructed and older buildings renovated. The College has installed the E2Campus emergency text messaging alert system that is being integrated with various other emergency systems within the College. All employees and students are included in this messaging system to receive alerts.

Recent and upcoming projects relating to security and mass notification include:

- During summer 2013, laminated placards describing Response Guidelines for Active Shooter or Immediate Physical Threat was mounted in all classrooms, labs, offices and open areas.
- During fall 2013, members of the Emergency Preparedness Management Committee will meet with all constituent groups to discuss progress to date in preparing the College for multi-hazard emergencies.
- In 2014, the College will be installing video surveillance and blue light call boxes in the parking lots and campus grounds as part of the Circulation and Roadway Improvements Project.
- The College is currently installing the Alertus Desktop Text Messaging System that will transmit emergency messages across all College-owned PC desktops. These messages are driven by the E2Campus Emergency Text Messaging System.
- The College just completed the building of a new Data Center that is supplied with power from multiple utility company feeds and backed up with

natural gas generators.

- The College is planning for an off-site location to establish redundancy in its website, Identity Management System and Active Directory to continue support of the employee MS Office 365 employee email system and the Blackboard Learning Management System in the event of a major prolonged electrical power outage.
- An emergency preparedness crisis response room was built in CHS with various communications technologies to manage a crisis situation.
- The College is currently installing a new VOIP telephone system that will include on each telephone device, an emergency panic button to the Campus Police 0111 number. Each classroom and lab has a minimum of one telephone device installed.

4.3.8.2 Fire Alarm

The College completed the installation of a new looped fiber optic backbone in duct bank in 2012 to support data/voice and fire alarm systems. This infrastructure will support upgrade of existing buildings and new buildings to install digitally addressable fire alarm systems that can be centrally monitored. The College plans on implementing a single standard fire alarm system in 2014-2015.

4.4 INFORMATION TECHNOLOGY INFRASTRUCTURE

The campus has a perimeter looped underground ductbank system that delivers fiber cabling to each building. There still remains some copper cabling as well, but new facilities will only require fiber. Currently blown fiber tubes originate from the Center for Health Studies via redundant paths to each building except the Steel and Natatorium buildings. All campus premise and outside plant fiber is currently air-blown fiber and is by Sumitomo FutureFlex ABF.

Existing campus buildings are served by Structured Cabling Systems (SCS) that interconnect to the campus outside plant cabling system. The SCS consists of CAT 6 Ethernet Cabling and components by TE Connectivity with products and installation warranty for 20 years. SCS's systems require that equipment rooms be centralized to take full advantage of SCS capabilities to deliver high bandwidth voice, data and video service to the information outlet. However many

of the existing buildings do not have centralized nor vertically stack equipment rooms and therefore cable lengths vary greatly and could limit future capabilities for greater bandwidths and services. Cabling like CAT 6A should be considered for new buildings and renovations to achieve 10 Gig or better to the information outlet.

Electronic access control system (ACS) and video surveillance systems (VSS) are limited on the campus.

A key factor contributing to classroom inefficiencies in the older buildings on campus is the lack of space and equipment that can handle current instructional technologies such as smart podiums, AV systems and projection of AV content from source devices such as computers, internet streaming or DVDs.

4.5 FORESTATION & ENVIRONMENTAL CONSTRAINTS

Approximately 35% or 52.5 acres of the 150 acre Largo Campus is covered by forested area. These areas are located along the southern and western property boundaries of the campus. The forested area on the western boundary is traversed by a stream segment. Outside of the FIRM maps discussed earlier, no documentation could be found specifically identifying or delineating existing environmentally sensitive areas such as floodplains, wetland or hydric soil areas on campus. The Prince George's County Green Infrastructure Plan does, however, identify a large portion of the forested area along the southeastern boundary of campus as containing high quality forest and possibly other environmentally sensitive areas. The Green Infrastructure Plan includes a recommendation that this area be preserved from development. This area along with those identified as forested are delineated on Figure 4.11 - Forestation and Environmental Constraints.

4.6 VEHICULAR CIRCULATION, TRANSIT AND BICYCLE CIRCULATION

4.6.1 Vehicular Circulation

PGCC is located at the intersection of Maryland Route 202 and Campus Way South. Maryland Route 202 is signed as a north/south route and Campus Way South is also referenced as a north/south roadway. For the purposes of this document, the "north" side of campus is considered to be along the border

with Maryland Route 202 and the "west" side of the campus is considered to be along the border of Campus Way South.

Vehicular access to campus occurs at several locations, including primary and secondary entrances. Three primary entrances include one on the western edge of campus at the signalized intersection of Campus Way South and the outer ring road, and the other two occur along Maryland Route 202. The entrances on Maryland Route 202 include one at the signalized intersection at the outer ring road that includes a left turn signal for northbound Maryland Route 202 left-turn access, and the other at a right-turn-entry only access north of the signal that allows southbound Maryland Route 202 access to the inner ring road. There is a secondary entrance on northbound Campus Way South, a right-in/right-out driveway that provides access to a pick-up/drop-off area at the northwest corner of campus in front of Bladen Hall. Largo High School, located just east of the College, utilizes the outer ring near Maryland Route 202 for its exiting bus traffic. Figure 4.12 - Entry Circulation, delineates primary and secondary entrance locations, vehicular circulation pathways and entrance and circulation issues on campus.

Egress out of campus is handled primarily via the outer ring drive signalized intersections at Campus Way South and at Maryland Route 202. An additional "right-out only" is provided at the inner ring drive for egress to northbound Campus Way South. The inner and outer ring roads are connected to each other by a road located between Lots A and B and by drive aisles through the other parking lots, especially a highly-utilized connection through Lot G. Vehicular circulation throughout campus is two-way with the exception of the one-way driveways at each end of the inner ring road and the connection from the outer ring road to Lot B/C. Also, the long parking lot south of the Bladen Hall driveway on Campus Way South exits only to the inner ring road. Figure 4.13 – Exit Circulation, delineates primary and secondary exit locations, circulation pathways and circulation and exiting issues on campus.

Figure 4.12 illustrates that visitors approaching campus on Campus Way South from Maryland Route 202 are presented with confusing situations on how to enter the campus. The first is a median break at the intersection of Campus Way South and College Station Drive which gives the impression that there should be an entrance into campus at this location. The new Center for

Advanced Technology was designed as a “gateway” structure at the inner ring, yet visitors cannot access the campus from this location. The gateway signage at the corner of the outer ring and Campus Way South is oriented toward northbound Campus Way South traffic and is not visible to southbound traffic. Finally, the intersection of the inner ring and Campus Way South is too close to the main intersection of Maryland Route 202 and Campus Way South to function acceptably as a full access intersection. The College previously applied to the County for a full intersection at this location, but their request was denied.

A primary reason for the challenging vehicular circulation to and on campus is the road and parking layout. For instance, two of the primary campus entrances place visitors on the outer ring road at the furthest points from the academic core. One access to the inner ring road is a “right-in only” entrance, inaccessible from northbound Maryland Route 202. Additionally, the lack of a well-defined drop-off area leads to congestion along the inner ring road. Particularly this happens near the Maryland Route 202 entrance, sometimes causing backups onto Maryland Route 202 from the inner ring road.

The congestion is exacerbated by the fact that the only clear roadway connection to the inner ring from the outer ring is at the eastern end of the campus between Lots A and B. This lead to an additional influx of traffic to the inner ring road near the point of peak congestion. All other access points to the inner ring road are through parking lots, with Lot G providing the primary access in the western part of campus. This access point is a standard parking aisle not designed to support through traffic. At the western end of the inner ring, pedestrian traffic along Campus Way South crossing the inner ring road gets very heavy, leading to vehicular delays exiting the inner ring road while also being required to yield to both pedestrian and vehicular cross-traffic. The high occurrence of automobile and pedestrian interactions at this location is a potential safety issue.

Speeding is a concern along both ring roads on campus. There is a speed bump on the inner ring road near the pedestrian crossing to the Center for Advanced Technology. However, at the location of the speed bump there is also a circle for parking and drop-offs near Kent Hall. This currently acts as a “bypass” for vehicles to avoid the speed bump. The proposed Circulation and Roadway Plan improvements address this issue by extending the speed bump across the circle near Kent Hall.

The drop-off area and parking near Bladen Hall is being fully utilized to provide a convenient, but small, parking area for student registration near the front of campus. However, exiting the lot to Campus Way South at this location can be dangerous for drivers who wish to make a left turn to northbound Maryland Route 202. The driveway is only 200 feet from the Maryland Route 202 signal and the left turn lanes of Campus Way South routinely queue beyond the parking lot access. Drivers must also watch for pedestrian traffic and the right turn lane traffic of Campus Way South while attempting to maneuver over to the left turn lanes.

The Circulation and Roadway Improvements Project, planned to be completed in 2015, is primarily limited to renewal and upgrade of existing road, walkway, light fixture and emergency communication infrastructure on campus. No significant reconfiguration of existing roadway and walkway infrastructure to change circulation patterns will be made as part of the project.

Specific improvements to be completed as part of the project include:

- Repaving of both ring roads and existing surface parking lots.
- Replacing of curb and gutter on both ring roads.
- Installation of new sidewalk (where absent) on one side of the outer ring road.
- Installation of new street, walkway and parking lot lighting, including.
- Addition of new security features including exterior emergency call boxes and CCTV cameras.
- Installation of new bus roadway pads at each of the four outer ring road bus stops.
- Installation of new sidewalk from outer ring road along service road to Facilities Management Building.
- Widening of through-route from outer ring road through G Lot to inner ring road.
- Adding a dedicated left turn lane from outer ring road into G Lot.
- Repaving the outer ring road to correct an existing area of asphalt rutting and failure near the 90° bend where buses brake to make the turn.

4.6.2 Transit

In addition to automobile circulation, the campus is served by Washington Metropolitan Area Transit Authority (WMATA) and Prince George's County bus stops along Campus Way South and Maryland Route 202 and County bus stops located within the campus at the eastern and western ends of the outer ring road. Figure 4.13 - Exit Circulation, illustrates the vehicular circulation patterns, pedestrian conflict areas and bus stops on or near campus.

County bus routes 21, 21X, and 26 all serve PGCC, which is a major ridership generator. Route 21X exists almost exclusively to provide service between the College and the Metrorail. Nonetheless, students traveling on existing bus systems and routes still spend significant amounts of time commuting to campus, due to long headways between buses and a shortage of routes that facilitate direct connections to campus.

Approximate daily combined ridership totals by stop for these routes, provided by the County, are:

- Campus Way South at College Station Drive: 688 uses per day (177 on Route 21, 293 on Route 21X, and 218 on Route 26).
- PGCC outer ring road at Largo Road: 102 uses per day (51 on Route 21, and 51 on Route 21X).
- Campus Way South at Prince Place: 85 uses per day (27 on Route 21, 41 on Route 21X, and 17 on Route 26).
- PGCC outer ring road at Child Care Center/R. I. Bickford Natatorium: 16 uses per day (8 on Route 21, and 8 on Route 21X).

There are no plans for changes to these bus routes/stops. The Prince George's County Department of Public Works and Transportation maintains the bus stops and amenities, with the exception of the WMATA signs. At this time, no incentives or discount fare programs are offered to students.

4.6.3 Bicycle Circulation

Currently, there are no dedicated bike lanes on streets adjacent to or on the PGCC Largo campus. The Countywide Master Plan of Transportation Bikeways and Trails, completed by The Maryland-National Capital Park and Planning Commission and Prince George's County Planning Department in November 2009, set forth recommendations for a future dedicated bike lane along

Campus Way South and a side path along Maryland Route 202. PGCC should continue to monitor the implementation schedule for these improvements for coordination and minimally plan for an extension of the Campus Way South dedicated bike lane on to the outer ring roadway of campus as part of a future project.

4.7 PARKING

Parking for students, faculty, staff and visitors on campus is provided through a combination of surface lots and on-street parking. Figure 4.14 - Existing Parking delineates the location of existing parking assets on campus by user group. It also identifies parking areas that contain ADA compliant spaces. Table 4.2 provides a quantitative inventory of parking by location and user group.

Table 4.3 is a comparative analysis of the existing parking inventory by category (students, faculty/staff, visitors, and ADA) with the state allocation guidelines to identify existing and projected surpluses and deficits by category. Based on the state guideline the campus has a current net deficit of 1,176 spaces on campus. The entire deficit using the state guideline is attributable to student parking. However, field observation by the consultant team and the facilities management staff that monitor parking assets on a daily basis led to the conclusion that, based on the current enrollment, the existing parking inventory capacity is generally adequate for students, even during a large majority of the peak times of day and semester.

This is expected to change with the construction of the Queen Anne Fine Arts Center and Culinary Arts projects, along with the expected enrollment growth.

To plan for future student parking need, the consultant team and facilities management staff recommend the use of a 0.50 student parking allocation factor, in lieu of the 0.75 factor set forward by the state. The proposed student parking allocation factor represents a capacity slightly higher than what currently exists on campus today. This slight increase is to accommodate the "effective parking supply." The effective supply is essentially a "cushion" used to account for parking spaces temporarily lost due to improperly parked vehicles, snow removal, construction, and the natural flow of vehicles. Simply stated, it considers that a parking supply operates at peak efficiency when parking occupancy is no more than 90 to 95 percent of the supply. When occupancy exceeds this level, users may experience delays and frustration while searching

for the last few remaining spaces. This creates a perception that the supply is inadequate even when spaces are still available.

Table 4.4 provides a comparative analysis of the existing and projected parking inventory by category (students, faculty/staff, visitors and ADA) using the recommended alternative allocation guideline for student parking. It should be noted that existing parking to be taken off line permanently as part of capital construction projects will be evaluated in Chapter 6 and combined with the guideline analysis in Table 4.4 to identify the total net parking needed over the ten year planning period.

Specific strategies and incentives to increase bus ridership, biking and walking to campus should be studied as a means for reducing the number of new parking spaces needed on campus in accommodating future enrollment. Structured parking facilities should be studied to address additional parking needs, including bicycle, scooter and motorcycle parking to make better parking logistics and use of land resources to maintain more open/green space. In addition, all future capital facility projects on campus should include bicycle parking for the building if it doesn't already exist.

4.8 BUILDINGS ANALYSIS

4.8.1 Building Use

Building usage on campus has become more compartmentalized and co-located as newer buildings have been constructed. Most of the buildings in the north quad group, in particular Bladen Hall, Marlboro Hall and Lanham Hall, are occupied by a variety of program uses, including Student Services and various academic divisions. Lanham Hall is currently being redesigned and will undergo a renovation and addition in year 2015 to accommodate the Academy of Health Sciences program (Middle College students) plus WDCE and Student Services. See Figure 4.15 - Existing Building Usage.

The buildings surrounding the south quad are identified by more singular uses: Accokeek for Library and administrative functions, Queen Anne for Academic and Performing Arts, and Kent Hall for Administration. Similarly, Novak Field House and the R. I. Bickford Natatorium are solely athletic facilities, with the Natatorium used primarily for non-credit activities. The Center for Advanced Technology (CAT) and the Center for Health Studies (CHS) are occupied by Sci-

ence Technology Engineering and Math (STEM) and Health Sciences divisions, respectively. CHS also houses the Technology Services functions.

4.8.2 Facilities Conditions

The physical condition of individual Largo Campus buildings and building systems have been analyzed to determine how well the existing buildings support the instructional programs on campus. Deficiencies affecting the learning environment are noted in the text. See Figure 4.16 - Existing Building Conditions.

The College hired the consultant EMG to complete a detailed facilities condition assessment of all Largo Campus buildings between 2011 and 2012. Their report includes a complete inventory of systems and equipment, a baseline condition assessment of systems/equipment, and recommended corrective actions and costs associated with correcting deficiencies to meet this objective.

The information contained in this report is derived from the EMG assessment as well as visual inspection by the FMP consultant team and interviews with Facilities Management staff. These interviews gathered specific information relating to the physical property, available maintenance procedures, available drawings, and other documentation. The property's systems and components were observed and evaluated for their present condition.

The physical condition of building systems and related components are typically defined as being in one of four conditions: Excellent, Good, Fair, or Poor, or a combination thereof. For the purposes of this report, the following definitions are used:

Excellent = Facility was recently constructed or fully/partially renovated.

Good = Satisfactory as-is. Requires only routine maintenance over the evaluation period. Repair or replacement *may* be required due to a system's estimated useful life.

Fair = Satisfactory as-is. Repair or replacement *is* required due to current physical condition and/or estimated remaining useful life.

Poor = Immediate repair, replacement, or significant maintenance is required.

Further, these terms have been coordinated with the Condition Codes listed in the FY 2014 - April 2013 Facilities Inventory provided by PGCC Facilities Management staff.



KEY

1. KENT HALL
 2. ACCOKEEK HALL
 3. BLADEN HALL
 4. BLADEN HALL
 5. LARGO STUDENT CENTER
 6. CHESAPEAKE HALL
 7. LANHAM HALL
 8. MARLBORO HALL
 9. QUEEN ANNE FINE ARTS
 10. NOVAK FIELD HOUSE
 11. R. L. BICKFORD NATATORIUM
 12. CONTINUING EDUCATION
 13. STEEL BUILDING
 14. FORMER CHILDTIME CHILDREN'S CENTER
 15. FACILITIES MANAGEMENT
 16. TRACK and PRACTICE SOCCER FIELD
 17. GOLF RANGE
 18. TENNIS COURTS
 19. RACQUETBALL COURTS
 20. FACILITIES MANAGEMENT SHOPS/AUTO BAY
 21. WAREHOUSE
 22. BASEBALL DIAMOND
 23. SOFTBALL DIAMOND
 24. PICNIC GROVE
 25. TEMPORARY BUILDINGS 1 AND 2
 26. TEMPORARY SERVICES BUILDING TS
 27. TEMPORARY SERVICES BUILDING TO
 28. TEMPORARY SERVICES BUILDING TZ
 29. CENTER FOR ADVANCED TECHNOLOGY
 30. CENTER FOR HEALTH STUDIES
 31. TEMPORARY BUILDING 3
 32. MAIN SOCCER FIELD
- A. NORTH QUAD
B. SOUTH QUAD

Figure 4.1 Largo Campus Existing Conditions Aerial



Figure 4.2 Largo Campus Existing Conditions Site Plan

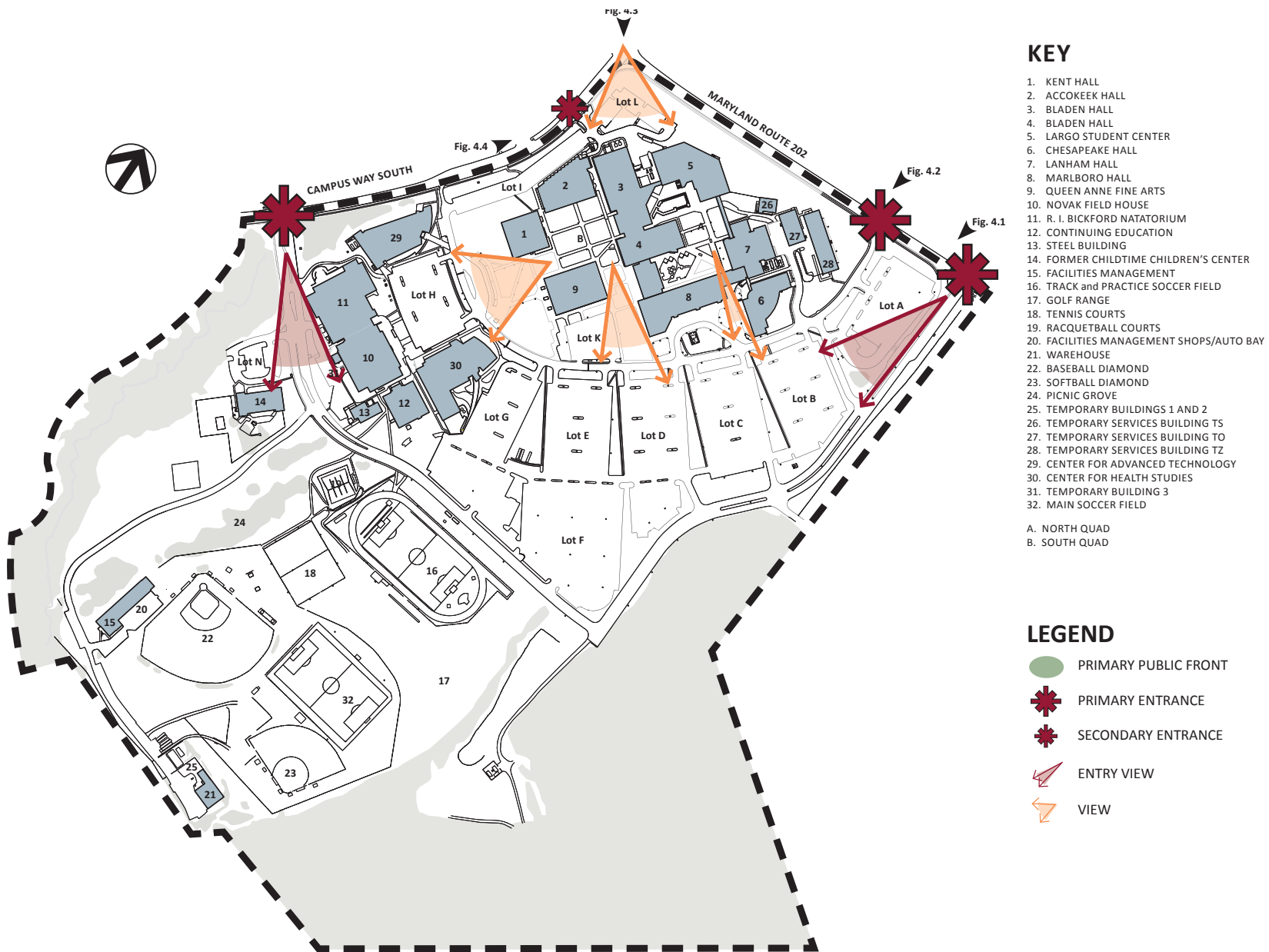


Figure 4.3 Largo Campus Existing Gateways and Views



Figure 4.4 Largo Campus Existing MNCPC Zoning Districts



Figure 4.5 Largo Campus Existing Open Space

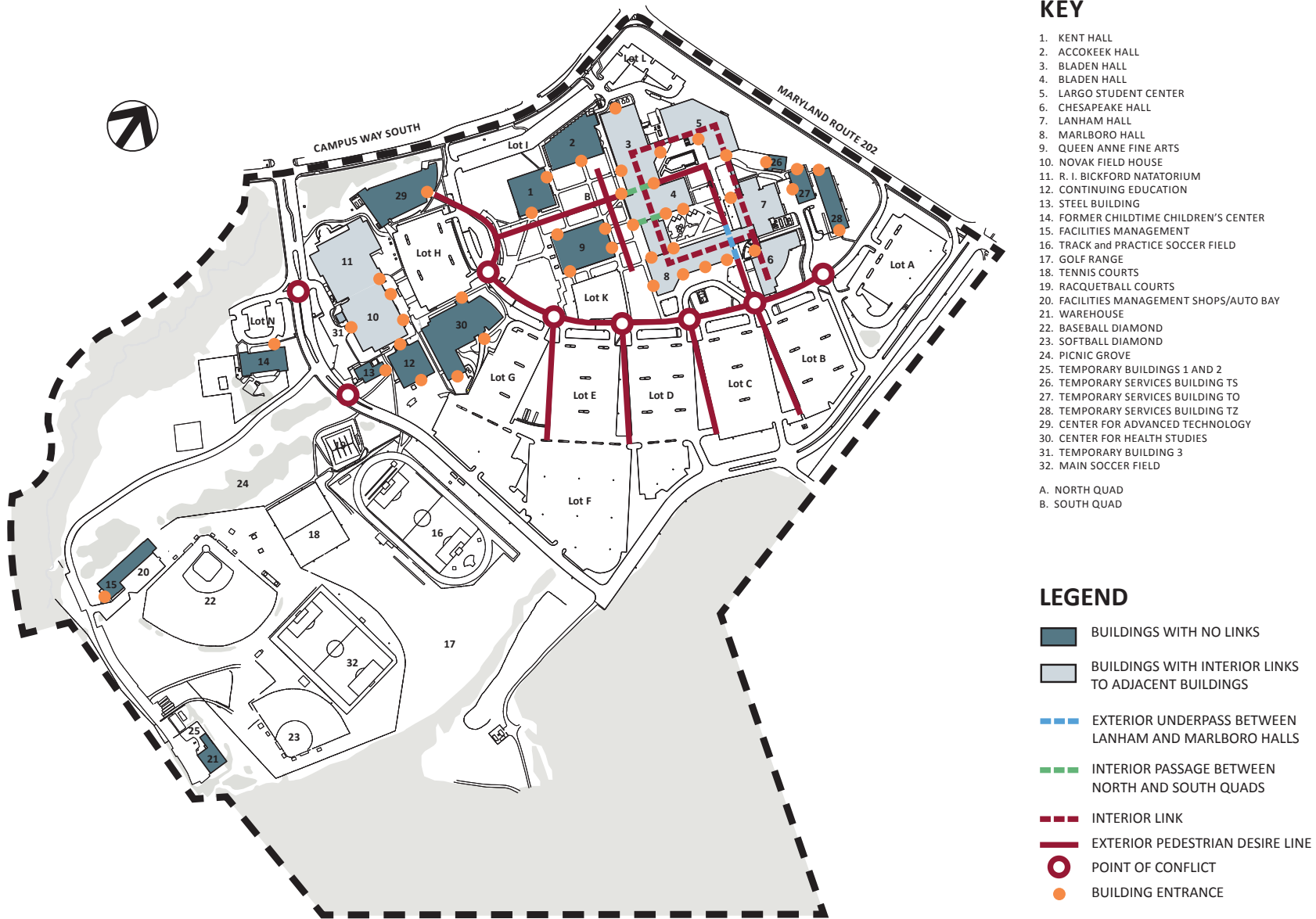


Figure 4.6 Largo Campus Existing Pedestrian Linkages

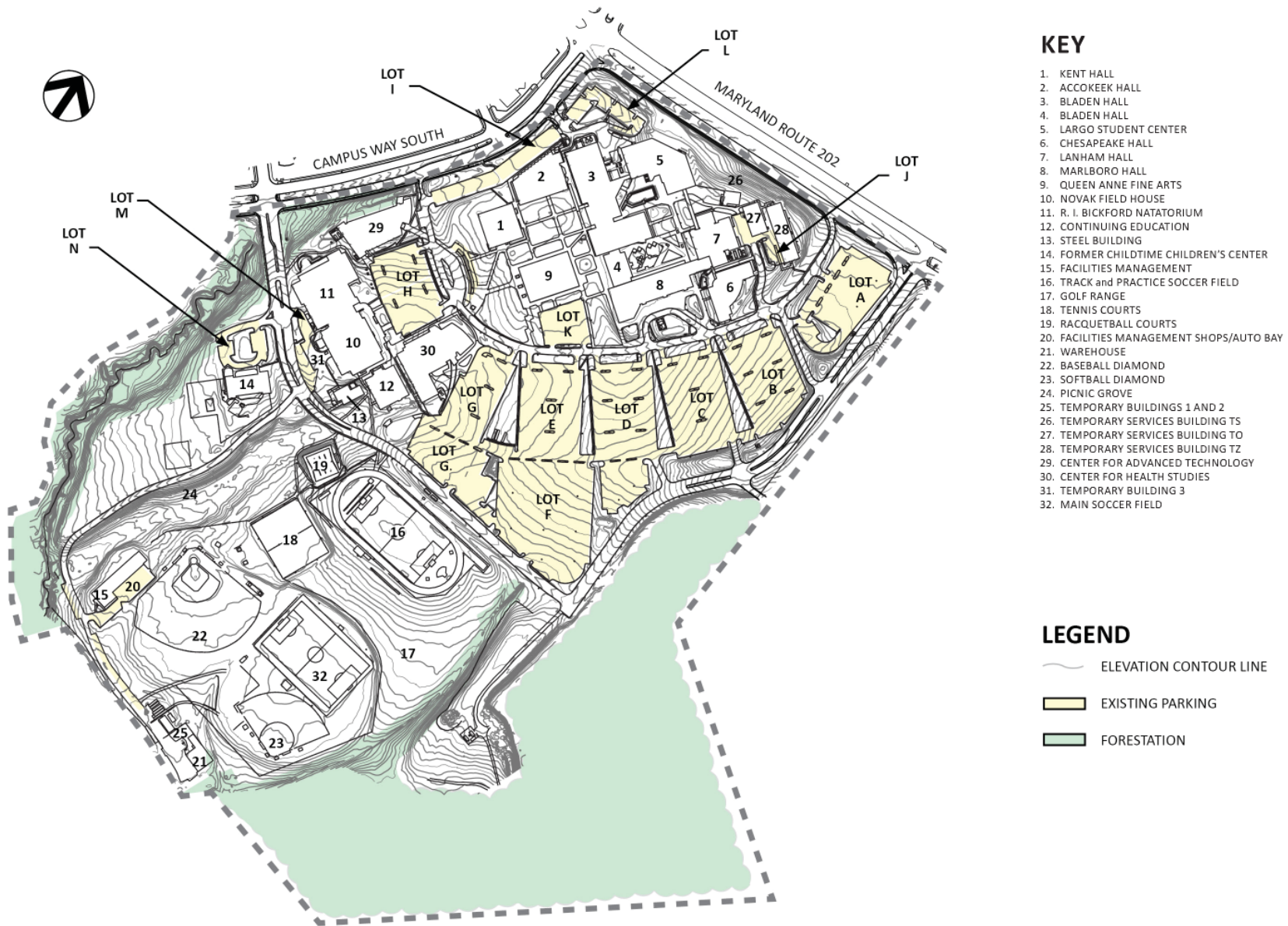


Figure 4.7 Largo Campus Existing Topography

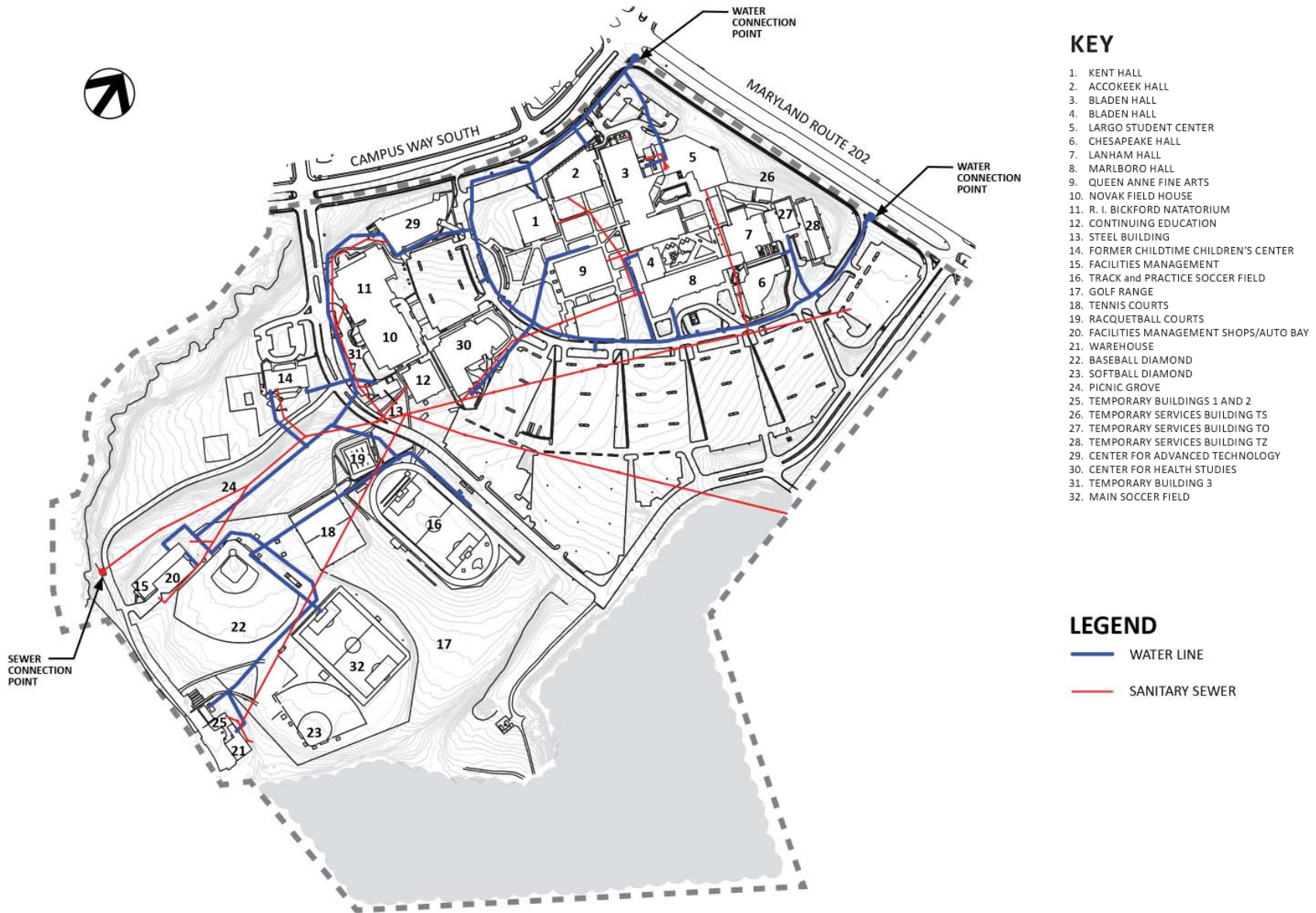


Figure 4.8 Largo Campus Existing Sewer and Water

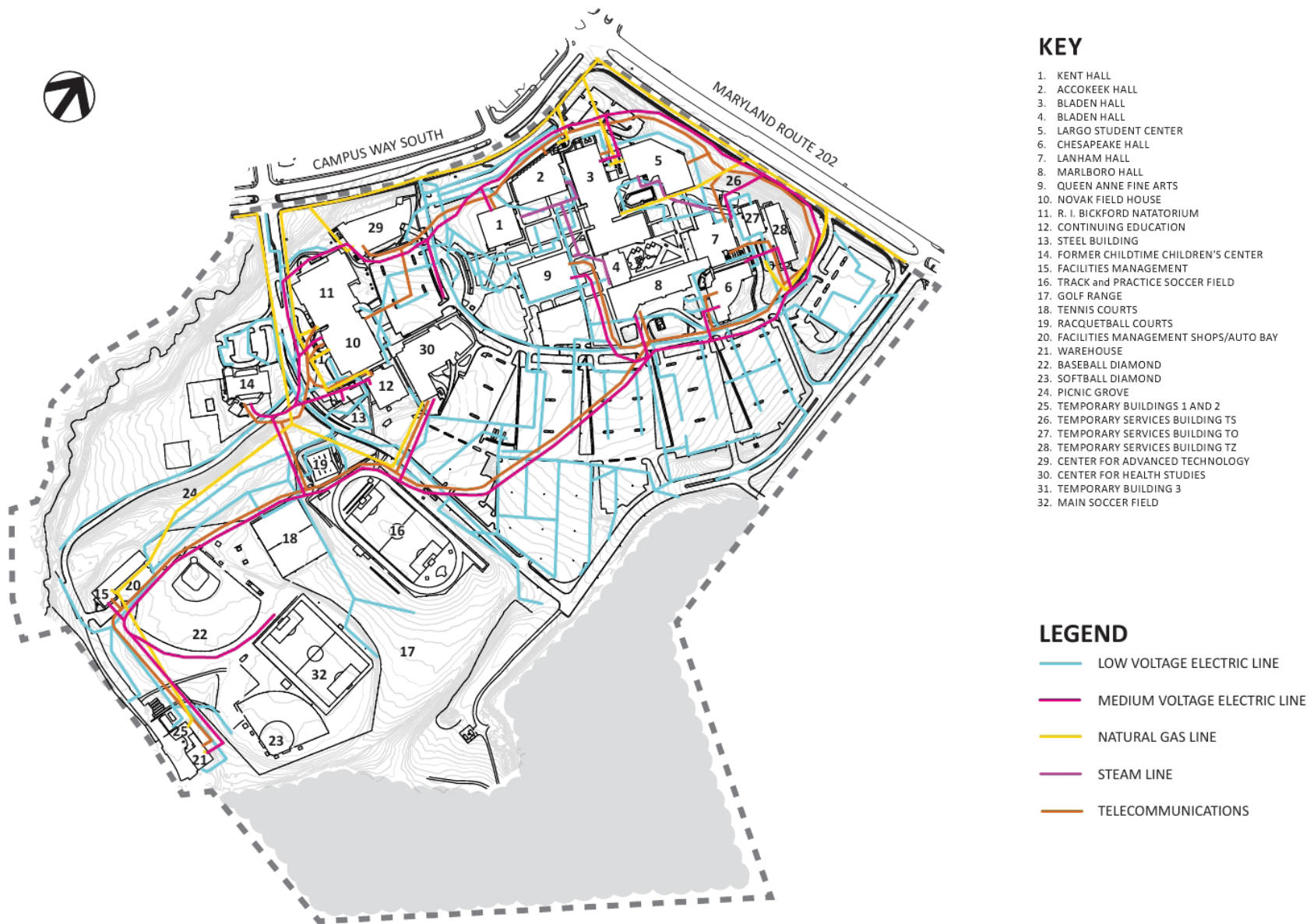


Figure 4.9 Largo Campus Existing Site Utilities



Figure 4.10 Largo Campus Existing Stormwater



Figure 4.11 Largo Campus Existing Forestation and Environmental Constraints

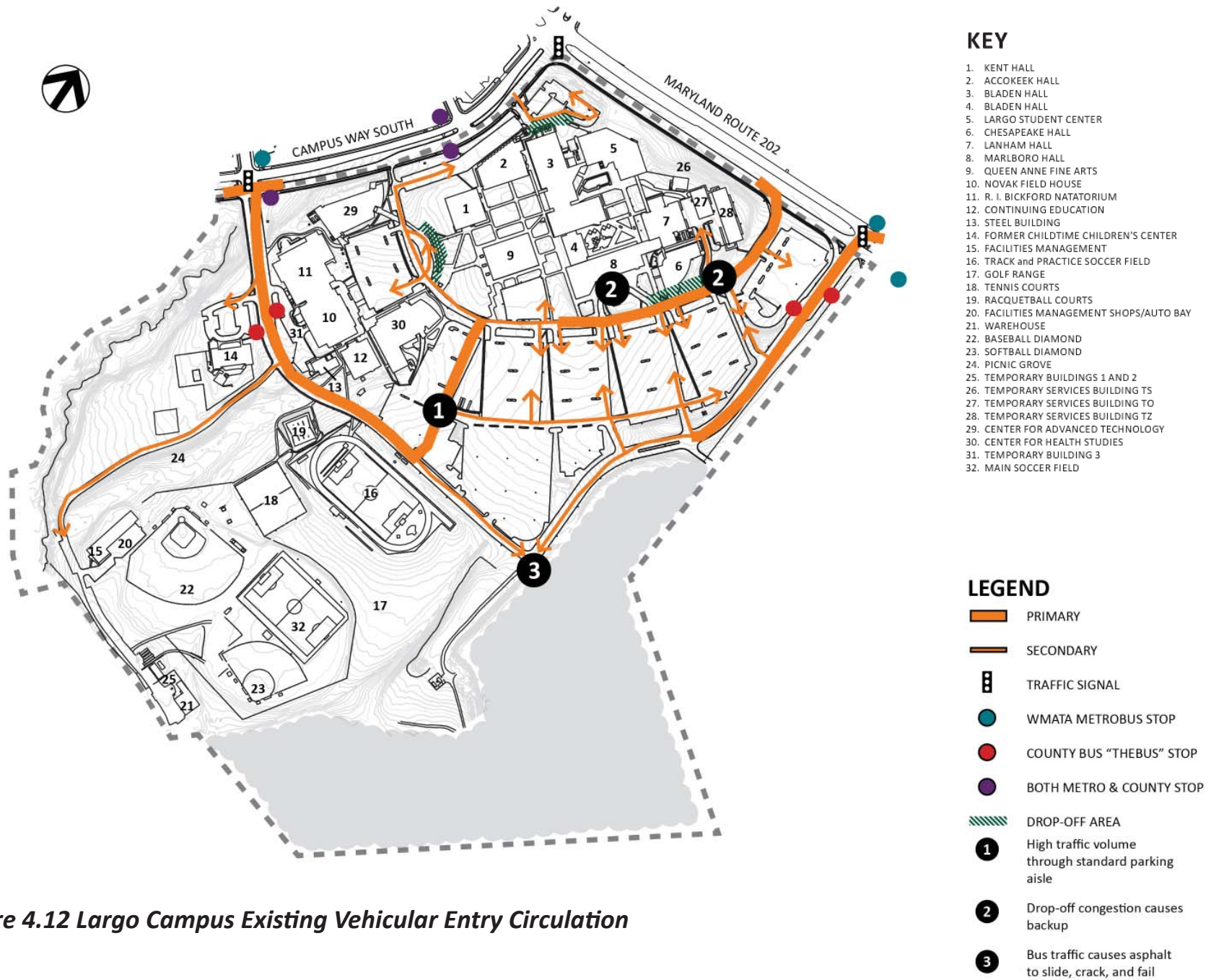


Figure 4.12 Largo Campus Existing Vehicular Entry Circulation

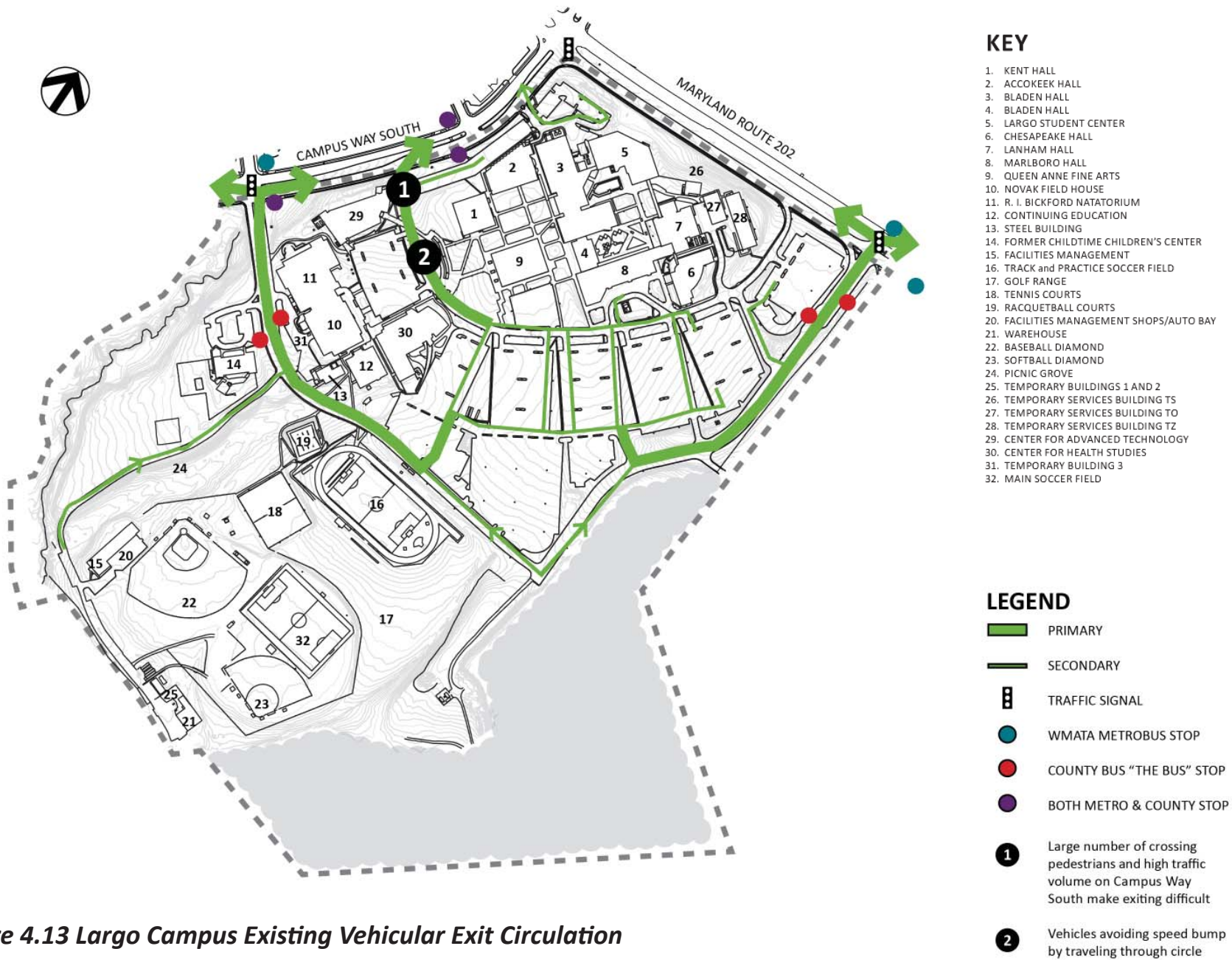


Figure 4.13 Largo Campus Existing Vehicular Exit Circulation

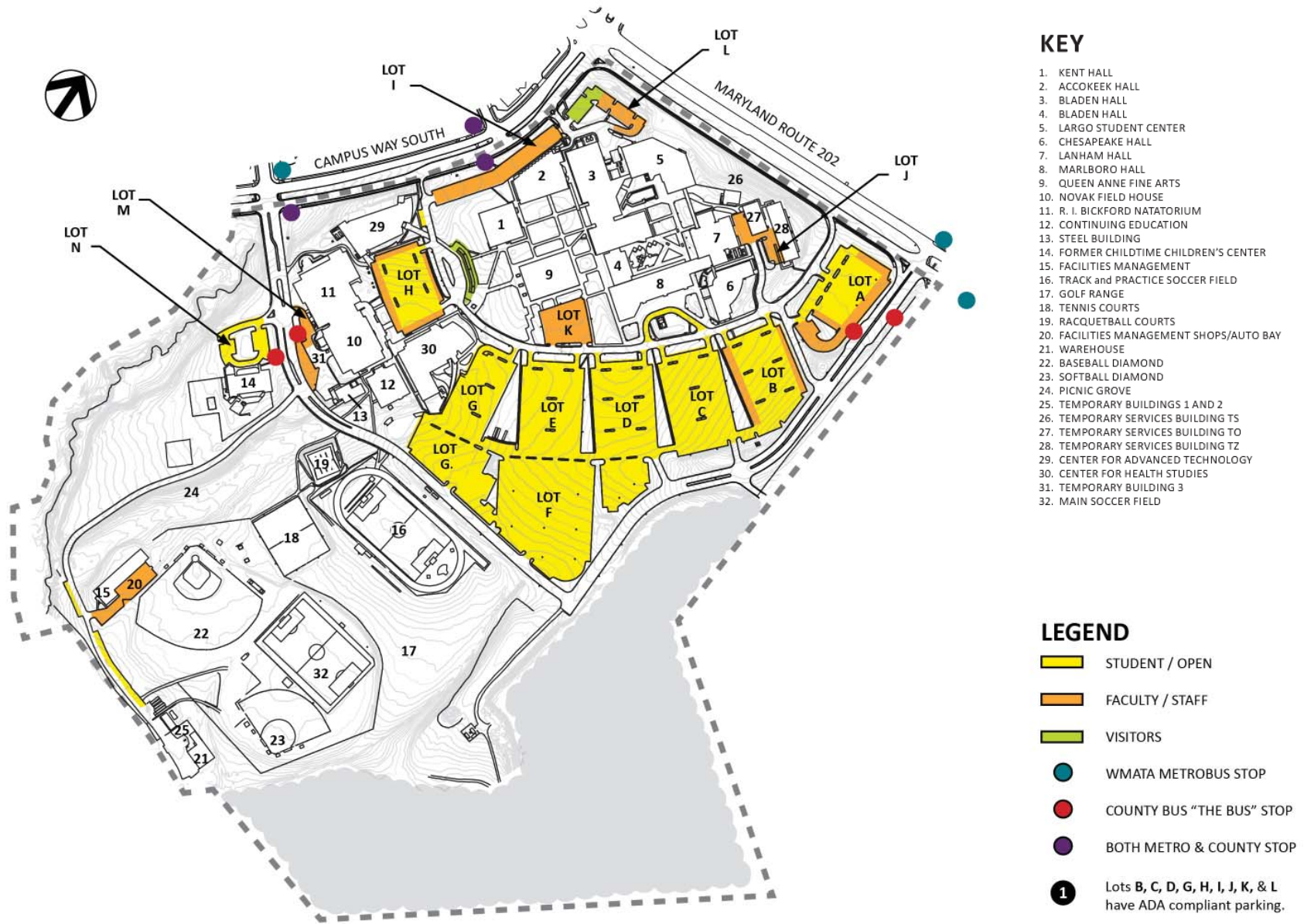


Figure 4.14 Largo Campus Existing Parking



KEY

1. KENT HALL
2. ACCOKEEK HALL
3. BLADEN HALL
4. BLADEN HALL
5. LARGO STUDENT CENTER
6. CHESAPEAKE HALL
7. LANHAM HALL
8. MARLBORO HALL
9. QUEEN ANNE FINE ARTS
10. NOVAK FIELD HOUSE
11. R. I. BICKFORD NATATORIUM
12. CONTINUING EDUCATION
13. STEEL BUILDING
14. FORMER CHILDTIME CHILDREN'S CENTER
15. FACILITIES MANAGEMENT
16. TRACK and PRACTICE SOCCER FIELD
17. GOLF RANGE
18. TENNIS COURTS
19. RACQUETBALL COURTS
20. FACILITIES MANAGEMENT SHOPS/AUTO BAY
21. WAREHOUSE
22. BASEBALL DIAMOND
23. SOFTBALL DIAMOND
24. PICNIC GROVE
25. TEMPORARY BUILDINGS 1 AND 2
26. TEMPORARY SERVICES BUILDING TS
27. TEMPORARY SERVICES BUILDING TO
28. TEMPORARY SERVICES BUILDING TZ
29. CENTER FOR ADVANCED TECHNOLOGY
30. CENTER FOR HEALTH STUDIES
31. TEMPORARY BUILDING 3
32. MAIN SOCCER FIELD

- A. NORTH QUAD
- B. SOUTH QUAD

LEGEND

- LIBERAL ARTS
- SOCIAL SCIENCES
- HEALTH SCIENCES
- SCIENCE TECHNOLOGY & MATH
- ACADEMY OF HEALTH SCIENCES
- LIBRARY
- CONTINUING EDUCATION
- STUDENT SERVICES
- ATHLETICS
- ADMINISTRATION/TECHNOLOGY SERVICES
- FACILITIES MANAGEMENT

Figure 4.15 Largo Campus Existing Building Usage

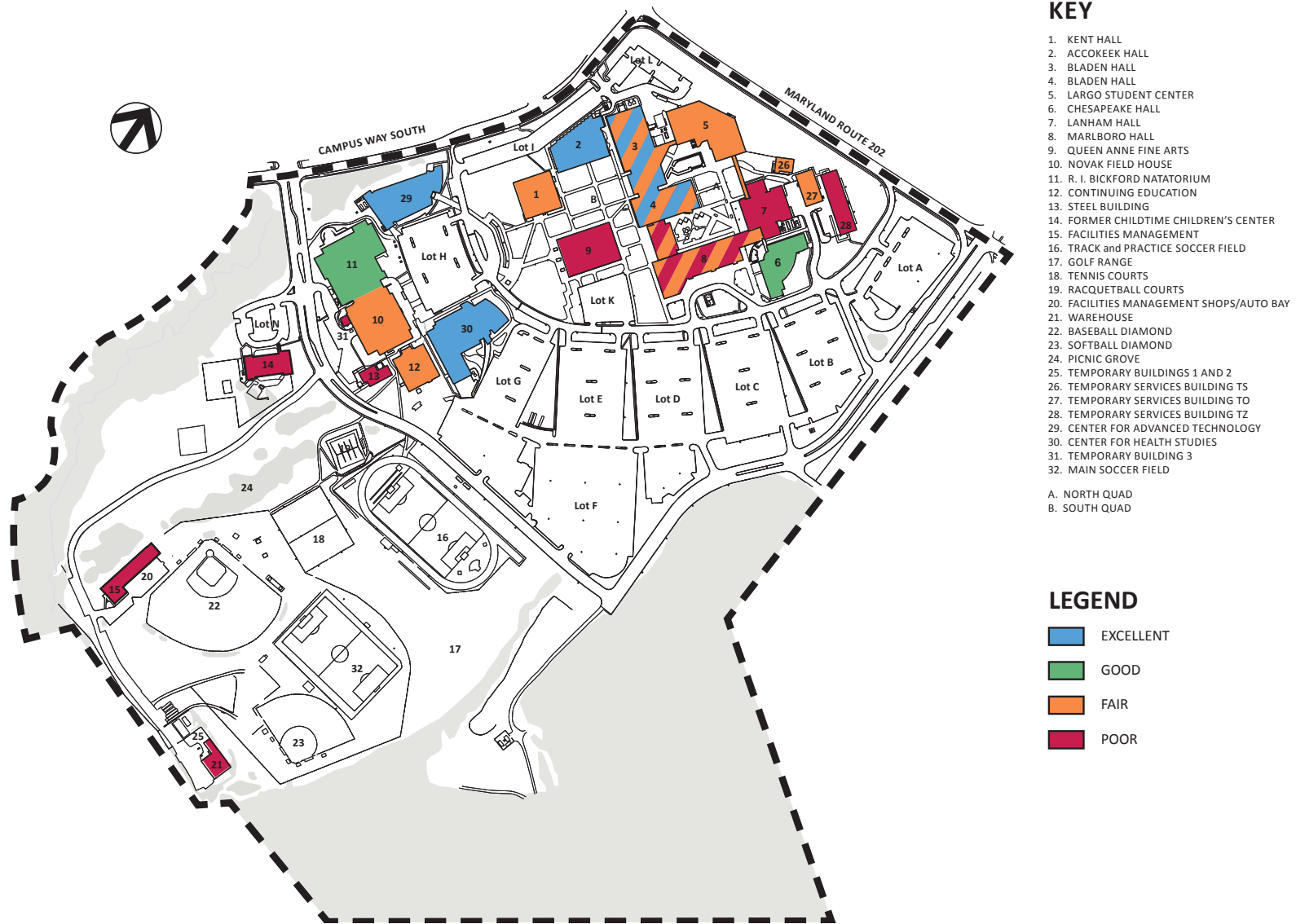


Figure 4.16 Largo Campus Existing Building Conditions

Building	kVA	Secondary
Accokeek Hall	1000 kVA	480/277 V, 3 Phase, 4W.
Bladen Hall	750 kVA	120/208V, 3 Phase, 4W.
Continuing Education Center for Advanced Technology	225 kVA	120/208V, 3 Phase, 4 W.
Lanham Hall	Unknown	480/277V, 3 Phase, 4 W.
Largo Student Center	(2) 750 kVA	120/208V, 3 Phase, 4 W.
Marlboro Hall	750 kVA	480/277V, 3 Phase, 4 W.
Parking Lot "B"	1500 kVA	480/277V, 3 Phase, 4 W.
Parking Lot "G"	75 kVA	480/277V, 3 Phase, 4W.
Queen Anne Fine Arts	75 kVA	480/277V, 3 Phase, 4 W.
Novak Field House & Natatorium	500 kVA*	120/208V, 3 Phase, 4 W.
Physical Plant	225 kVA	120/208V, 3 Phase, 4 W.
Temporary Buildings	225 kVA	120/208V, 3 Phase, 4 W.
	500 kVA	120/208V, 3 Phase, 4 W.

*Dry Type

Source: PGCC Facilities Management Department

Table 4.1 Largo Campus Existing Pad-Mounted (Oil-Filled) Transformers (Fall 2013)

LOT	Students	Staff/Faculty	Handicap	Visitors	Designated	Other	Total
A	117	123					240
B	208	64	2				274
C	221	68	2			6	297
D	369		2			8	379
E	272						272
F	463						463
G	352		8		19	6	385
H (Novak/Nat Lot)	110	64	12	9	2		197
I (KH/AH)		86	5		21		112
L (BH/LSC)		35	6	10	11		62
J (Temp bldg Lot)			5		4		9
K (Queen Anne)		50	21		3		74
M (Novak/Nat Lot)				31	2		33
N (Former Childtime)					1	33	34
MH Circle			13				13
KH Circle			2	9			11
Facilities Bldg		24	1		34		59
Service Roadway	20	31					51
TOTALS	2132	576	81	28	95	53	2965

Source: PGCC Facilities Management Department

Table 4.2 - Existing Parking Inventory (Fall 2013)

PARKING CATEGORY	FACTOR	Need Current	Inventory Current	Surplus/ (Deficit)
FTDE-T	0.75	3,421	2,186	(1,235)
FT-Faculty and FT-Staff	0.75	592	672	80
SUBTOTAL		4,013	2,858	(1,155)
Visitors	0.02	80	28	(52)
REGULAR SPACES		4,093	2,886	(1,207)
Reserved Accessible*		50	81	31
ALL SPACES		4,143	2,967	(1,176)

Source: PGCC Facilities Management Department

Table 4.3 - Existing Parking Need Analysis

PARKING CATEGORY	FACTOR	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Surplus/ (Deficit)
FTDE-T*	0.50	2,281	2,186	(95)	3,108	(922)
FT-Fac and FT-Staff	0.75	592	672	80	806	(134)
SUBTOTAL		2,872	2,858	(14)	3,914	(1,056)
Visitors	0.02	57	28	(29)	78	(50)
REGULAR SPACES		2,930	2,886	(44)	3,993	(1,107)
Reserved Accessible*		50	81	31	65	16
ALL SPACES		2,980	2,967	(13)	4,058	(1,091)
* Alternative guideline factor						

Table 4.4 - Alternative Parking Need Analysis

1 KENT HALL

Year constructed:	1967
Major Renovations:	1985 (2nd floor), 2001 (1st floor)
General Condition:	Fair
Estimated Repair Costs:	\$1.177 million
Building type:	Administrative Offices
Building area:	19,247 (Building NASF); 30,738 (Total GSF)
Building Capacity:	308 Occupants
Number of stories:	Two
Building construction:	Concrete masonry unit encased steel frame with concrete-topped metal decks
Roof construction:	Flat bituminous built-up roof with stone aggregate

Exterior Materials:

Brick veneer with exterior insulation and finish system (EIFS) on columns and fascia. Brick is in good condition; EIFS is in fair to poor condition. Windows are steel frame, single-glazed units at the end of their useful life.

Description of Space:

Kent Hall contains office space and conference rooms for senior administrative officials, plus WDCE and administrative functions such as HR, payroll, accounting, procurement, OPAIR, marketing and creative services. The layout is organized around a ring corridor, generally flanked by perimeter offices surrounding an internal core of mixed use spaces. General finishes include ceramic tile and carpeted floors, painted drywall and acoustic tile ceilings. Stairwells are covered in a glazed masonry unit typical of the period of construction.

Adequacy of Space:

Kent Hall is inadequate for the administrative personnel both in quantity and quality of space. Finishes are dated and there is little opportunity to create state-of-the art office space within the current configuration. There is also a shortage of gathering spaces for staff, faculty, external vendors and outside consultants. In addition, restrooms are non-compliant with ADA.

Mechanical/Plumbing:

The building is supplied with steam and chilled water from the Central Plant located in Bladen Hall through an underground tunnel. The steam is converted to heating water and circulated through the building. Most of the building is conditioned by two air handling units (AHUs) with heating and cooling coils. The constant volume AHUs supply air to the building through reheat coils for zone temperature control. Two supplemental split system AHUs provide conditioning to Room 112.

The mechanical systems, including the AHUs, hot water heater, sump pumps, and condensate return pump are in fair condition, but they have exceeded their expected life and should be replaced. Piping and pumps in the mechanical room should be replaced as soon as is feasible. Replacing the existing constant volume AHUs with variable volume AHUs with variable air volume (VAV) terminal boxes would significantly improve energy efficiency and thermal comfort control.

The existing plumbing fixtures are old and require replacement with new water efficient fixtures. The fire suppression system is limited to a wet pipe system serving only Room 112.

Electrical:

The existing transformer was upgraded as a part of the campus electrical system upgrades project in 2013.

Information Technology:

Voice and data services are currently served via Telecommunications room K115 Building Distribution Room (BD) and 2nd Floor Server room, Floor Distribution Room (FD).

1 KENT HALL



Exterior view from South Quad



President's office suite



Board Room



Exterior view from Kent Hall Circle

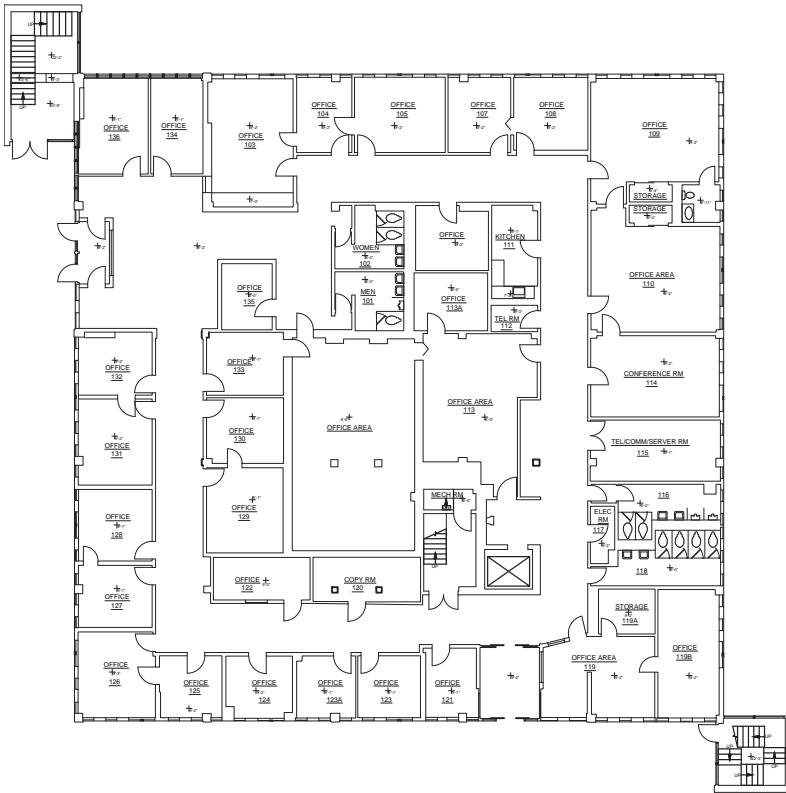


Typical corridor - note attempt to make corridor more inviting by furniture placement. This occurs in several of Kent Hall's corridors

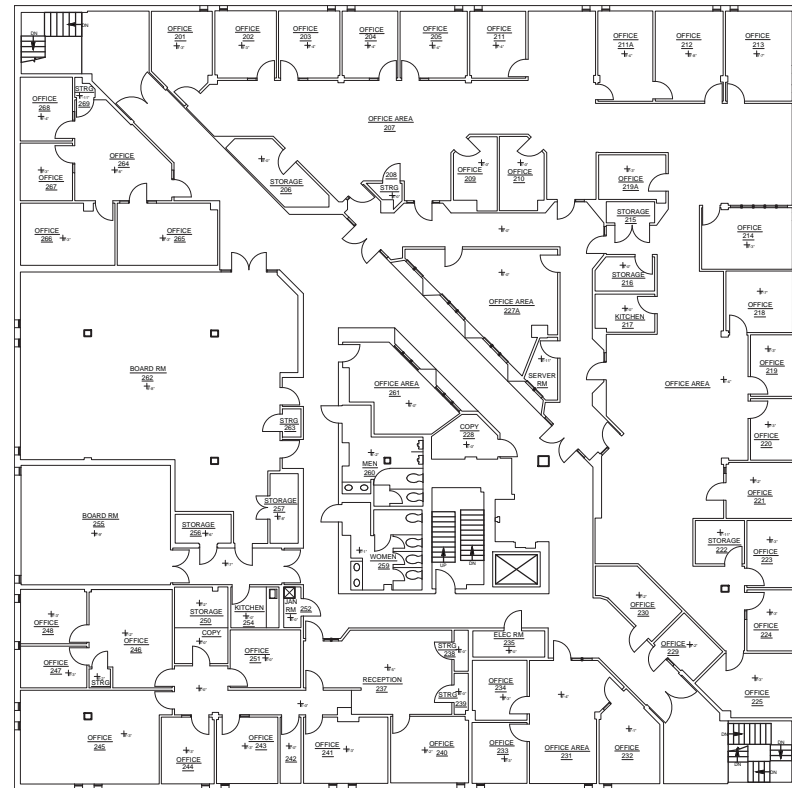


Workforce Development & Continuing Education Office Suite

1 KENT HALL



First Floor



Second Floor

2 ACCOKEEK HALL

Year constructed:	1985
Major Renovations:	2009
General Condition:	Excellent
Estimated Repair Costs:	\$500k
Building type:	Library/Administrative Offices
Building area:	54,841 (Building NASF); 74,505 (Total GSF)
Building Capacity:	746 Occupants
Number of stories:	Three
Building construction:	Concrete masonry unit encased steel frame with concrete-topped metal decks
Roof construction:	Single-ply TPO with rigid insulation

Exterior Materials:

Brick veneer with exterior insulation and finish system (EIFS) on soffits

Description of Space:

Accokeek Hall houses the campus Library, the PGTV Cable Television studio, large conference room for 40-50, and offices for a variety of administrative functions, Institutional Advancement, eLearning, Professional Development, Grants and Resource Development, Community and Government Affairs and Institutional Initiatives.

Adequacy of Space:

The space is generally adequate for Library use, although there is a shortage of student study spaces and office space for Library administrators. The administrative offices on the 3rd floor that house Institutional Advancement and

eLearning have a shortage of office space such that cubicles are set up in open areas. There is also a shortage of campus-wide meeting and conference rooms that should be housed in this building.

Mechanical/Plumbing:

Accokeek Hall was substantially renovated in 2009 and most mechanical systems are new and in good condition. The building is supplied through a tunnel with steam and chilled water from the central plant located in Bladen Hall. In addition, the building is equipped with a 300 ton modular water cooled chiller system. A 362 ton cooling tower on the roof serves the modular chiller plant. Five AHUs with steam heating coils and chilled water coils provide conditioning to the majority of the building. Heating water radiators provide supplemental heating for offices and restrooms. Supplemental ductless split systems provide cooling to elevator machine rooms and server rooms. The plumbing systems are in good condition and building is fully sprinklered.

Electrical:

The existing transformer, service entrance switchboard and distribution panels were upgraded as a part of the campus electrical system upgrades project in 2013.

Information Technology:

Voice and data services are currently served via to Data room 133 Building Distribution (BD), Data room 224 Floor Distribution (FD), 3rd Floor Data Room (FD) and Engineering Closet.

2 ACCOKEEK HALL



Exterior view from south quad



2nd floor Library Stacks



View of Accokeek from parking lot



e-Learning space on 3rd floor

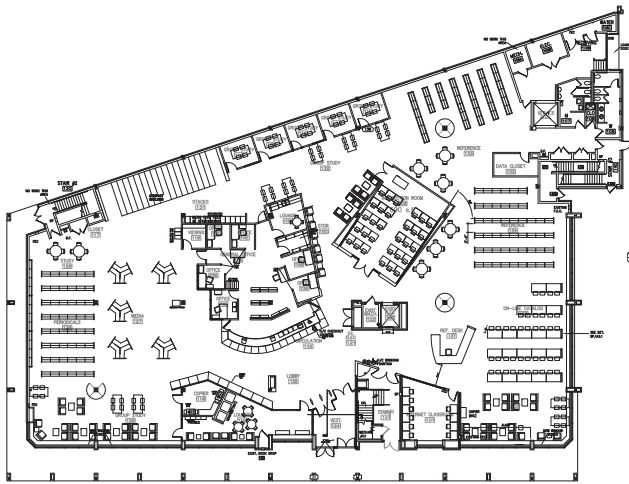


Student learning space on 1st floor

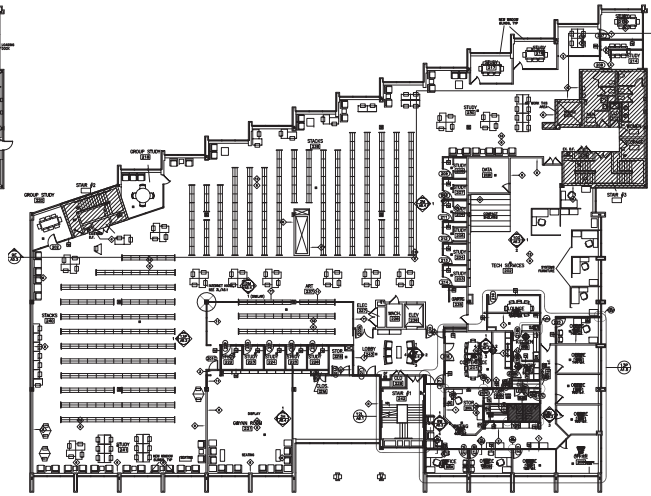


Open Office Space on 3rd floor

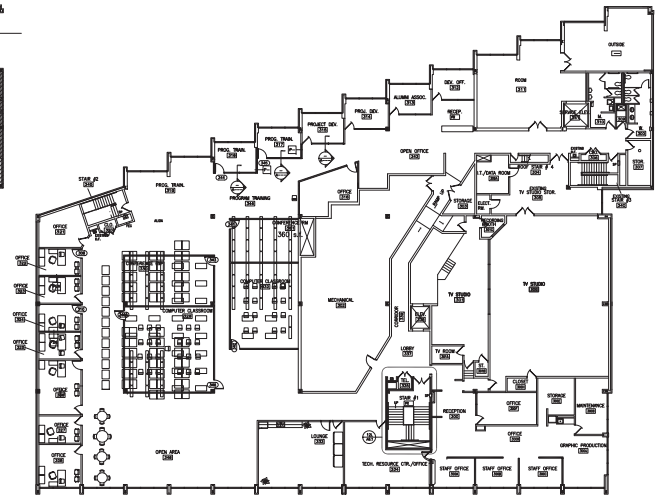
2 ACCOKEEK HALL



First Floor



Second Floor



Third Floor

3-4 BLADEN HALL

Year constructed:	1967
Major Renovations:	2004 and 2007 on 1st floor only
General Condition:	Excellent in renovated areas; poor elsewhere
Estimated Repair Costs:	\$3.374 million
Building type:	Educational/Classroom and Student Services
Building area:	65,910 (Building NASF); 101,136 (Total GSF)
Building Capacity:	1,012 Occupants
Number of stories:	Three
Building construction:	Concrete masonry unit encased steel frame with concrete-topped metal decks
Roof construction:	Flat roofs with built-up membrane
Exterior Materials:	Brick veneer and EIFS. Brick veneer is in fair condition, while most of the EIFS is at the end of its useful life

Description of Space:

Bladen Hall contains Student Services offices for Admissions and Records, Advising and Counseling, Campus Assessment Center, Financial Aid, Health Center, Tutoring and Writing Center, Enrollment Services, Recruitment, Veterans Services, Diverse Male Student Initiatives, and PAS. The building also contains open and class labs and classrooms. General finishes on the 2nd and 3rd floors include ceramic tile floors, painted drywall and acoustic tile ceilings.

Adequacy of Space:

The 1st floor is generally adequate for Student Service functions. Second and 3rd floor classrooms are outdated and do not function well; many classrooms have no technology other than an overhead projector on a cart, tablet arm

chairs and blackboard/tackboard surface. Further, there is no informal meeting space for students or faculty. Restrooms on the 2nd and 3rd floors are non-compliant with ADA, and the exit stairs serving the upper floors do not communicate directly to the exterior and are therefore not code-compliant.

Mechanical/Plumbing:

The building is conditioned by three rooftop AHUs and an indoor AHU. The indoor air handler is old and requires replacement. The rooftop air handlers were replaced in 2001. The 16 existing roof mounted exhaust fans are in poor to fair condition and should be replaced. The existing HVAC system is not functioning well and requires re-balancing. In addition, while the fan coils serving the upper floors are replacements in good condition, they are not sized for the current space usage, which includes higher cooling demands due to the introduction of computers into the classroom environment. Two small boilers dedicated to serving the Learning Center require replacement.

The first floor digital control system is a Johnson Controls System and the remainder of the building utilizes a Siemens Control System. The need for year-round cooling requires the water-cooled chillers in the central plant to operate in the winter, resulting in operational issues and lack of efficiency. The central plant is located in Bladen Hall. Refer to the Central Heating and Cooling Plant section for additional information.

The existing plumbing fixtures are old and require replacement with new water conserving type. The building is fully protected with a wet pipe sprinkler system.

Electrical:

The existing PEPCO medium voltage services were relocated to new 15 kV switchgears located behind Lanham Hall. The existing transformer, service entrance switchboard and distribution panels were upgraded as a part of the campus electrical system upgrades project in 2013.

Information Technology:

Voice and data services are currently served via Telecommunications room B129 Building Distribution (BD), 2nd floor IT room Floor Distribution (FD), and 3rd floor IT room (FD). Bladen Hall south voice and data services connections are via existing server room (BD).

3-4 BLADEN HALL



Exterior view from north quad toward the one- and two-story masses of Bladen Hall



1st floor student services corridor



1st floor student services corridor

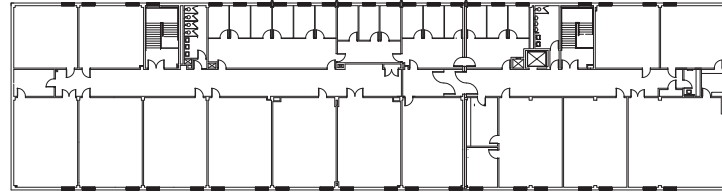


1st floor student assessment lab

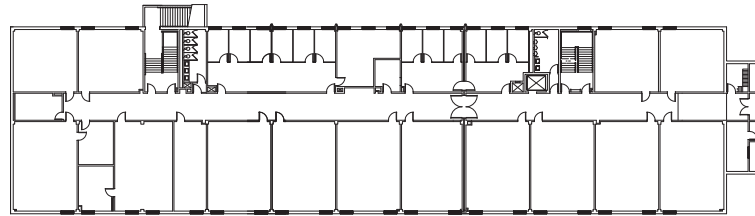


View of stark 2nd floor corridor showing lack of amenities such as benches, bulletin boards, etc.

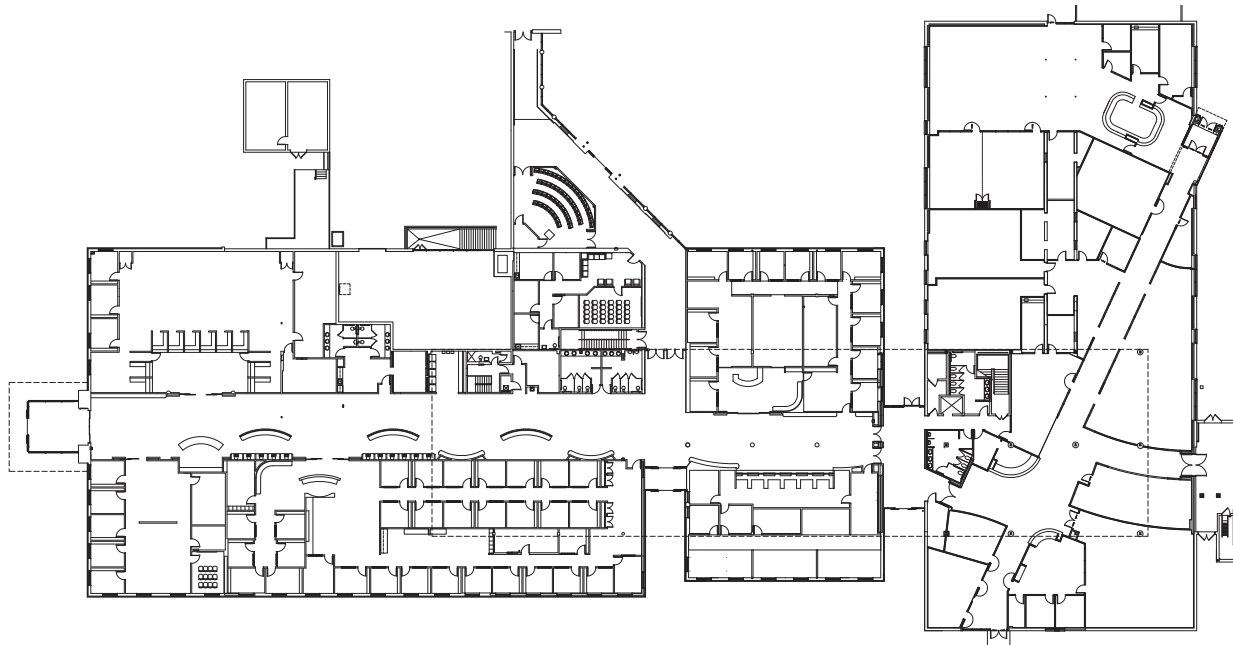
3-4 BLADEN HALL



Third Floor



Second Floor



First Floor

5 LARGO STUDENT CENTER

Year constructed: 1973
Major Renovations: in past five years

General Condition: Fair

Estimated Repair Costs: \$1.6 million

Building type: Educational/Classroom and Student Services

Building area: 50,742 (Building NASF); 69,116 (Total GSF)

Building Capacity: 692 Occupants

Number of stories: Two

Building construction: Concrete masonry unit encased steel frame with concrete-topped metal decks

Roof construction: Single-ply flat roofs with stone ballasts

Exterior Materials: Brick veneer

Description of Space:

The Largo Student Center contains the campus Book Store, Campus Dining, College Life Services, Community Rooms, Owl Newspaper, Rennie Forum, Print, Supply and Mail room, and Student Governance Board rooms.

Adequacy of Space:

As the primary location on campus for food service, meeting space, and the bookstore, the building is taxed well beyond its ability to adequately serve the student population and community. The kitchen and servery are cramped, limiting the number of food service vendors. There is also limited space to accommodate student government and college life services, plus a shortage of general student lounge and gathering space, offices, meeting rooms and

flexible space. The dining areas are too small for the number of patrons during peak (lunch) times, and this area is off limits to students unless they are dining. Meeting rooms are small and limited in number. Receiving, loading, and trash areas are small and do not serve the functions well. Acoustics are problematic; sounds are transmitted throughout the building, interfering with functions inside occupied rooms.

Mechanical/Plumbing:

The Largo Student Center is conditioned with AHUs installed in 2002. Supplemental rooftop air-handling units provide conditioning for the cafeteria and assembly areas. The building contains its own 300 ton York Millennium water cooled chiller and associated cooling tower, which are old and have exceeded their expected life. Steam from the central boiler plant in Bladen Hall is used to generate heating water that is circulated throughout the building. Several exhaust fans are located on the roof, including kitchen and cafeteria exhaust fans. The kitchen/cafeteria cooking equipment is old and requires upgrade.

The chillers, cooling towers, chilled and heating water pumps, and heating water system have exceeded their expected life and the AHUs will exceed their expected life within the next five years. The constant volume AHUs and pumps are energy inefficient. Energy savings and improved zone temperature control can be achieved with variable volume AHUs with terminal variable air volume boxes.

The existing plumbing fixtures are old and require replacement with new water conserving type. The building is fully sprinklered and kitchen hoods are protected with Ansul wet agent chemical systems. The fire suppression systems are in good condition.

Electrical:

The existing transformer was upgraded as a part of the campus electrical system in 2013. The existing 100 kW natural gas generator is being shared with Queen's Anne Fine Arts and Bladen Hall.

Information Technology:

Voice and data services are currently served via an existing equipment rack in mechanical room 146 and second floor telecommunications rooms Building Distribution (BD).

5 LARGO STUDENT CENTER



View from north quad



LSC houses several conference rooms for student, faculty, staff, and community use



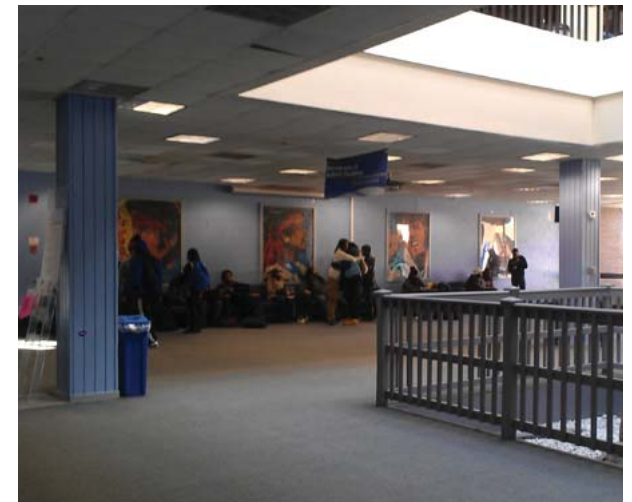
College Life Services Space



Double-height lobby and entry to bookstore

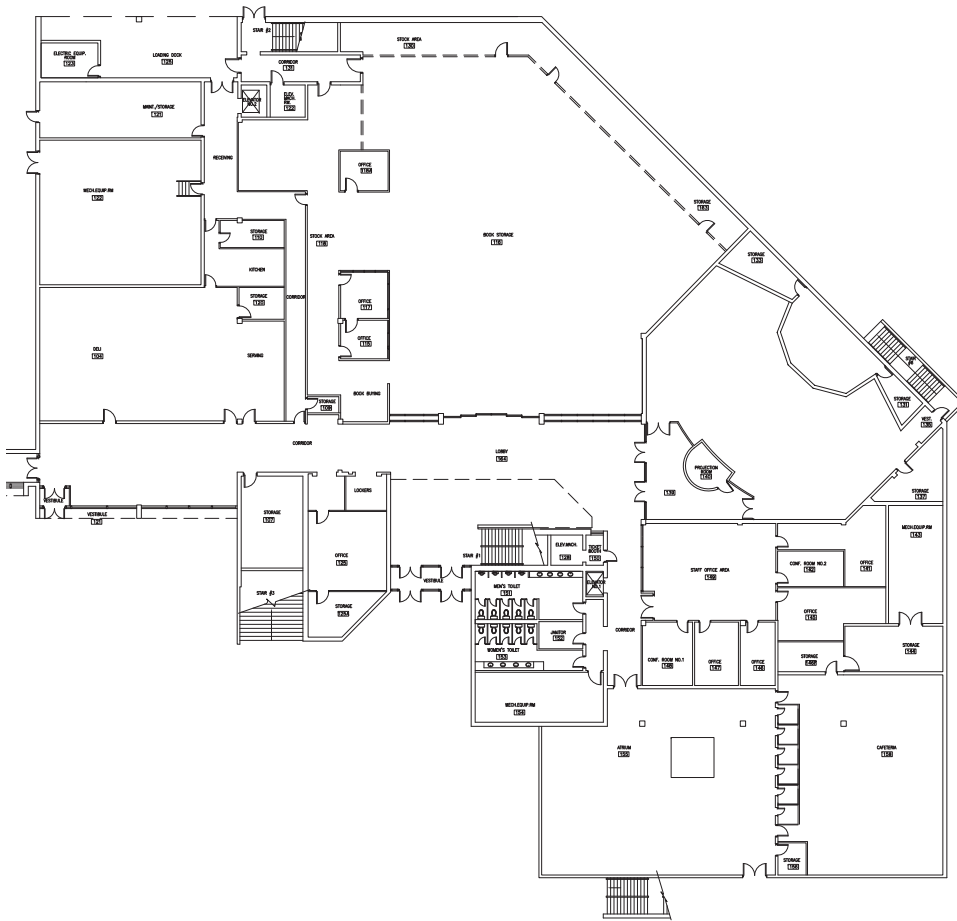


Dining facility, with small foodservice area at back

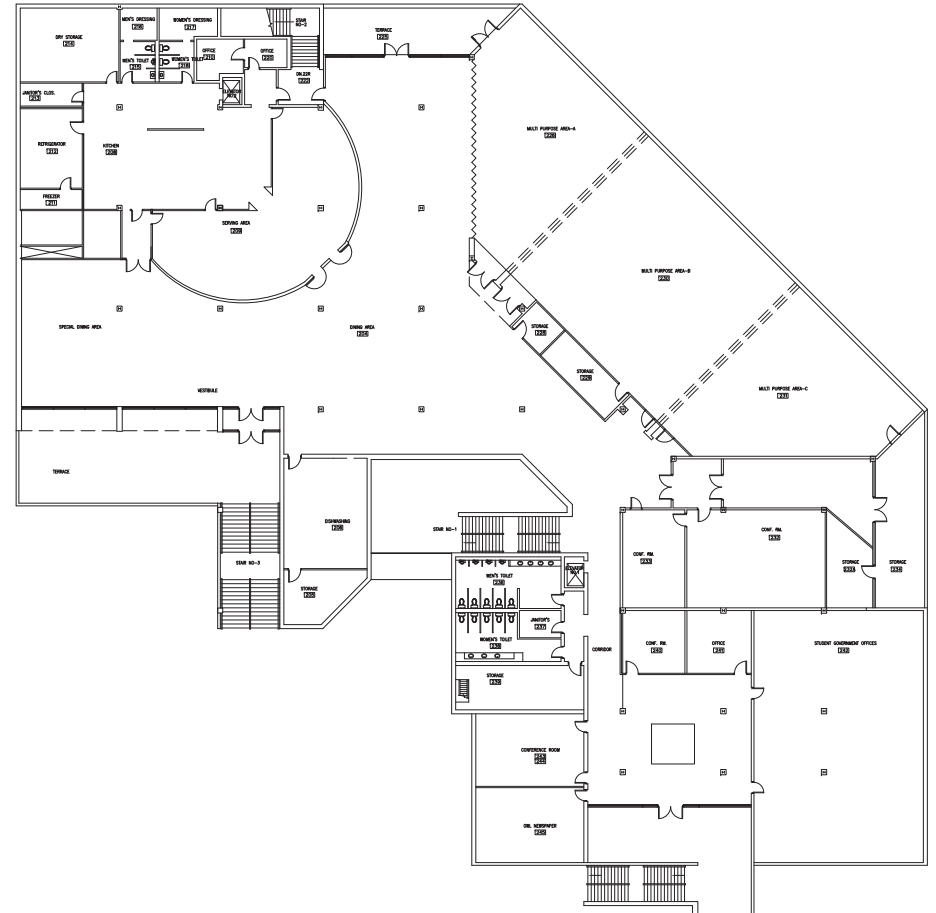


Student Lounge

5 LARGO STUDENT CENTER



First Floor



Second Floor

6 CHESAPEAKE HALL

Year constructed: 1999
Major Renovations: none

General Condition: Good

Estimated Repair Costs: \$22,125,039

Building type: Educational/Classrooms

Building area: 38,011 (Building NASF); 65,327 (Total GSF)

Building Capacity: 654 Occupants

Number of stories: Three

Building construction: Concrete masonry unit encased steel frame with concrete-topped metal decks

Roof construction: Multi-level flat roofs with built-up membrane

Exterior Materials: Brick veneer and metal sandwich panel curtain wall system, aluminum framed, insulated glass windows, storefronts and doors

Description of Space:

Chesapeake Hall contains faculty offices, classrooms and labs for the Sciences, Technology, Engineering, and Mathematics divisions.

Adequacy of Space:

Generally, the building is in very good condition.

Mechanical/Plumbing:

The building contains a heating and cooling plant including two York air cooled 300 ton chillers and four boilers. The two primary boilers have an input rating

of 2,887 MBH and the two secondary boilers are rated for 596 MBH input. The chillers utilize R-22 refrigerant, which has a phase-out date of 2010. Several exhaust systems for hoods exist, but they are unable to provide adequate exhaust. Heating and cooling is provided by two variable volume AHUs equipped with heating and cooling coils and two glycol heat recovery units. The buildings are controlled through a Siemens digital control system.

The building HVAC systems are generally in good condition and incorporate energy efficient technologies, but the primary boilers are in poor condition with significant evidence of corrosion and damage. New condensing type heating water boilers would improve heating system efficiency. Heating water system equipment such as the heating water pumps and chemical treatment tanks in the first floor mechanical room have evidence of corrosion and should be replaced.

The laboratory exhaust system has not met design objectives and provides inadequate exhaust air flow. The system should be analyzed and improvements implemented to remedy deficiencies. In addition, the chemical room exhaust fans should be connected to the emergency generator to prevent unhealthy levels of chemicals during power outages.

The plumbing systems, including the lab deionized water system, are in good condition. The building is equipped with a wet pipe sprinkler system, stand-pipes and a smoke evacuation system. The fire suppression systems are in good condition.

The building infrastructure was constructed in 1999 and consideration should be given to replacement of major HVAC and plumbing equipment when the building approaches 20 years of age in 2019.

Electrical:

The existing transformer, service entrance switchboard and distribution panels were upgraded as a part of the campus electrical system upgrades project in 2013. The existing 200 kW natural gas generator is being shared with Lanham Hall.

Information Technology:

Voice and data services are currently served via Telecommunications room 105 Building Distribution (BD), vertically stack Comm. rooms 104, 206, and 307 Floor Distribution (FD).

6 CHESAPEAKE HALL



View from Inner Ring Road



Typical classroom



View of entry, atrium and bridge to Lanham Hall

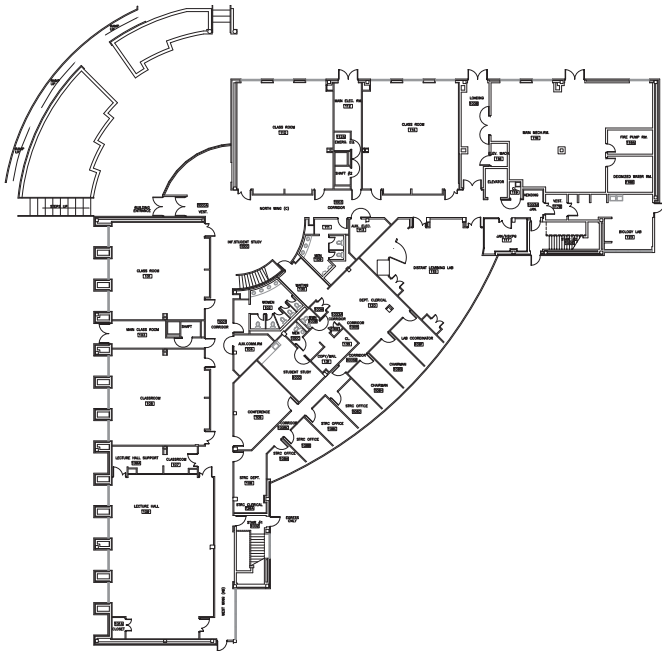


View of 3-story atrium

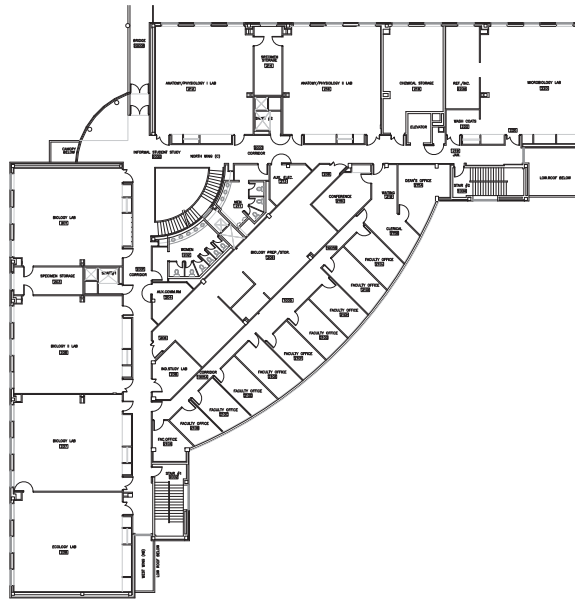


Typical classroom

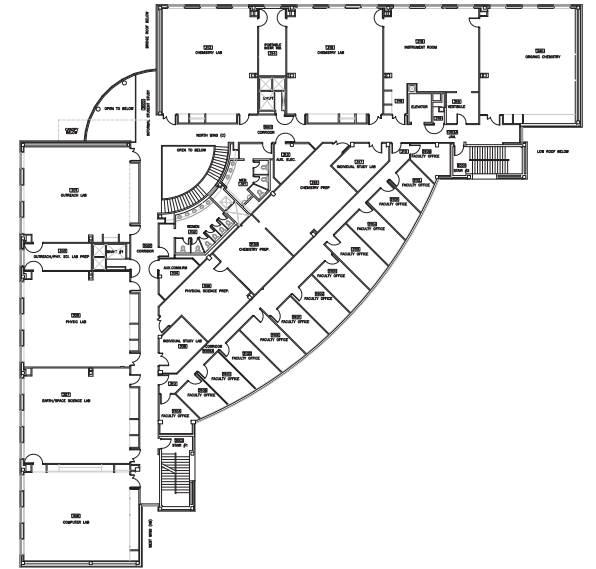
6 CHESAPEAKE HALL



First Floor



Second Floor



Third Floor

7 LANHAM HALL

Year constructed:	1969
Major Renovations:	renovations currently in design
General Condition:	Fair
Estimated Repair Costs:	\$3.1 million
Building type:	Educational/Classrooms
Building area:	48,728 (Building NASF); 77,249 (Total GSF)
Building Capacity:	773 Occupants
Number of stories:	Three
Building construction:	Concrete masonry unit bearing walls and steel columns. Cast concrete floors supported by steel beams and lightweight concrete topped metal deck roof supported by open web steel joists.
Roof construction:	Multi-level flat roofs with built-up membrane
Exterior Materials:	Brick veneer

Description of Space:

Lanham Hall currently houses the International Education Center, and Academy of Health Sciences. After the building renovation scheduled for fiscal year 2015, the facility will continue to house the Academy of Health Sciences and International Education Center, along with Student Support services and WDCE offices relocated from TO, TS and Kent Hall 2nd Floor. Programs and services that will occupy the renovated building include Vocational Support Services, Tutoring and Writing Center Honors Program, Hillman Entrepreneurs, Diverse Male Student Initiatives, Upward Bound, Owl's Success Track, print,

supply and mail room. The College's data center was relocated from Lanham Hall to CHS in 2012.

Adequacy of Space:

There are a number of former health science labs in the building that are no longer in use with the relocation of the health sciences to the newly built Center for Health Sciences. Corridors are typically extremely wide, such that they are an inefficient use of space.

Mechanical/Plumbing:

The building is served by five AHUs with heating water and chilled water coils and contains its own chillers and cooling tower (replaced in 2003). Steam from the central boiler plant in Bladen Hall is converted to heating water to serve the building. Both the chilled water and heating water pumps are old and require replacements. Additionally, the chilled water and heating water pipes are in poor condition and require replacement throughout the building. The building also contains approximately 80 unit ventilators, which are in poor condition. The existing plumbing fixtures are old and require replacement with new water conserving type. Elevator jacks require replacement. Toilet rooms require complete renovation, either as a systemic renovation project or total building renovation. The roof was replaced in 2002. Complete renovation is recommended.

Electrical:

The existing transformer was upgraded as a part of the campus electrical system upgrades project in 2013. The existing 200 kW natural gas generator is being shared with Chesapeake Hall.

Information Technology:

Lanham Hall used to be the main campus data center for the campus. Voice and data services are currently served via Data center Building Distribution (BD) and 2nd Floor Server room Floor Distribution (FD).

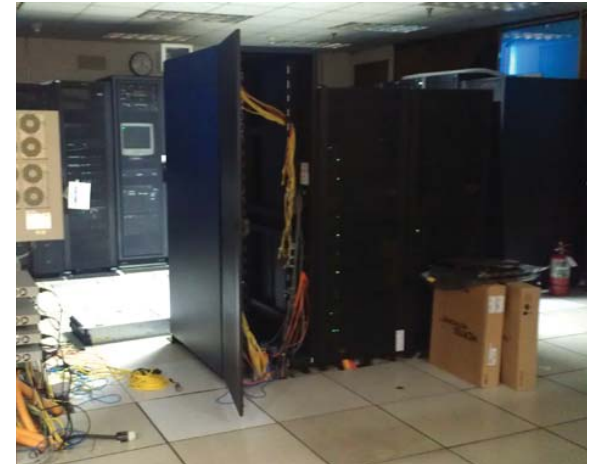
7 LANHAM HALL



*Lanham Hall and adjacent transformers
Bridge connection between Lanham Hall and Largo Student Center*



Excessively wide corridor on upper floor



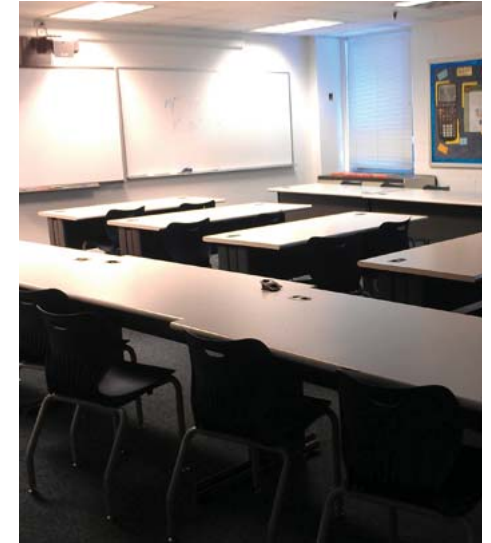
Abandoned Data Center



*Excessively wide corridors in Lanham Hall are very inefficient
Excessively wide corridor on upper floor*



Computer Lab/Classroom

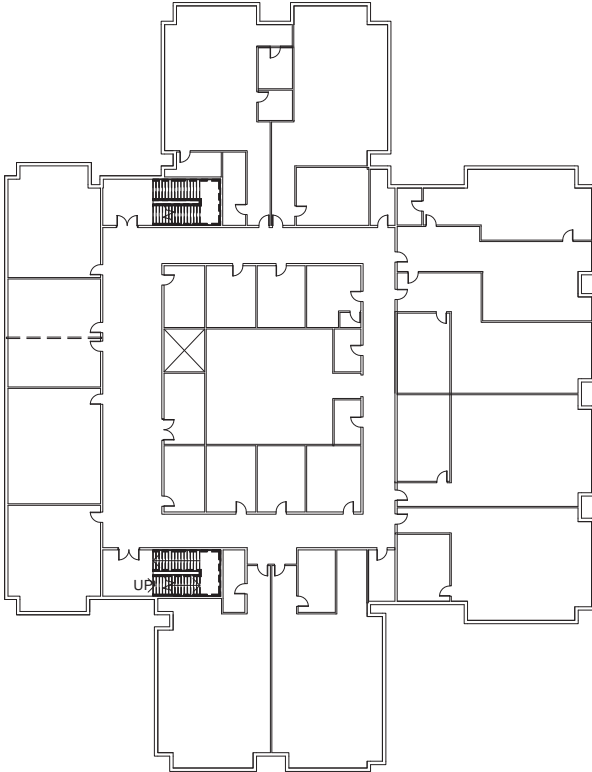


Small Academy of Health Science Classroom

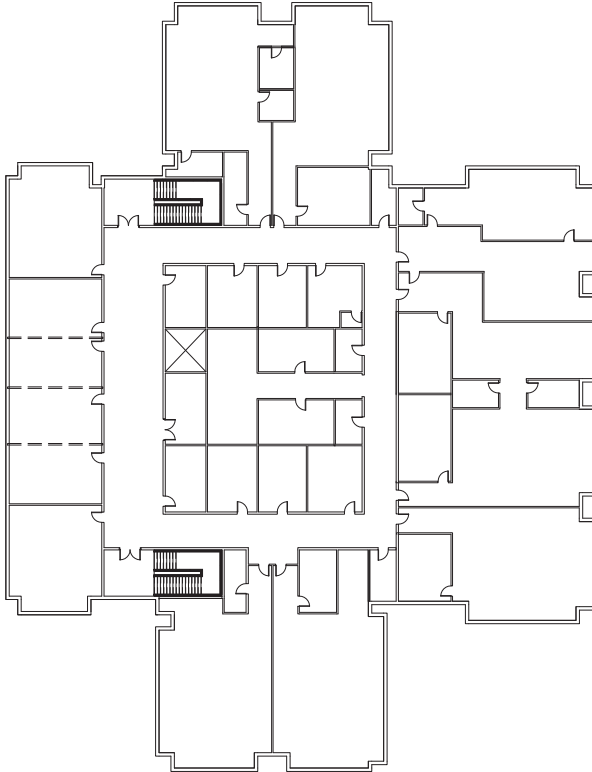
7 LANHAM HALL



First Floor



Second Floor



Third Floor

8 MARLBORO HALL

Year constructed: 1975
Major Renovations: none

General Condition: Fair

Estimated Repair Costs: \$3.5 million

Building type: Educational/Classrooms and Labs, Offices, Art Gallery

Building area: 77,672 (Building NASF); 130,156 (Total GSF)

Building Capacity: 1,302 Occupants

Number of stories: Three

Building construction: Steel columns and beam with open web steel joist-framing supporting metal deck roofs

Roof construction: Flat roofs with built-up membrane

Exterior Materials: Brick veneer and aluminum curtain wall

Description of Space:

Marlboro Hall currently houses faculty offices and classrooms for Art and Music, Career/Job Services, Learning Foundations, Liberal Arts, Social Sciences and Business, English, History, Political Science, Geography, Mathematics, Psychological and Sociological Sciences, as well as Student Service functions such as Retention Services, Student Support Services, and Vocational Support Services.

Adequacy of Space:

Marlboro Hall suffers from age and lack of major renovations for over 30 years. Structural cracking is evident in several locations, noticeably on the brick exterior and exit stairs; the College is monitoring these cracks. Although connected to Bladen and Lanham Halls, corridors provide through-circulation only

on level 1 to Bladen, level 2 to both buildings and level 3 to Lanham. Classrooms in general are too small, and several classrooms are not equipped with basic technology infrastructure such as overhead projectors & controls, have limited lighting controls and limiting classroom furnishings such as tablet arm chairs. Faculty offices are very small. Though Marlboro Hall contains much of the visual arts programs, there is no room in the building for several visual arts labs (currently located in CAT) and no space for ceramics and sculpture studios. ADA non-compliance includes handrails in stairs, doors, and toilet rooms. Temperature control is erratic. Operable partitions provide little sound resistance. The roof is at the end of its useful life and requires replacement.

Mechanical/Plumbing:

The building is primarily conditioned with seven variable air volume AHUs that provide supply air to variable volume terminal boxes. Chilled water is provided by two 255 ton capacity water cooled chillers, each served by a 400 ton capacity cooling tower. A 10" steam main from the central plant in Bladen Hall is used to generate heating water for the building. All heating and chilled water pumps are constant volume, which is energy inefficient. Ten constant volume rooftop AHUs provide supplemental cooling for special use spaces. Several exhaust fans serve toilet rooms. All of the air handling equipment is old and requires replacement. The building is equipped with Siemens digital controls, but temperature control is erratic and would be improved with an upgraded HVAC system.

The existing plumbing fixtures are old and require replacement with new water conserving type. The building is protected by a wet pipe fire suppression system.

Electrical:

The existing transformer and service entrance switchboard were upgraded as a part of the campus electrical system upgrades project in 2013. The existing 50 kW diesel generator provides for life safety loads.

Information Technology:

Voice and data services are currently served via Telecommunications closet M1057, equipment rack cabinets in rooms M2102, M2129, M2052, M3072 and room M3030.

8 MARLBORO HALL



View of large glass expanse at quad side



1st floor Art Gallery



Vending machines in corridor in lieu of lounge space



View of massive brick facade at east side

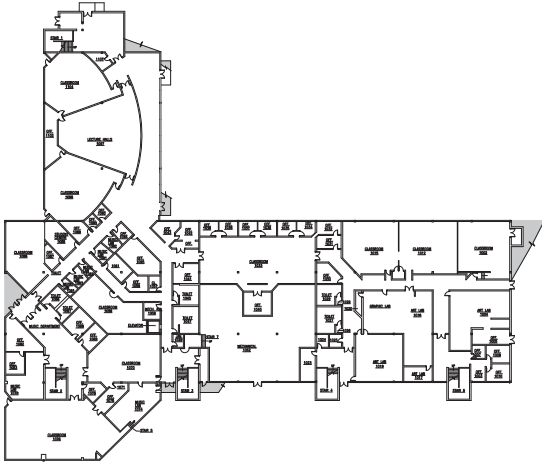


Art Lab

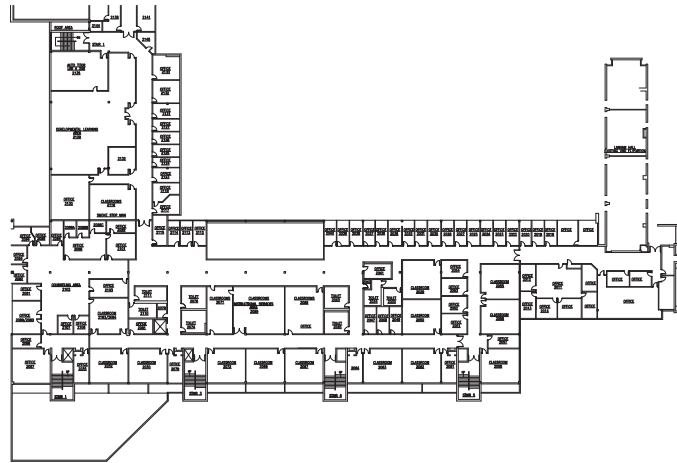


Music Classroom

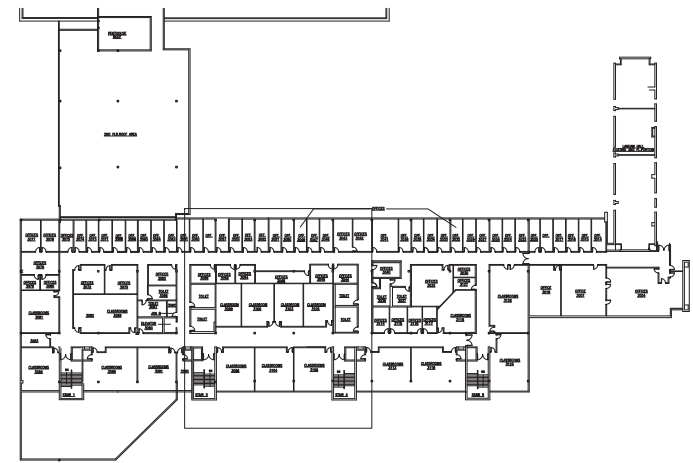
8 MARLBORO HALL



First Floor



Second Floor



Third Floor

9 QUEEN ANNE FINE ARTS

Year constructed:	1967
Major Renovations:	none
General Condition:	Poor
Estimated Repair Costs:	\$1.229 million
Building type:	Performing Arts Theater, Communication and Theater Offices
Building area:	22,852 (Building NASF); 33,455 (Total GSF)
Building Capacity:	335 Occupants
Number of stories:	Double height auditorium with two-story office support
Building construction:	Concrete masonry unit encased steel frame with concrete topped metal decks.
Roof construction:	Flat roofs with built-up asphalt
Exterior Materials:	Brick veneer with exterior insulation and finish system (EIFS) on columns and fascia

Description of Space:

Queen Anne Fine Arts currently houses an 805-seat performing arts space (Hallam Theatre) as well as administrative offices, lobby, dressing rooms, and costume and storage space.

Adequacy of Space:

The building functions very poorly as a performing arts venue and teaching building. The lobby is too small as a pre-function space for most events. The

building lacks classrooms, student gathering and study space, has a very small number of small offices and an inefficient and poorly placed loading dock. Storage space for costumes and sets is very limited. Very few spaces in the building are ADA-compliant, including the stage, seating, toilet rooms and the building entry itself.

Mechanical/Plumbing:

Chilled water and steam is provided from the central plant in Bladen Hall. The steam is converted to heating water and domestic hot water through indirect converters. The building is conditioned with two AHUs which utilize duct mounted steam coils for zone temperature control. Heating, cooling, and ventilation to the costume rooms, fitting rooms and orchestra pit are not provided, leading to humidity and mold problems that make the space unusable. HVAC systems in the building are original, aging, and energy inefficient. The building has been retrofitted with Siemens digital controls.

The existing plumbing fixtures and systems are old and require replacement with new water efficient systems. Portions of the building including the stage and communications room are protected by a wet pipe sprinkler system. The remainder of the building is not sprinklered.

Electrical:

The existing transformer and service entrance switchboard were upgraded as a part of the campus electrical system in 2013. The existing 100 kW natural gas generator is being shared with Bladen Hall and Largo Student Center.

Information Technology:

Voice and data services are currently served via two equipment rack cabinets, one in office behind stage on the 1st floor and the other on the balcony level in the production room.

9 QUEEN ANNE FINE ARTS



Queen Anne exterior view



Dressing Room



Lobby



Costume Room

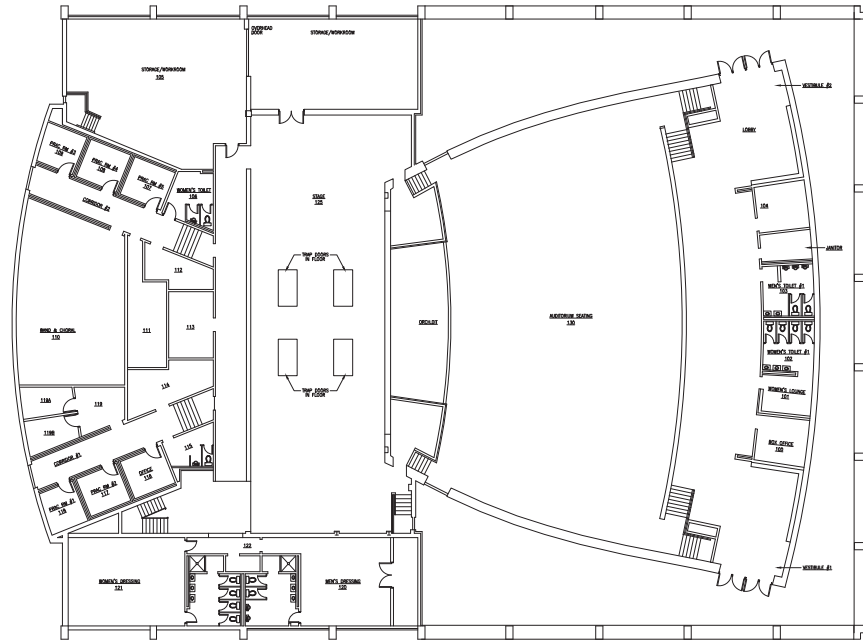


Theater space

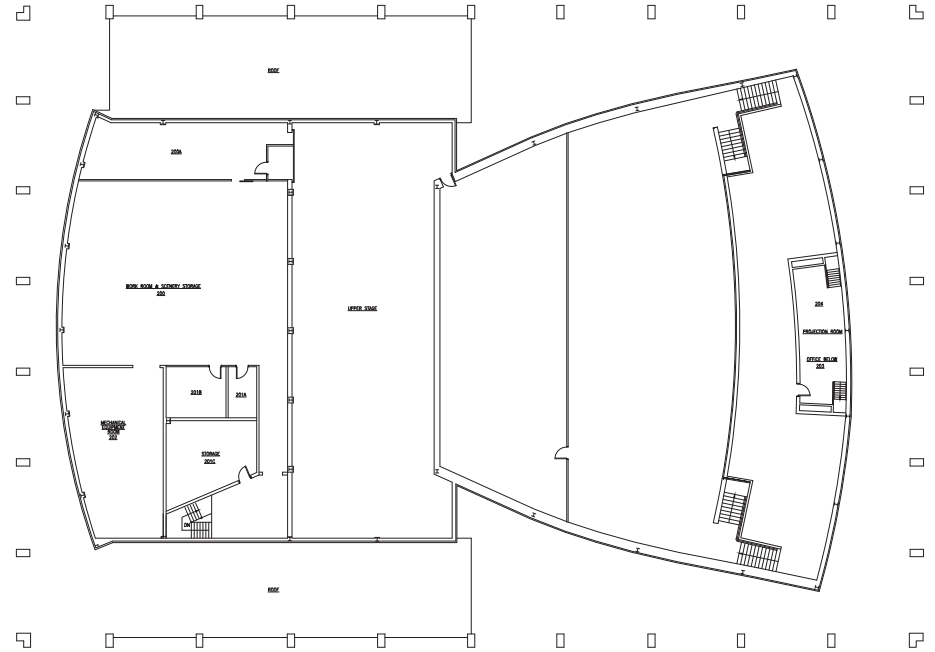


Scene Shop

9 QUEEN ANNE FINE ARTS



First Floor



Second Floor

10 NOVAK FIELD HOUSE

Year constructed:	1967
Major Renovations:	finishes renovations, 2011-12
General Condition:	Fair
Estimated Repair Costs:	\$1.168 million
Building type:	Gymnasium
Building area:	26,013 (Building NASF); 35,616 (Total GSF)
Building Capacity:	357 Occupants
Number of stories:	One
Building construction:	Masonry bearing walls surrounding gymnasium with metal decking and open web joist supported roof. Integral steel column and beam frame gymnasium with metal deck supported roof.
Roof construction:	Flat roofs with built-up membrane with pea gravel ballast (lower level) and single ply (upper level) membrane with stone ballast.
Exterior Materials:	Brick veneer with concrete panels with exposed aggregate fascia panels at mansard style perimeter of lower roof and factory finished metal panels for gym and mansard style fascia at upper height. Windows and storefronts are aluminum framed single-glazed units

Description of Space:

Novak Field House houses spaces for Athletics, Wellness, Health, Nutrition and Physical Education, Intramurals, the Police Academy, Children's Developmental

Clinic and Senior Fitness. Spaces include the main gymnasium, weight room, fitness room, locker rooms, training rooms and offices.

Adequacy of Space:

The building is too small to meet the demands of both PGCC and local community. There is only one gymnasium space, and public locker rooms need complete upgrades. The one gymnasium space is inadequate to meet the demands of the numerous programs vying for the space, and is not nearly big enough to use for graduation ceremonies. There are too few offices in Novak, necessitating the use of T3 behind Novak for some offices. Ramps, bleacher seats, and restrooms are non-ADA compliant. Circulation inside the building is awkward as well.

Mechanical/Plumbing:

The building is heated via two 2,821 MBH capacity steam boilers and packaged rooftop AHUs with gas furnaces. Steam is distributed to radiators serving the lobby areas and AHUs serving the gymnasium. The constant volume rooftop AHUs provide heating and cooling for the common areas. The boilers are old and require replacement. Existing rooftop AHUs were replaced within the last 10 years, but are constant volume and less efficient than a centralized system.

The existing plumbing fixtures were recently installed and do not require replacement. The fire protection system consists of a wet-pipe sprinkler system, an emergency smoke removal system in the gymnasium, and a CO2 protection system for the main electrical transformer room. The facility conditions assessment indicated that the CO2 system is not in compliance with current codes and needs to be upgraded or replaced.

Electrical:

The existing transformer, service entrance switchboard were upgraded as a part of the campus electrical system in 2013. The existing 100 kW natural gas generator is being shared with Natatorium.

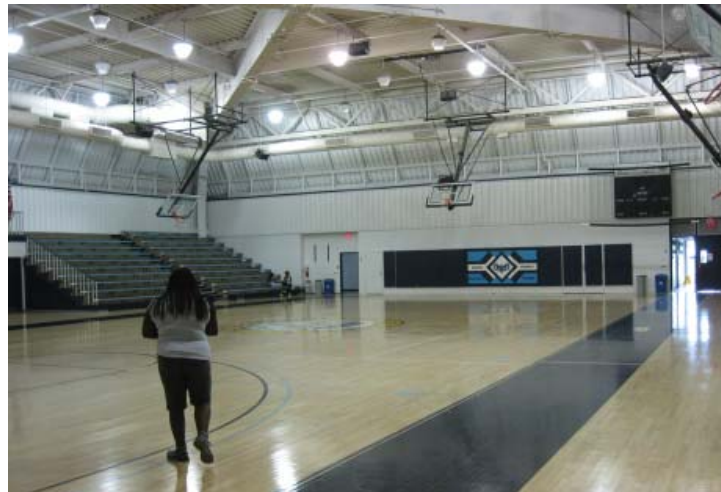
Information Technology:

Voice and data services are currently served via equipment rack/cabinet in the fitness room on the northeast corner of the building.

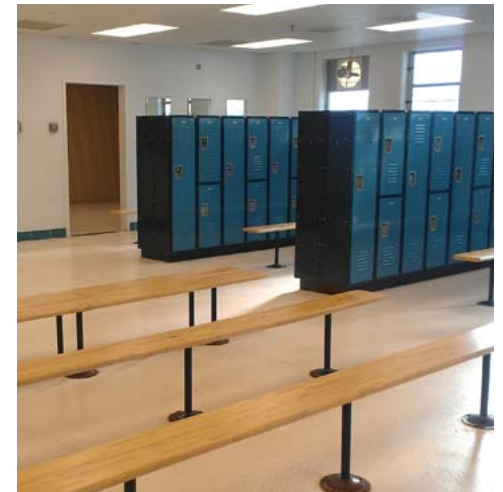
10 NOVAK FIELD HOUSE



Exterior view facing parking lot H



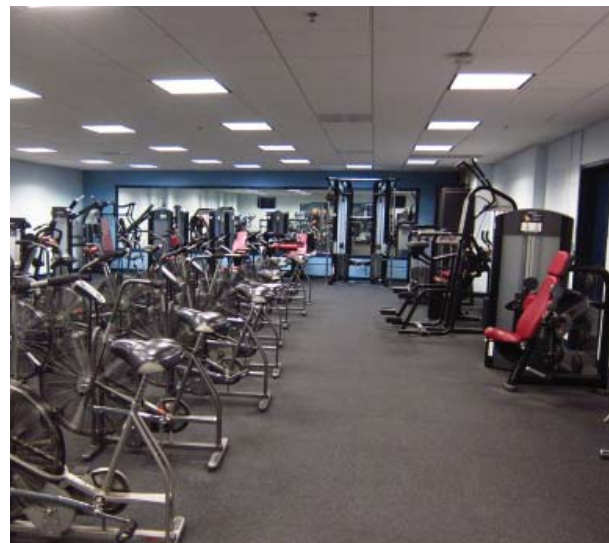
Gymnasium



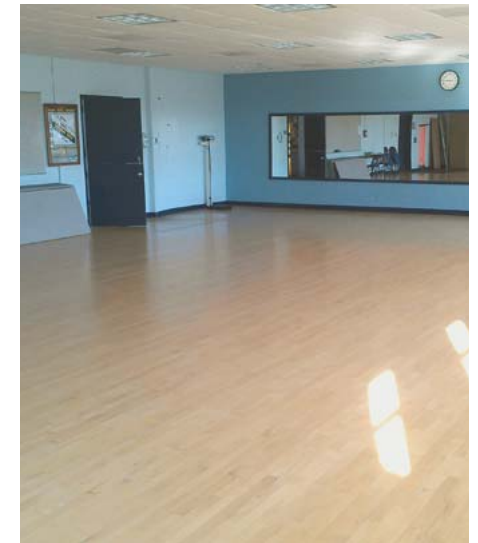
Public locker room



Exterior view (from the outer ring road) of the Field House and temporary Building T3 from outer ring road

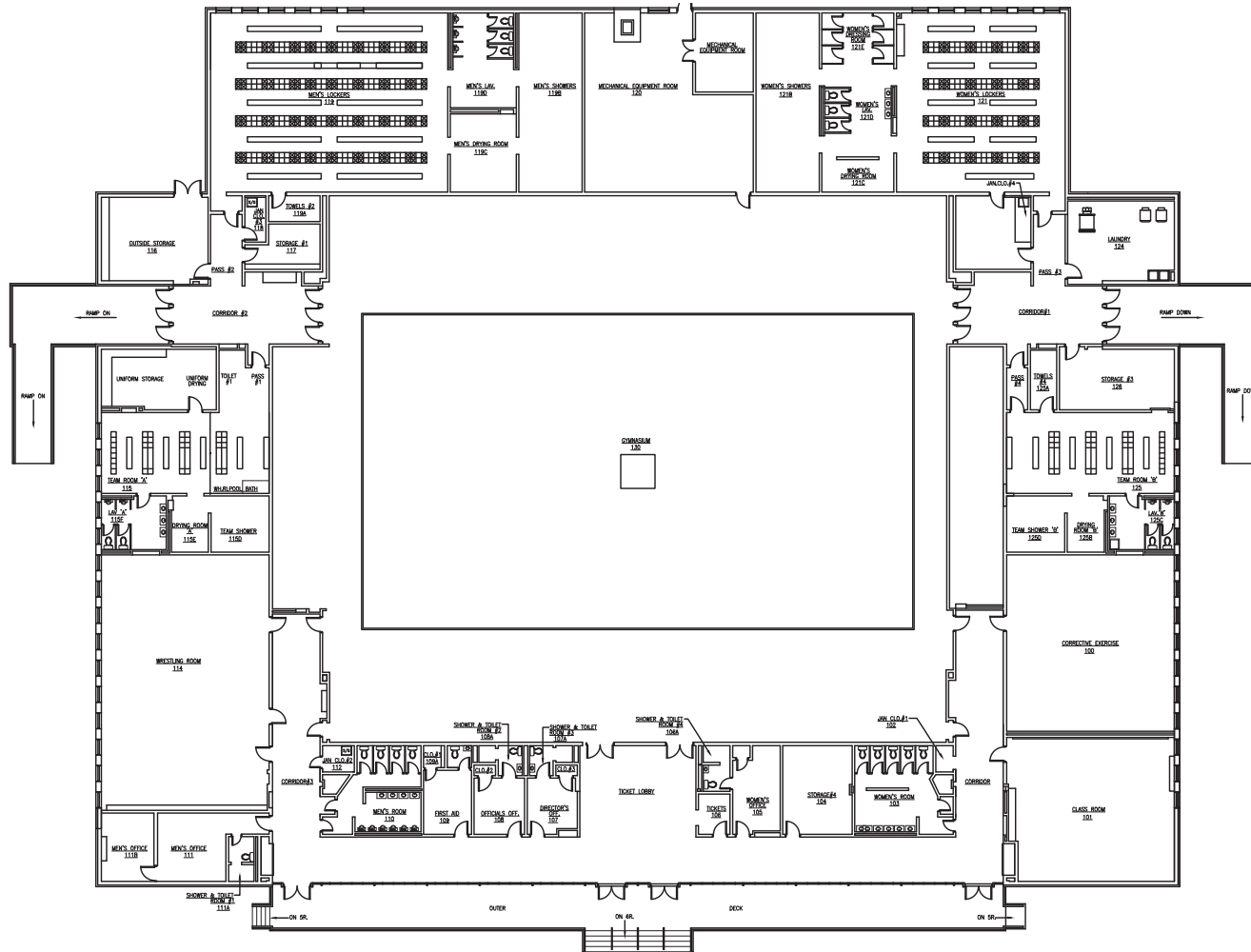


Training room



Aerobics room

10 NOVAK FIELD HOUSE



First Floor

11 R. I. BICKFORD NATATORIUM

Year constructed:	1991
Major Renovations:	2010
General Condition:	Good
Estimated Repair Costs:	\$385k
Building type:	Natatorium
Building area:	39,254 (Building NASF); 47,139 (Total GSF)
Building Capacity:	472 Occupants
Number of stories:	Double height natatorium with one-story office support
Building construction:	Steel bar joist/beams and columns with masonry bearing walls
Roof construction:	Flat roofs with built-up membrane. The roof deck is steel covered with rigid insulation and white single-ply membrane.
Exterior Materials:	Brick with painted masonry

Description of Space:

R. I. Bickford Natatorium houses a Fitness Center, Hydrotherapy Pool, Racquetball Court, Swimming Pool, Training Pool and offices.

Adequacy of Space:

The natatorium is an important amenity for the College with its 50 meter pool. Finishes are in good condition throughout but in need of upgrade in limited areas. Fitness rooms appear to be small for the amount of equipment contained,

and racquetball courts are little used, creating opportunities for adaptive reuse or elimination of the outdoor racquetball courts. The building is heavily used by the community in addition to use by PGCC students.

Mechanical/Plumbing:

The building is supplied with heating and chilled water from two 1,000 MBH capacity boilers and a 60 ton Trane air cooled chiller. In addition, heating for the pool is provided by two 1,000 MBH Aerco boilers and domestic water is provided by a 1,000 MBH boiler and 900 gallon tank. Two rooftop AHUs serve the natatorium, three AHUs serve the training room and spa areas, and five smaller Trane AHUs located above the ceiling serve the racquetball courts, weight room, lobby, and offices. The building is controlled through a Siemen's digital control system. HVAC equipment has been recently replaced and is in good condition.

Plumbing systems are in good condition and require only routine maintenance. The building is fully protected with a wet pipe sprinkler system.

Electrical:

The existing transformer and service entrance switchboard were upgraded as a part of the campus electrical system in 2013. The existing 100 kW natural gas generator is being shared with Novak Field House.

Information Technology:

Voice and data services are currently served through the Novak Field House equipment cabinet. Although existing ductbank reaches the building, currently no fiber tubes were a part of the 2010 campus fiber upgrade project.

11 R.I. BICKFORD NATATORIUM



Exterior view from inner ring road



Training/Therapy Pool

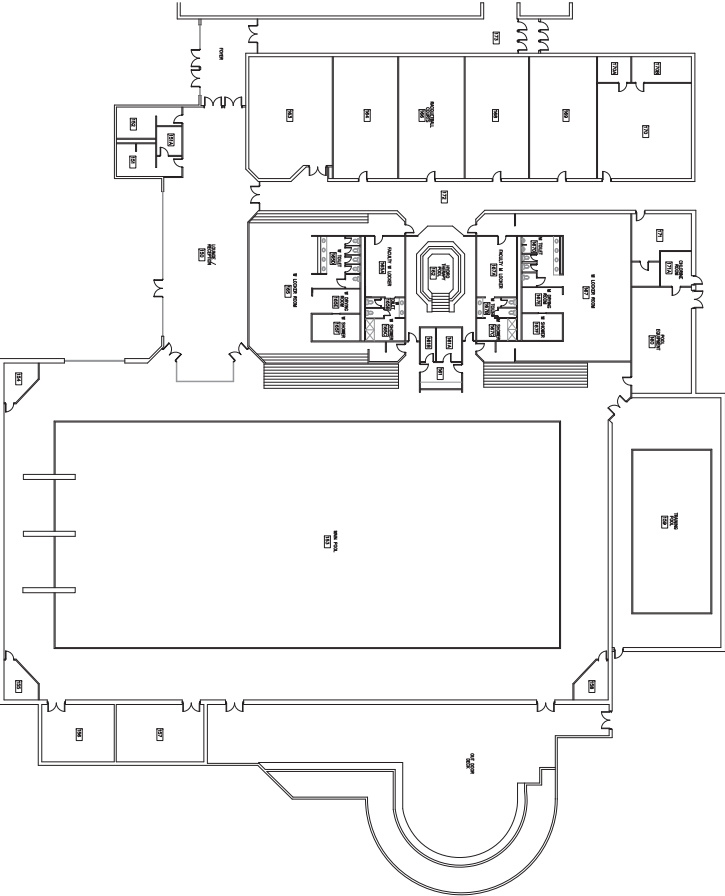


Swimming pool



Lobby

11 R.I. BICKFORD NATATORIUM



First Floor

12 CONTINUING EDUCATION

Year constructed: 1998

Major Renovations: none

General Condition: Fair

Estimated Repair Costs: \$526k

Building type: General Classrooms and Offices

Building area: 11,337 (Building NASF); 15,320 (Total GSF)

Building Capacity: 154 Occupants

Number of stories: One

Building construction: Modular buildings joined and encased in brick veneer. Wood frame bearing walls with raised steel beam supported floor on concrete post foundation

Roof construction: Flat roof with single-ply membrane

Exterior Materials: Brick veneer

Description of Space:

The Continuing Education Building houses a Children’s Developmental Clinic, College for Living, Police Academy, Senior Citizens Programs, and general classrooms.

Adequacy of Space:

This modular brick-clad building provides instructional space for continuing education programs but lacks a sufficient number of classrooms and class labs for the continuing education program. Built to meet now outdated demands of the continuing education programs, the building is showing signs of wear.

Sound attenuation between spaces is poor; the roof (now beyond its warranty) has leaked regularly over several years, and the HVAC system is erratic with little control of temperature and humidity. Floor finishes have degraded and require replacement. While the College has upgraded some classrooms, several are not equipped with basic technology infrastructure such as overhead projectors & controls, have no lighting controls beyond “on” and “off”, and have inflexible classroom furnishings such as tablet arm chairs.

Mechanical/Plumbing:

The building is conditioned with ten gas-fired heating and cooling units with an average capacity of 5 tons each. The units were recently replaced and are in good condition. The constant volume roof-top units are energy inefficient compared to a centralized variable air volume system and have less ability to maintain design space temperature and humidity. The building is controlled with a Siemens digital control system.

The existing plumbing systems are in good condition. The building is fully protected by a wet pipe sprinkler system.

Electrical:

The existing transformer, service entrance distribution panels were upgraded as a part of the campus electrical system upgrade project in 2013.

Information Technology:

Voice and data services are currently served via equipment rack/cabinets in electrical room.

12 CONTINUING EDUCATION



Exterior view at entry



Typical corridor



Police Academy classroom



Exterior view

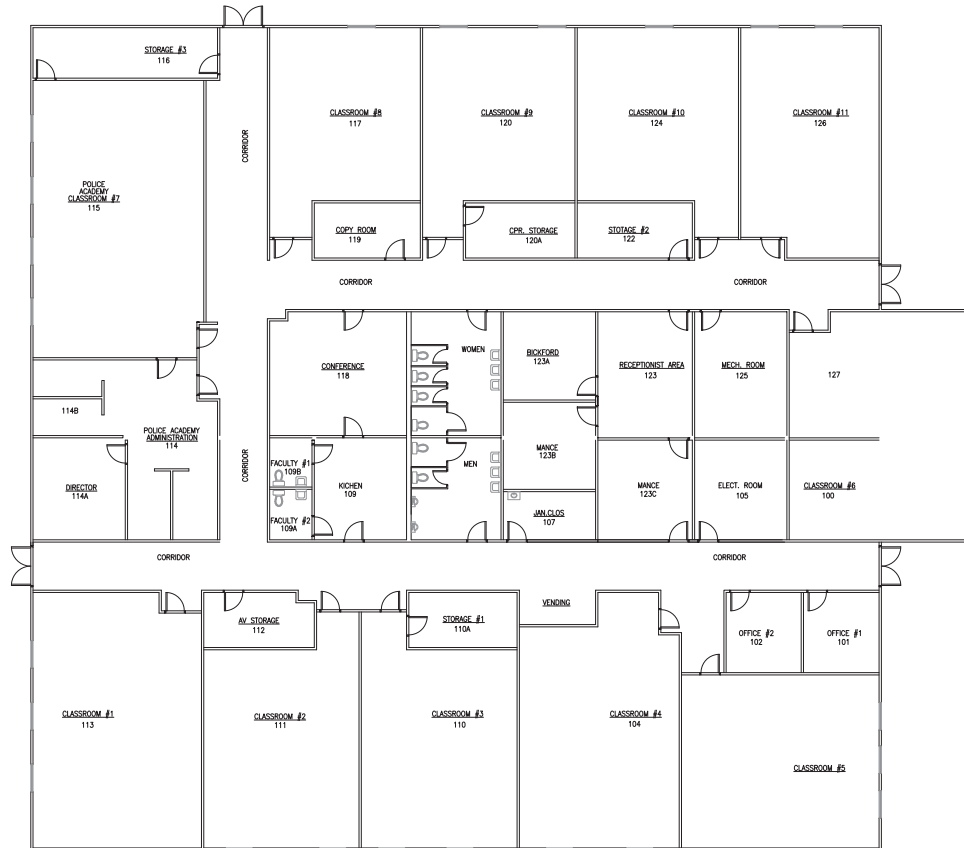


Typical classroom



Typical classroom

12 CONTINUING EDUCATION



First Floor

13 STEEL BUILDING

Year constructed:	1972
Major Renovations:	none
General Condition:	Poor
Estimated Repair Costs:	\$296k
Building type:	Art Studio
Building area:	4,324 (Building NASF); 4,866 (Total GSF)
Building Capacity:	49 Occupants
Number of stories:	One
Building construction:	Pre-engineered steel building
Roof construction:	Steel sloped roof frame with preformed metal panel finish
Exterior Materials:	Painted vertical metal siding and trim

Description of Space:

The building contains two large exposed-structure spaces for ceramics and sculpture; three kilns are also housed inside.

Adequacy of Space:

This pre-engineered building has out-lived its useful life. The building was constructed to provide space for sculpture and ceramics programs; however, these spaces are detached from the rest of the visual arts programs housed in Marlboro Hall and CAT and the space is too small for high quality instruction.

Further, the aesthetics of the Steel Building detract from the overall character of the campus along the outer ring road. There are no permanent interior finishes, windows are single-glazed, and it is not air-conditioned. More permanent, durable facilities are needed.

Mechanical/Plumbing:

The building is heated only via gas-fired unit heaters. The unit heaters are in poor condition. The hot water heater also requires replacement. The ventilation system is deficient in properly exhausting contaminants from the building; this is critical to the health of the building occupants. A Maryland Occupational Safety and Health (MOSH) inspection concluded that toxic chemicals, welding fumes, steel & bronze dust, sawdust and silica are present and not sufficiently contained or exhausted. There is no digital control system.

The plumbing systems are in good condition and the building is fully protected with a wet-pipe sprinkler system

Electrical:

The existing transformer and service entrance distribution panels were upgraded as a part of the campus electrical system upgrades project in 2013.

Information Technology:

The voice and data services are currently served through a wood equipment enclosure that receives fiber and copper from the campus. Although existing ductbank reaches the building, currently no fiber tubes were a part of the 2010 campus fiber upgrade project.

13 STEEL BUILDING



Ceramics Studio interior construction



Exterior View



Ceramics Lab

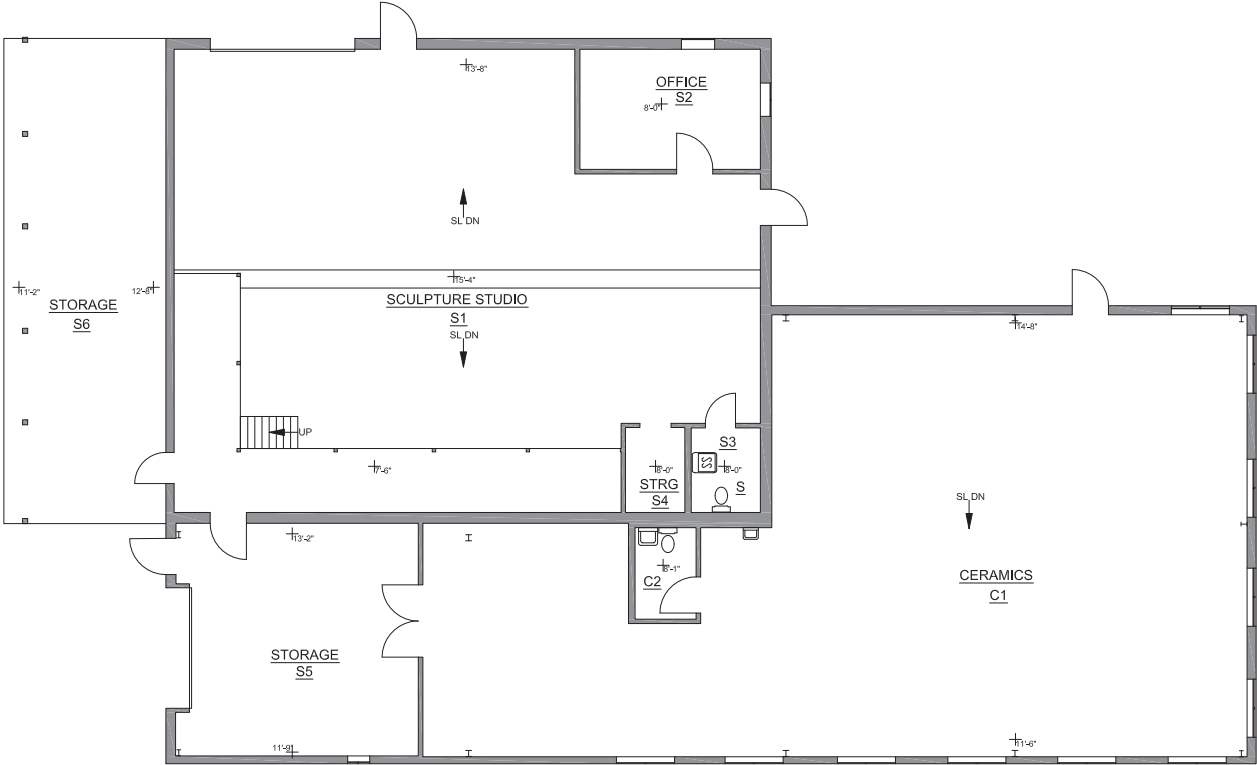


Sculpture Studio interior



Kiln Area

13 STEEL BUILDING



First Floor

14 FORMER CHILDTIME CHILDREN'S CENTER

Year constructed:	1976
Major Renovations:	none
General Condition:	Poor
Estimated Repair Costs:	\$330k
Building type:	Childcare classrooms and offices
Building area:	10,008 (Building NASF); 12,826 (Total GSF)
Building Capacity:	129 Occupants
Number of stories:	One
Building construction:	Masonry bearing walls and steel-framed metal deck roofs
Roof construction:	Flat roofs with single ply membranes
Exterior Materials:	Brick veneer with painted wood plank trim

Description of Space:

The space contains classrooms and offices for childcare, as well as a small kitchen. The building will be renovated, with construction starting in the fall of 2014. The building will be converted into a temporary classroom building that will be used by the Academy of Health Sciences program while Lanham Hall is being renovated. After that, the building will continue to be used as general surge space, though this building alone will not provide enough surge space for anticipated capital projects.

Adequacy of Space:

The space was generally adequate for childcare; with the ongoing renovation work, presumably the building will be and fully renovated and equipped to function as surge space for general classrooms.

Mechanical/Plumbing:

The existing gas-fired heating and cooling units (12 total) are reported to be in good condition, but use R-22 refrigerant, which has a phase-out date of 2010. Each unit has between 4.5 and 7.5 tons of cooling. The constant volume rooftop units are energy inefficient compared to a centralized variable air volume system and have less ability to maintain design space temperature and humidity.

The existing plumbing fixtures are old, do not meet ADA requirements, and should be replaced with new water efficient fixtures. The building is fully protected by a wet pipe sprinkler system.

Building systems were maintained by the tenant, which was not associated with Prince George's Community College. The College has now resumed ownership of maintaining all building systems.

Electrical:

The existing transformer service entrance distribution panels were not upgraded as a part of the campus electrical system upgrades project in 2013.

Information Technology:

The voice and data services are served through an equipment room with electronic card access. Currently the ductbank system extends to the building with blown fiber tubes from manhole 13C.

14 FORMER CHILDTIME CHILDREN'S CENTER



Typical corridor

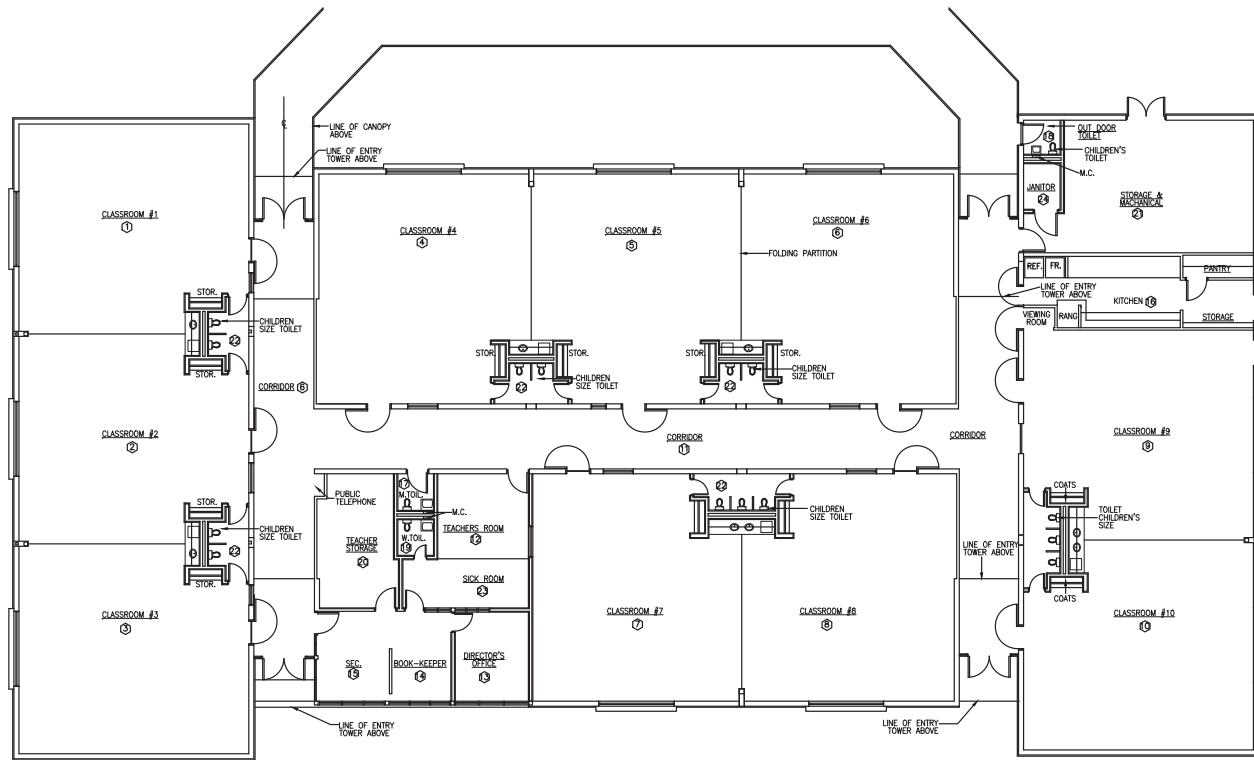


Typical classroom



Exterior view from the outer ring road

14 FORMER CHILDTIME CHILDREN'S CENTER



First Floor

15 FACILITIES MANAGEMENT

Year constructed:	1976
Major Renovations:	none
General Condition:	Poor
Estimated Repair Costs:	\$332k
Building type:	Office / Facility Trade Shop
Building area:	11,632 (Building NASF); 13,945 (Total GSF)
Building Capacity:	140 Occupants
Number of stories:	One
Building construction:	Concrete masonry unit encased steel frame with concrete-topped metal decks
Roof construction:	Main roof is finished with a multi-ply bituminous built-up membrane with stone aggregate. Shop Area is finished with standing seam metal panels
Exterior Materials:	Brick veneer and pre-formed vertical metal siding

Description of Space:

The building is constructed in two parts: Office space in a brick building in front and shop areas in a pre-engineered steel building in the rear. Facilities staff and campus police staff share the office portion.

Adequacy of Space:

Both the Facilities and Police staff suffer from significant space deficits. The break room doubles as a small meeting room (for six people at most), and also serves as an IT closet and file storage room. There are not enough offices to

accommodate all the staff who are housed in the building. Facilities Management staff lacks storage space for drawings, plans, construction and design manuals and other items used on a day-to-day basis. Campus police must use one room for multiple functions: roll call, staff meetings, and temporary detention, an issue of compromised functionality and safety. There is not space or infrastructure in the building to accommodate the police command center; as such, they operate out of a temporary space in Bladen Hall. A previously funded project scheduled to start construction in 2014 will address most of these deficiencies.

Mechanical: The building contains a rooftop multizone Mammoth unit, small 3-ton air conditioner on the roof, six Sanyo split system air conditioners, and a 3-ton air handler serving the auto-bay. Gas fired unit heaters are located in the shop spaces and a perimeter hydronic baseboard system provides heating for office spaces. The constant volume AHUs are aging and energy inefficient and should be replaced with a more efficient system. A single 1,000 MBH input capacity boiler provides heating water for the building.

The plumbing systems are in poor condition and should be replaced. The building is partially protected with a wet-pipe sprinkler system that serves only the shop spaces.

Electrical:

The existing transformer, service entrance distribution panels were upgraded as a part of the campus electrical system upgrades project in 2013.

Information Technology:

Voice and data services are currently served via Telecommunications rooms A-131 Building Distribution (BD).

15 FACILITIES MANAGEMENT



Brick-office portion of Facilities Management



Auto bay portion of Facilities Management



Sergeant / Lieutenant Office, 3 workstations



Office Corridor

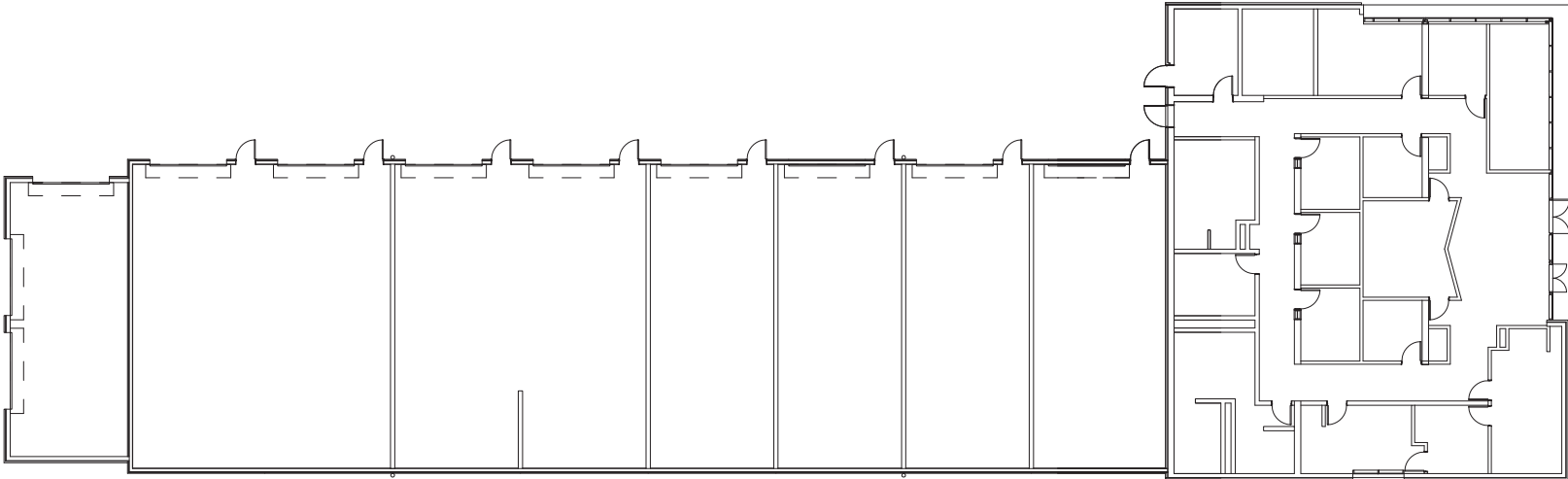


Lobby



Roll Call Room

15 FACILITIES MANAGEMENT



First Floor

21 WAREHOUSE

Year constructed:	1967
Major Renovations:	none
General Condition:	Poor
Estimated Repair Costs:	\$327k
Building type:	Storage
Building area:	9,236 (Building NASF); 9,290 (Total GSF)
Building Capacity:	93 Occupants
Number of stories:	One
Building construction:	Pre-engineered steel channel system in main warehouse with wood joists and wood planks at mezzanine
Roof construction:	Factory finished metal panels supported by steel beam and channel system
Exterior Materials:	Factory finished metal wall panels

Description of Space:

Built as a pre-engineered steel building, and located in a remote part of the campus, the building has outlasted its useful life without a significant expansion. The mezzanine is inaccessible except by way of a ladder, making handling of storage items difficult. A small office next to the large service entrance allows monitoring of building operations.

Adequacy of Space:

The building is significantly undersized for the needs of the College. Due to its inadequate size, shipping containers are being used for miscellaneous furnish-

ings storage, along with excess classrooms in Lanham Hall and other buildings.

Mechanical/Plumbing:

The building is heated only with gas fired space unit heaters hung from the ceiling; there is no air-conditioning or humidity control. The gas fired unit heaters are in good condition, but poor humidity control does not meet the College's criteria for storage space.

The building is equipped with residential type plumbing fixtures and is not equipped with a fire suppression system

Electrical:

The existing transformer was upgraded as a part of the campus electrical system upgrades project in 2013. Existing panels inside the building were not replaced.

Information Technology:

Voice and data services are currently served via wall mounted equipment rack/cabinet in warehouse office.

21 WAREHOUSE



Exterior view from parking lot



Interior

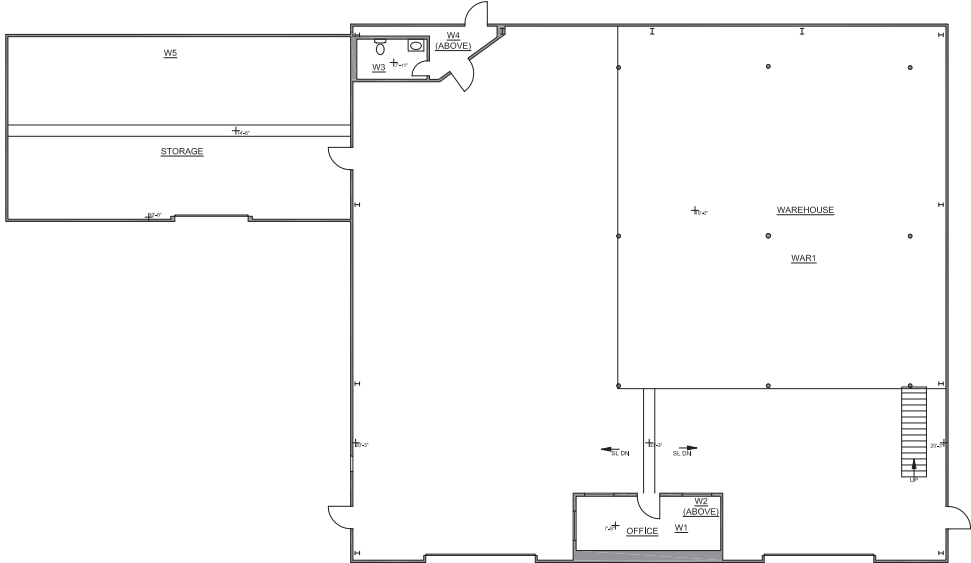


Interior

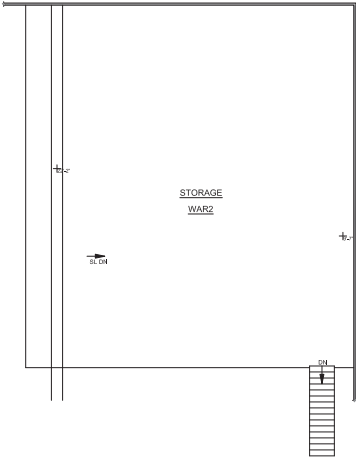


Interior

21 WAREHOUSE



First Floor



Loft / Storage area

29 CENTER FOR ADVANCED TECHNOLOGY (CAT)

Year constructed:	2007
Major Renovations:	none
General Condition:	Excellent
Estimated Repair Costs:	\$853k
Building type:	Classrooms, class labs, offices
Building area:	50,094 (Building NASF); 72,684 (Total GSF)
Building Capacity:	727 Occupants
Number of stories:	Three
Building construction:	Concrete masonry unit encased steel frame with concrete topped metal decks
Roof construction:	Flat roofs with thermoplastic olefin (TPO)
Exterior Materials:	Brick veneer, metal sandwich panels and aluminum framed glass curtain walls

Description of Space:

CAT contains classrooms, open labs, class labs, faculty offices and gathering spaces to house the following programs: Computer Lab Services, Emerging Technologies, Information and Engineering Technology, Minority Business Development Center, Technology Resource Center, Visual Communications and a cyber cafe.

Adequacy of Space:

The building is adequate for its intended purpose. Once the renovation and addition is completed for Marlboro Hall, the visual arts labs housed in CAT

will be relocated to Marlboro Hall, leaving space in CAT to be used for other programs.

Mechanical/Plumbing:

The building is equipped with two 145 ton capacity air cooled chillers, two 1,300 MBH input gas fired boilers, and associated pumps. Three central variable air volume AHUs provide supply air to variable volume terminals that control temperature in each zone. The atrium is conditioned by a direct expansion rooftop air handling unit with a gas furnace. Supplemental air conditioners and heat pumps are provided for specialized spaces such as the communications room, café, and elevator machine room.

The plumbing systems are in good condition. The building is equipped with a wet pipe sprinkler system and the fire suppression system is in good condition

Electrical: there are no current needs.

Information Technology:

Voice and data services are currently served via vertically stacked Telecommunications rooms 104 Building Distribution (BD), 204, and 304 Floor Distribution (FDs).

29 CENTER FOR ADVANCED TECHNOLOGY (CAT)



Exterior view from inner ring road



Exterior view of entry



Open Computer Lab

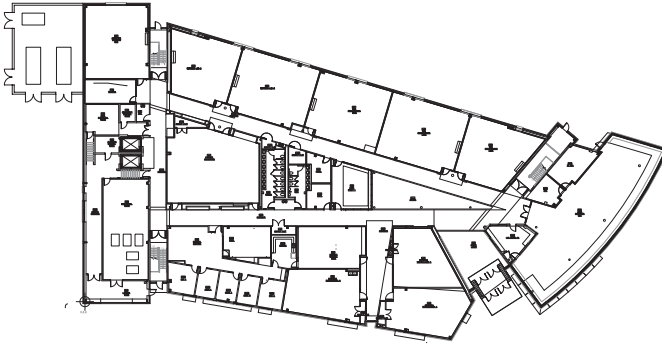


Large Classroom

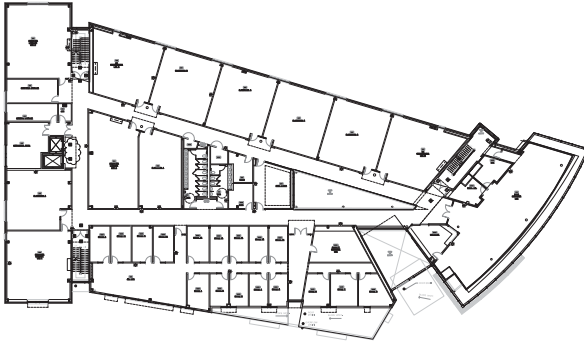


Lobby

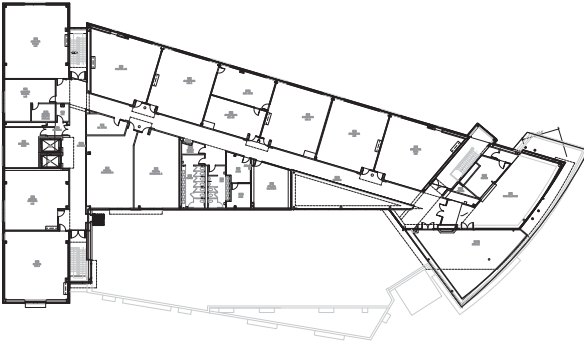
29 CENTER FOR ADVANCED TECHNOLOGY



First Floor



Second Floor



Third Floor

30 CENTER FOR HEALTH STUDIES (CHS)

Year constructed:	2012
Major Renovations:	none
General Condition:	Excellent
Estimated Repair Costs:	\$363k
Building type:	Classrooms, class labs, offices, Technology Data Center
Building area:	63,876 (Building NASF); 112,071 (Total GSF)
Building Capacity:	1,121 Occupants
Number of stories:	Three
Building construction:	Steel frame with concrete-topped metal decks
Roof construction:	Flat and barrel vaulted roofs with single-ply membrane
Exterior Materials:	Brick veneer, factory finished metal composite panels and curtain wall glazing system

Description of Space:

CHS contains classrooms, class labs, faculty offices and gathering spaces to house the following programs: Allied Health, Health Technology Learning Center, Info System Data Control Center, Media Services, Nursing. The building also houses the Technology Data Center and offices of various technology service staff.

Adequacy of Space:

The building is adequate for its intended purpose.

Mechanical/Plumbing:

This building is in new condition and is equipped with energy efficient systems. Chilled water is provided by six air cooled chillers. Three chillers are rated for 126 tons and three chillers are rated for 26 tons. Heating water is provided by two 2,753 MBH input capacity heating water boilers. Central variable volume AHUs provide supply air to variable volume terminal boxes. Supplemental Liebert computer room air conditioning units provide cooling to the data center and several smaller computer server rooms. An energy recovery ventilator unit is located on the roof.

The plumbing systems are in good condition and the building is fully protected with a wet pipe sprinkler system and standpipe. A 500 gallon fire pump provides required flow and pressure to the standpipes and sprinkler system.

Electrical: there are no current needs.

Information Technology:

Voice and data services are currently served via Telecommunications rooms 1105 (MDF/Primary), Telecomm room 1207A (Service Entrance/ Redundant Entrance), IDF rooms 1225, 1414, 2225, 2416, 3225, 3408 and Campus Data Center on 3rd floor.

30 CENTER FOR HEALTH STUDIES



CHS from inner ring road



CHS entry



Technology Services NOC



Lobby

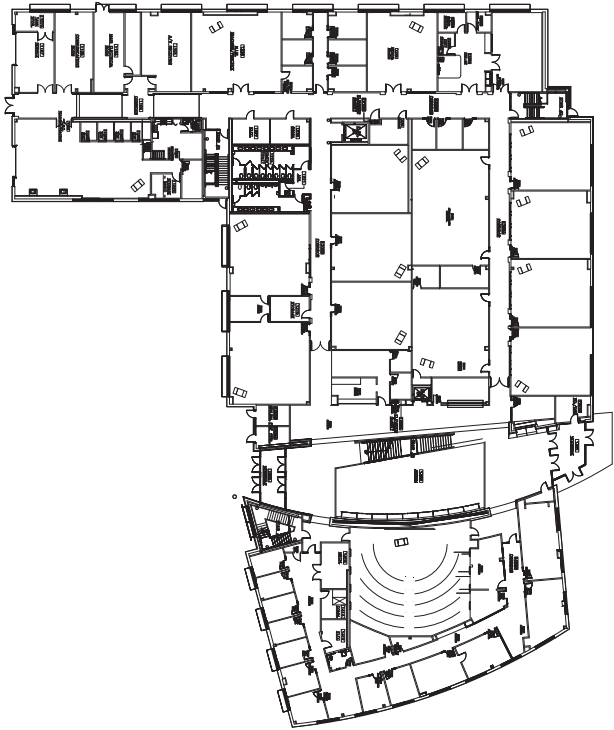


Health Sciences Lab

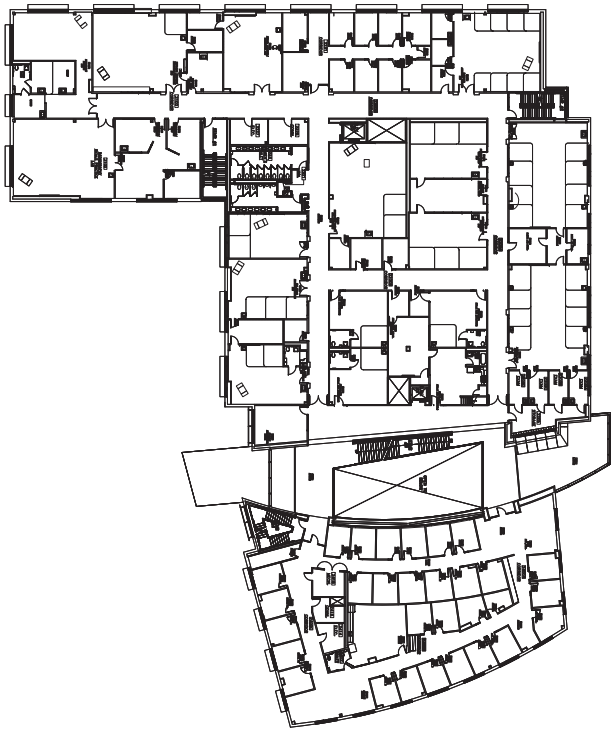


Tiered Classroom

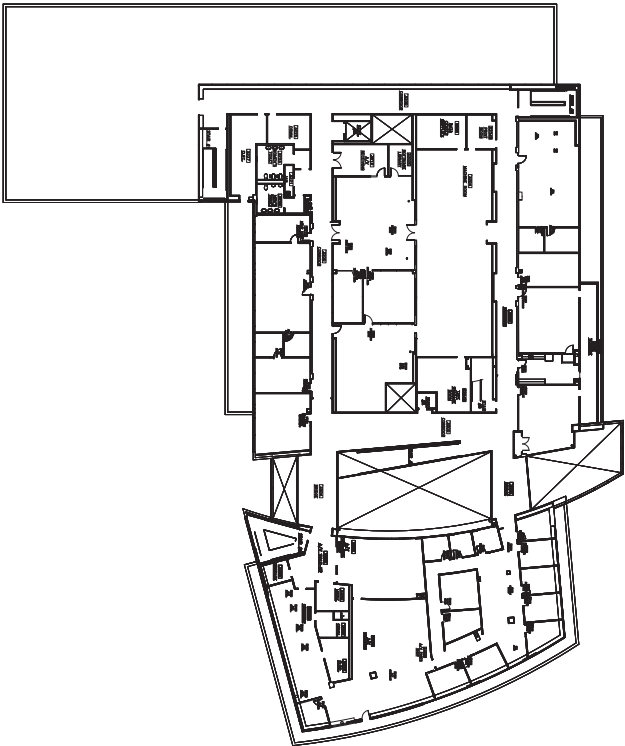
30 CENTER FOR HEALTH STUDIES



First Floor



Second Floor



Third Floor

4.9 CONSTRAINTS AND OPPORTUNITIES

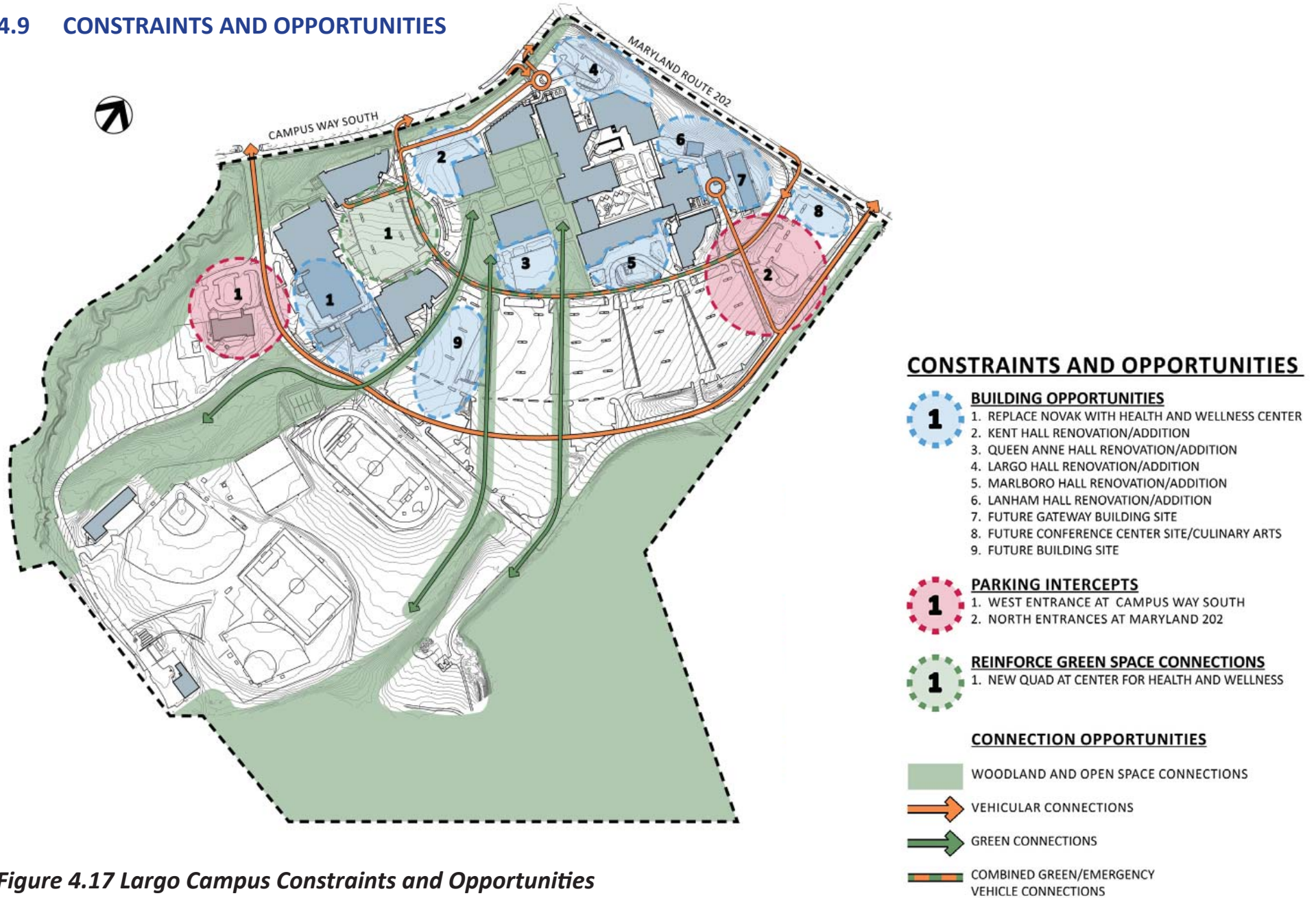


Figure 4.17 Largo Campus Constraints and Opportunities

5 EXTENSION CENTERS

5.1 LAUREL COLLEGE CENTER (LCC)

Building Designation: Laurel College Center

Building Location: 312 Marshall Avenue Laurel, Maryland 20707

Number of Floors:

Fully Occupied by PGCC: 3

Partially Occupied by PGCC: 2

Net Assignable Square Feet (NASF): 12,245 (shared with Howard CC)

Leased Area - SF approx. 17,420

Contains: Classrooms, Science Lab, Microbiology Lab, Information Technology Labs, Conference Room and Offices

General Condition: Good

Adequacy of Space: Classrooms are insufficient in number to meet demand

Sprinkler Systems: Yes

Prince George's Community College occupies three full floors in a 10-story office building known as the "Executive Office Building" in Laurel, located on Marshall Avenue off Route 1 in the northern end of the county.

Shared with Howard Community College, enrollment has historically been about 50% PGCC students and 50% HCC students. Laurel College Center has had a steady increase in space and now fully occupies floors two through four and part of five. As an example, new micro-biology lab and was recently built on the first floor. The College also recently expanded to the fifth floor providing new classrooms for English as a Second Language and a conference room. Learning spaces are provided, including instructional / lecture classrooms, computer labs, two biology labs, and one room used for art. All learning spaces are used during the day and evenings throughout the semester. Capacity is limited to 18 to 24 students per room due to the configuration of the building

and class room layout. The larger desks that are found in many of the older classrooms limit capacity; new classrooms have smaller desks which helps to increase capacity.

Way-finding is difficult because there are two corridors of circulation. An internal corridor contains the elevators and stairs, which are shared with the office tenants. The office tenants are concerned about the increased demand on the elevators by the students as the college expands. It increases the wait time for the elevator. A second, external corridor connects the classrooms, study areas and break room. Study areas are located along the external corridor. The break room provides vending machines and tables for group study, but is generally inadequate and lacks windows. Signage is adequate, and was created and printed by the college itself.

The library resources offered by the College are strictly on-line: no print media is available. No wireless service is provided, and there is no designated testing space. Two open computer labs are available during the day and evening. There is a small copy center for faculty use only. With only one copier, it is inadequate for their needs.

Much of the office space is a maze of corridors and hard-to-access rooms. Administrative offices were cramped, and need electric upgrades. Faculty offices are shared, and provide no privacy for individual student counseling. Students can too easily access faculty mailboxes and copy services.

Parking is plentiful and free. Public transportation is provided by MTA (Baltimore) and WMATA (Washington). The campus is within a half mile of the Laurel MARC Station on the Camden Line which serves Baltimore to the north and Washington to the south. The Washington Metro (WMATA) provides service to the Greenbelt and New Carrollton Metro Stations. Both systems only provide morning and evening service and therefore do not serve the local population as they should. Central Maryland Regional Transit provides bus service via the G and H Routes along Route 1 to the College Park Metro Station. Howard Transit operates its Purple Route from Laurel Town Center to points north along Route 1 in Howard County. Both systems provide hourly service throughout the day.



Laurel College Center - 312 Marshall Road, Laurel, Maryland



LCC - Study and Break Area



LCC - Computer Laboratory



LCC - Micro-Biology Lecture



LCC - Micro-Biology Laboratory

5.2 UNIVERSITY TOWN CENTER (UTC)

Building Designation: University Town Center

Building Location: 6506 Belcrest Road, Hyattsville, Maryland 20782

Number of Floors:

Fully Occupied by PGCC: 1

Net Assignable Square Feet (NASF): 21,439

Leased Area – SF approx. 30,000

Contains: Classrooms, Science Lab, Information Technology Labs, Conference Room and Offices

General Condition: Good

Adequacy of Space: Classrooms are insufficient in number to meet demand

Sprinkler Systems: Yes

Prince George's Community College occupies the entire second floor of an 8-story office building in the Hyattsville Town Center in Hyattsville, Maryland. It is in a prime location convenient to public transit, shopping and amenities, and a population center. It is also within a mile of the University of Maryland College Park Campus.

Since Fall 2008, registration has increased significantly, and students have been turned away from some courses due to lack of space to conduct those courses. Enrollment is constrained by both the size and number of learning spaces; room sizes typically cap the capacity at 24 students. Room size and the desk layout constrain the circulation within the classroom. The desk arrangement forces students against one wall, forcing them to squeeze past or climb over other students as they leave their row. A significant portion of enrollments are in the area of English as a Second Language. Health sciences and the nursing program are growing rapidly. The biology lab is consistently over-enrolled surpassing the 20-station capacity. The facility operates at or above capacity during peak times in weekday mornings and evenings and Saturdays.

Circulation is confusing as way-finding signage is non-existent. There is one public bulletin board. Signs and copies with directions, schedules and room

locaters are taped adjacent to the classrooms they are intended to serve. One student break area is provided. It doubles as the waiting area for student services and administration, and is overcrowded. Vending machines and a copier are provided. The space is too small to encourage any group discussions or study sessions. Tables provided are for one or two persons only.

There is no dedicated testing facility. Library resources are on-line access only; no print media is available.

Faculty office and student counselling space is shared amongst adjunct faculty. Largo Campus based staff who operate the Career Center and Financial Aid also do not have appropriate office space at UTC. This makes faculty/student counseling sessions difficult to schedule and execute. Lockers and mailboxes are provided for each faculty member. Storage space is insufficient. The IT managers share their offices with a store room and the information and technology server.

Parking is inconvenient. There is no reserved parking for students within the complex, and students must pay for parking after the first two hours. Students complain that paying for parking is a financial strain, and they often leave class as soon as possible missing faculty advisement or skipping appointments. The campus is well served by public transportation. The Prince George's Plaza Metro Station is located across Belcrest Road just south of East West Highway; the green and yellow lines serve the station. In addition to the Metro, The Washington Metropolitan Area Transit Authority (WMATA) operates several bus routes with frequent service throughout the morning, afternoon and evening. Prince George's County also operates its "The Bus" service providing connections to College Park and New Carrollton.

University Town Center is set to nearly double in size by the Fall of 2014. The Center is set to expand to about two-thirds of the first floor and one quarter of the ground floor of the building; an increase of approximately 42,470 gross square feet. The expansion will include classrooms, biology and micro-biology labs, new computer labs and a dedicated testing center. New offices, a new student lounge and bookstore will also be built on the ground floor. The Center will have its own entrance from Belcrest Road, and dedicated stair between the first and second floors. This will help separate the students from the office tenants. Access to the elevators that are shared with the office tenants will be maintained. The center will not have its own elevator.



University Town Center - 6506 Belcrest Road, Hyattsville, Maryland



UTC - Typical Classroom Layout



UTC - Nursing Center



UTC - Adjunct Faculty Offices

5.3 WESTPHALIA TRAINING CENTER (WPH)

Building Designation: Westphalia Training Center

Building Location: 9109 Westphalia Road, Upper Marlboro, Maryland 20774

Number of Floors: 1

Net Assignable Square Feet (NASF): 20,343

Gross Building Area (GSF): 26,392

Contains: Trades labs, classrooms, offices

General Condition: Good

Adequacy of Space: With the exception of the automotive center and motor cycle repair shop, instructional and training spaces are large and adequate for their purpose.

Sprinkler Systems: Yes

Located on Westphalia Road, the Westphalia Extension Center offers non-credit courses in the vocational or skilled trades. The building sits on several acres in the developing second tier of Prince George's County between Upper Marlboro and the Capitol Beltway. Westphalia Road is accessed from the Capital Beltway by Pennsylvania Avenue. The building is leased by the college. If the demand for skilled trades continues, the facility may need to expand.

The center offers non-credit training programs in building maintenance and construction trades such as: carpentry, framing, welding, HVAC and mechanical systems and locksmithing. Most of these facilities have been recently renovated and upgraded. There is a computer lab for computer aided design classes as well as a dedicated classroom for the carpentry program. A carpet installation training room is under construction. The center recently renovated a room for a BICIS Certification program. Four classrooms have been recently renovated, three of which can be combined into one large facility. There is a large conference room and shared faculty offices. The classrooms and facilities that serve the building maintenance and construction trades appear well suited for their purpose.

There is an automotive center and motorcycle repair shop to the rear of the center. The facility is too small for student demand, and proper function. It is

a wood frame structure that is slightly larger than a typical residential garage. The College would like to expand the facility to include four automotive bays and an enlarged motorcycle shop. The site contains the acreage to do so, but the College would have to negotiate with the property owner. Free parking is available. There is limited public transportation serving the area. Prince George's County operates "The Bus" along Pennsylvania Avenue; the closest stop is just under a mile away.



Westphalia - 9109 Westphalia Road, Upper Marlboro, Maryland



WPH - Welding Training Center



WPH - Computer Aided Design Laboratory



WPH - Mechanical (HVAC) Training Center

5.4 SKILLED TRADES CENTER (ST)

Building Designation: Skilled Trades Center

Building Location: 6400 Old Branch Avenue, Camp Springs, MD 20748

Number of Floors: 1

Net Assignable Square Feet (NASF): 5,397

Gross Building Area (GSF): 8,244

Contains: Trades labs, classrooms, offices

General Condition: Fair

Adequacy of Space: Inadequate

Sprinkler Systems: No

The Skilled Trades Center is dedicated to meeting the county's need for skilled construction trades people. At this center, the focus is entirely on skilled construction trades. This facility provides lab space for five construction trade areas including carpentry; electrical; plumbing; heating, ventilation, air-conditioning, and refrigeration (HVAC-R); and building maintenance. This converted office building is ill-suited for construction trades instruction and training.

Design of the existing building provides neither the capacity to appropriately house current programs, nor the flexibility for easy adaptation of interior spaces to changing needs in the future. Many qualitative problems with Skilled Trades Center stem from the fact that the current building was never designed or built to accommodate the unique learning environments necessary for contemporary construction trades programs. As a result, there are both insufficient and inappropriate spaces for instruction, instructional support, office/conference/meeting/food service, building support and outdoor spaces. The college would like to combine the Skilled trades Center with Westphalia Training Center.

Many program titles, formats and options are available ranging from one-day short courses to multi-semester, long-term certification programs.

5.5 JOHN E. HOWARD ELEMENTARY SCHOOL (JH)

Building Designation: John E. Howard Elementary School

Building Location: 4400 Shell Street | Capitol Heights, MD 20743

Number of Floors: 1

Contains: Kitchens, classrooms, labs

General Condition: Fair

Adequacy of Space: Inadequate

Sprinkler Systems: Yes

The Culinary Arts Center at Prince George's Community College is located in the John E. Howard Elementary School. It houses both credit and continuing education culinary arts classes, as well as some of the related management courses. The center includes instructional kitchens, classrooms, a computer lab, and a simulated banquet hall. Limited support services are available on site, such as advising and registration. The college plans to relocate the culinary arts center to the Largo Campus by the spring of 2016.

5.6 JOINT BASE ANDREWS (JBA)

Building Designation: Joint Base Andrews

Building Location: 1413 Arkansas Road, Room 111 | Joint Base Andrews, MD 20762

Number of Floors: 1

Net Assignable Square Feet (NASF): 6,913

Contains: Classrooms, labs

General Condition: Fair

Adequacy of Space: Classrooms and administrative offices are provided in adequate number, but classrooms are small. No faculty office space is provided.

Space for Prince George's Community College and four other colleges and universities is provided rent-free by the Air Force base education office (AF-BEO). The mission of the College for this location is to serve the military, their dependents and families, and the civilian community surrounding the base. Students attending classes at this site may complete the requirements for an associate degree in general studies or take courses toward degrees in a variety of transfer and career programs. Course offerings are varied, including on-line, accelerated and 16-week, suited mostly to the needs of the AFBEO. Programs offered include Business Administration AA, Business Management AAS, Criminal Justice AAS, General Studies AAS, and Accounting AAS.

The space is subject to availability but normally is sufficient to accommodate PGCC's programs. Enrollment is not growing, but is likely related to increased deployments overseas; this has been the historic pattern at AAFB. According to the Center manager for PGCC, enrollment may also be limited due to cumbersome screening of civilians desiring to take courses on base. Students who do not live or work on the base or who do not have a valid military ID card must submit to a special background check before accessing the base for the first time each semester.

Access to the base by public transportation is not difficult, but it is complicated. The nearest bus stop is about a half mile away from the front gate. Shuttle

service from the front gate to the classroom building was discontinued, so students must walk a mile from the front gate to the classroom building.

Academic advisors are at the center during class hours to assist with academic planning. Library and audiovisual services also support instructional areas.

This page intentionally left blank.

6 RECOMMENDATIONS

6.1 COLLEGE-WIDE STRATEGIC RECOMMENDATIONS

The recommendations described below will position PGCC to grow in an orderly and efficient way, support the College mission and advance the strategic goals, as well as address campus facility and space issues identified in the FMP.

1. Identify and commit to the strategic location of programs and enrollment.
 - The Largo Campus has adequate land and infrastructure resources and is operationally best equipped to accommodate substantial growth. A large majority of planned enrollment growth should be directed to the Largo Campus.
 - University Town Center and Laurel College Center should continue to grow as needed to accommodate demand as lease space is available and growth can be sustained economically.
 - Consider distribution of courses between Skilled Trades Center and the Westphalia Extension Center.
 - Consider increasing enrollment in programs at Joint Base Andrews extension center.
 - John E. Howard Elementary School should continue to support Culinary Arts until the new Culinary Arts Center is built and occupied at the Largo Campus.
 - A feasibility study, including identification of potential sites and academic offerings, should be completed for a new south county and/or north county campus. In the north county, Laurel College Center is in the process of adding 7,694 SF of leased space. University Town Center will nearly double in leased space to approximately 73,600 SF by the Fall 2014. In the south county, PGCC has expressed an interest in expanding the facility at the Westphalia Training Center but would have to negotiate with the property owner to do so. There is the possibility that this extension center could expand to become a south county campus location. The College needs to decide whether to locate a potential new campus in the north county, where there are larger population centers and anticipated population growth, or in the south county, where there is a smaller population and less anticipated growth. A south county location might have the advantage of capturing much of the student “bleed” into nearby campuses of the College of Southern Maryland, yet it has the disadvantage of being located away from the population centers of the north county where there has been growth in enrollment. National Harbor has been discussed as a possible South County location.
2. Strengthen the identity of PGCC Extension Centers as an integral part of the College.
 - New extension centers should be located at or near transit oriented development areas since these will be strategically important to both Prince George's County and PGCC. Existing campuses are automobile oriented and this is likely to change over time. New purchases or leases for existing or new extension centers should be located within a 10 minute walk of a transit center if possible.
 - Creating a stronger identity for the extension centers will enable a broader reach into the community and a clear, welcoming environment for visitors, and new and potential students.
 - An approach similar to that of retail establishments is recommended. This approach will entail developing a standard welcoming configuration and design for the public entry space of each extension center location. The design would include standard materials for flooring, walls, ceiling and lighting, as well as furniture and signage. The graphics developed for signage should be coordinated with the branding of the Largo Campus as well as printed material that PGCC distributes. The College should develop a design concept that is consistent with the College mission and will serve the program for the next five to ten years.
3. Ensure that institutional support facilities are developed to keep pace with College growth in instructional facilities.
4. For the Largo Campus, use capital and facility renewal projects and funding to:

- Upgrade or construct flexible, active and engaging educational environments equipped with technology to support the current teaching/learning paradigm (Flipped Classroom) and instructional program needs of Academic Affairs and WDCE.
- Continue right-sizing instructional space configuration, size and station capacity to best support curriculum requirements and current teaching/learning paradigm.
- Address the shortage of adjunct faculty office space by providing adjunct offices in every building that houses faculty offices.
- Renovate and reconfigure existing space for adaptive reuse as other types of space to address deficiencies. For example, renovate adjoining small classrooms into one larger, better functioning classroom, or renovate dysfunctional classrooms into much needed student lounge and/or study space.
- Add or expand facilities to support large meetings, events, and productions that support the student experience and provide opportunities that enhance the quality of life for faculty, staff and community.
- Develop informal convenient student study and learning spaces in academic buildings across campus to address the shortfall of study space and create opportunities for students and faculty to interact and engage in active learning outside of class.
- Implement energy conservation measures and increase the use of renewable energy and sustainable products to become more energy efficient, reduce operational expense and make campus more sustainable. This effort should be coordinated with achieving LEED certification for capital projects.
- Address and offset deferred maintenance backlogs and reduce the level of daily maintenance. These items are described in more detail in Sections 6.6.
- Address internal building and ambient campus ADA compliance issues.
- Use existing under-utilized space on campus to accommodate the “swing/surge” space requirements for future capital projects that require temporary dislocation of occupants; also consider adding more

surge space in one contiguous area for smoother operations.

- Use the detailed space utilization study being completed to schedule classes more efficiently and plan for future capital renovation and new construction projects.

6.2 LARGO CAMPUS PLANNING PRINCIPLES

Planning principles have been developed to create a framework and serve as a guide in developing the FMP recommendations for the Largo Campus. In addition, these principles should be considered after completion of the FMP during the detailed programming of capital and non-capital projects undertaken by PGCC at the Largo Campus. The illustrative FMP for the Largo Campus is shown on Figure 6.1.

1. Reinforce the core
 - Make the academic core a walkable, convenient, attractive place by clustering new buildings adjoining the existing to create a cohesive, compact and integrated campus.
2. Make the best use of limited site area with buildings three stories tall where possible.
3. Create a new active face along Maryland Route 202.
 - Take advantage of gateway sites at the corner and entrances to the campus to provide new buildings at least three stories tall to create an attractive edge.
4. Connect and reinforce green space throughout the campus
 - Make the most of campus amenities like the south quad, picnic grove and tree lined inner ring road.
 - Reinforce and extend the green, parkway-type character along Campus Way South to the corner to provide a park-like face to the campus on that side.
 - Expand the south quad to the proposed Health and Wellness Center to increase the size of the academic core.
 - Provide site furniture to help make more pleasant informal outdoor meeting spaces.

- Connect the woods and the athletic fields to the center of campus to help integrate landscape /pedestrian walks and usage.
 - Include landscape and other site infrastructure adjoining building projects as part of funding for each building project.
5. Create a more pedestrian friendly campus by eliminating vehicular-pedestrian conflicts along the inner ring road.
 - Redevelop the inner ring as a tree-lined pedestrian/service path, and reconfigure the outer ring road to make it a handsome tree lined boulevard.
 6. Intercept parking at entries.
 - Provide parking structures at campus entries to encourage drivers to park before circulating through campus.

6.3 LARGO CAMPUS SITE RECOMMENDATIONS

6.3.1 Maryland Smart Growth Initiative

The concept plan for the Largo Campus proposes locating future development on disturbed lands, within an already developed area with public water and sewer and mass transit service. It also recommends preserving existing green open space and expanding it where possible, and avoiding any future development in environmentally sensitive areas. As such, the FMP is aligned with the state's Smart Growth policies. Maryland's Smart Growth Initiative seeks to concentrate new development and redevelopment in areas that have existing or planned infrastructure to avoid sprawl. The Maryland Department of Planning Smart Growth web page describes smart growth as "sustainable and is characterized by compact, transit-oriented, bicycle-friendly land use, with neighborhood schools, walkable streets, mixed-use development and a wide range of housing choices. Its purpose is to conserve valuable natural resources through the efficient use of land, water and air; create a sense of community and place; expand transportation, employment, and housing choices; distribute the costs and benefits of development in an equitable manner; and promote public health."

6.3.2 Views, Vistas and Gateways

Primary views of campus from Maryland Route 202 and Campus Way South should be improved to create a stronger image for the College. Along Campus

Way South, the parkway-like greenery already existing in parts should be reinforced by planting more trees, natural shrubs and flowers. Parking should be reduced in the lots along Campus Way South to allow for more green space. This will help screen the cars and service areas that front along Campus Way South and also create a more pleasant environment for walking from the bus stop on Campus Way South into the campus.

Along Maryland Route 202, the campus edge should be built up to create a stronger presence that indicates to passers-by that this is a college campus. New construction and building additions should be at least three stories tall to help create this edge. Service areas fronting along Maryland Route 202 should be screened with low walls and/or plantings to keep this edge uncluttered.

As part of these improvements, the campus gateways will naturally start to be established. A new academic building proposed near the north entry at Maryland Route 202 and the inner ring road should be of adequate height and massing to support this effect. A significant, well-designed new three-story building at this location will establish a College presence along this heavily traveled roadway, and will help clearly identify the campus entrance. Signage, lighting and orientation should be taken into consideration when designing this new building so that a clear entry point and sense of arrival are achieved. Similarly, the parking structure proposed near the north entry on Lot A should be screened with a new occupied building fronting Maryland Route 202 to provide a more attractive image and reinforce the sense of arrival to campus.

At the south entry from Campus Way South, the new Health and Wellness Center and parking structure should be sited and oriented to act as a pair of gateway buildings, reinforcing the sense of entry and arrival to campus.

Once inside campus, views to and from the surface parking lots should be screened with landscape plantings. Parking lots are currently situated in a radial pattern oriented toward the academic core. The green spaces between those lots should be planted with trees so that one's eye is directed toward the academic core by tall rows of greenery; adding trees will also help reduce the sense of "a sea of parking" that pervades the area now. By also planting trees along the inner ring path, the surface parking lots will be further screened from the academic core. Trees and plantings should also be added along the campus property lines to provide a buffer with neighboring properties, and as screening at all loading and service entries.

6.3.3 Open Space

Some greening of a portion of the north quad near Largo Student Center is currently planned; more areas should be planted in the north quad if possible. Further, shaded seating areas should be provided to accommodate various size groups of people.

The south quad, while nicely landscaped and pleasant, lacks seating areas that could make it a much more active space. Provide seating areas that can accommodate a variety of group sizes, preferably located below or near groupings of shade trees and adjacent to established pedestrian walks.

Parking lot H, surrounded by three buildings, has the potential to become a very pleasant green space. With the construction of the proposed Health and Wellness Center, and the location of one of its main entries as shown on the facilities master plan (Figure 6.1) this new quad could be extremely lively and active. All parking should be eliminated from this space, and landscape plantings, pathways and seating areas should be provided. Given that this new quad is about the same size as the main south quad, large trees should be planted early on so that they will eventually provide shade and a comfortable scale relative to the adjacent buildings. A campus landscape master plan is recommended to address these issues in more detail.

6.3.4 Forestation and Environmental Recommendations

All facility development on the campus must comply with the regulations and requirements of Prince George's County and the Department of Natural Resources for reforestation and the County and the Maryland Department of the Environment for disturbance of floodplain, wetland or hydric soil areas. Specific recommendations include:

- Preserve forested and environmentally sensitive areas on campus, as identified in Chapter 4, in accordance with the Prince George's Green Infrastructure Plan by directing future development away from these areas of campus.
- Develop a forest conservation easement for a portion of the

forested areas identified in Chapter 4. The benefits of an easement are two-fold. First, the easement serves as a tool for preserving high quality forest areas from development. Second, the easement can be used to create a "bank of credit" to be used to offset forestation requirements of the County and the Maryland Department of Natural Resources for permitting of future capital projects on campus.

6.3.5 Pedestrian Circulation

Pedestrian circulation and connections should be maintained and strengthened on campus and into the community. By increasing the amount of green space as described above, a better pedestrian path system could be created to connect the far south group of buildings (CAT, CHS and proposed Health and Wellness) with the academic core.

Pedestrian pathways should also be constructed between the parking lots to make a stronger connection between the academic core and the athletic fields. Pedestrian pathways should also be constructed to facilitate students walking to and from campus from the adjacent communities and from nearby bus stops.

6.3.6 Vehicular Circulation and Transit

As identified in Chapter 4, the primary vehicular access and circulation issues on campus are caused by the heavy use of the inner ring road and its location between a large majority of campus buildings and existing parking lots. This situation has created numerous vehicle-pedestrian conflict points and safety issues. Particularly, the inner ring road is used as a drop-off area by automobiles and the Academy of Health Sciences (Middle College) buses, exacerbating the traffic back-ups, safety issues, and making circulation less efficient. Specific recommendations to address these issues include:

- Reconfigure the outer ring road to serve as the main vehicle circulation roadway for campus entrance and exit from both Maryland State Route 202 and Campus Way South. The redesigned roadway should include traffic calming improvements (i.e., speed humps, etc.) and bike lanes.
- Ensure that bike lanes on the reconfigured outer ring road connect to bike lanes proposed by the County on adjacent roadways at Campus Way South and Maryland Route 202. Also, provide bike lanes connecting the outer ring road to the academic core.

- Convert most of the inner ring road into a wide pedestrian path. This will eliminate most of the vehicle-pedestrian conflict points that exist today. The walkway will serve as a wide pedestrian path and an aesthetically pleasing interface between the academic core of campus and parking lots. The new wide pedestrian path should be designed to provide and support emergency and service vehicle access to the academic core.
- Retain the portion of the inner ring road closest to Maryland Route 202 as a one-way road for buses dropping off and picking up students from the Academy of Health Sciences (Middle College) in Lanham Hall.
- Maintain and extend the existing service and emergency vehicle road off the inner ring road on northeast side of Chesapeake Hall to continue to serve Chesapeake Hall, Lanham Hall, Largo Student Center and future buildings on the Maryland Route 202 perimeter.
- Modify the existing inner ring road exit to Campus Way South so that it also becomes an entry to serve Parking Lot I.

The College should continue discussions with County and State transit system organizations about improving bus routes so they better service the College.

6.3.7 Parking

The Largo Campus has accommodated about as much convenient general purpose surface parking as the site will allow. To accommodate parking deficits planned to occur as student enrollment increases and to offset existing parking facility losses due to new building construction, it is recommended to build two new parking structures.

Table 4.4 is a snapshot of the Largo Campus parking needs over the ten year planning period, based on a recommended parking factor of .5, as discussed in Chapter 4. Based on planned enrollment and faculty/staff growth, the future net need for parking spaces is estimated at 1,091 total spaces. It is estimated that 492 spaces will be permanently lost due to capital construction projects (See Table 6.1). In combination, the projected demand for parking at the Largo Campus for 2022 is estimated at 1,583 additional parking spaces.

These new parking structures should be located as close to the main campus entry points as possible, so that drivers are intercepted as they enter campus. This will minimize vehicular traffic in and around campus and encourage a “park once” approach. This strategy will be most effective if implemented in

conjunction with the supporting pedestrian infrastructure and signage to make getting from parking to the destination point convenient, efficient, and pleasant. Locating garages near the major vehicular entrances of campus will also make better use of campus land resources, in particular allowing most of the existing inner ring road to be converted to a wide pedestrian path. This change will eliminate the numerous pedestrian-vehicle conflict points that exist today.

Figure 6.1 illustrates the locations of the proposed parking structures – one off the campus entry from Maryland Route 202, and the other just past the campus entry from Campus Way South.

The parking structure located near Maryland Route 202, P-1, should be screened from the roadway by a programmed building that will act as a campus gateway, opposite the proposed academic building that will also act as a new gateway building. Since the inner ring road at this location is proposed to be modified to accommodate buses serving the Academy of Health Sciences students only, pedestrians crossing from this parking structure over to the academic core of campus will encounter fewer or no pedestrian-vehicle conflicts. Parking structure P-1, proposed to accommodate 850 vehicles, will provide a net gain of 610 spaces over the 240 spaces currently provided in parking lot A.

The parking structure located off Campus Way South, P-2, will be situated outside the main ring road and close to the proposed Health and Wellness Center. A very visible and wide cross-walk or system of speed bumps should be provided to ensure safety for pedestrians crossing from the proposed parking structure across the ring road. An alternative to consider is a bridge connecting the garage with an upper level of the proposed Health and Wellness Center. Parking structure P-2, proposed to accommodate 750 vehicles, will provide a net gain of 716 spaces over the 34 spaces currently provided in parking lot N.

Table 6.1 proposes a sequence of construction projects for buildings and parking garages that follows the recommendations and priorities described in section 6.5. The priority order for the two parking garages is based on the desire to situate the first parking structure closest to the academic core and to focus on building an active face along Maryland Route 202. It should be noted that this sequencing increases the parking deficit over time before parking demands can be met by the construction of the first garage.

Specific recommendations to address the need include:

- Construct two new parking garages. Each garage will accommodate between 750 to 850 spaces.
- Locate one garage on Lot A to intercept arriving vehicles off Maryland Route 202.
- Locate one garage on the current site of the Former Childtime building to intercept arriving vehicles from Campus Way South. This garage will be located adjacent to the new multi-purpose arena to accommodate anticipated large spectator events such as graduation and sports events.
- Design the new outer ring road to accommodate on-street parking.
- Plan for electric automobile, bicycle and motorcycle/scooter parking in new parking garages to accommodate users and support campus sustainability efforts.
- Develop strategies and incentives for increasing bus ridership, bicycling and walking to campus as a means for reducing the number of new parking spaces needed and to advance campus sustainability efforts.
- Construct public transit all-weather waiting areas near new parking garages.
- Develop parking policies, incentive programs and space accommodations to encourage car-pooling and use of electric, hybrid and high mileage automobiles.
- Add trees and plantings to existing surface parking lots to: improve aesthetics, provide sun and wind relief, and to improve stormwater management and advance campus sustainability efforts.

6.3.8 Signage

Signage recommendations include:

- Develop street names and upgrade vehicular way-finding signage to/from and on campus to support new circulation patterns and reinforce institutional branding. New signage should be of sufficient size so that it can be easily read from a distance when cars are moving slowly through campus.
- Improve the aesthetics of building identification signage to reinforce institutional branding.

- Work with the County to increase the number and size of roadway signs identifying PGCC along Campus Way South and Maryland Route 202. The signs should be large and located appropriately to attract the attention of drivers-by. The signage design should reinforce the College's institutional branding.

6.4 LARGO CAMPUS INFRASTRUCTURE RECOMMENDATIONS

6.4.1 Sanitary Sewer

All future facility development on campus involving new or reconfigured sanitary sewer service will be required to comply with the design and engineering requirements and permitting processes of Washington Suburban Sanitary Commission (WSSC). Specific recommendations regarding the existing sanitary sewer system on campus include:

- Conduct a study to determine the required capacity of sewer lines. The study should utilize flow projections based upon anticipated future build-out conditions for the campus.
- Inspect all sanitary sewer lines and replace or repair as needed.

6.4.2 Storm Drains & Storm Water Management

It is recommended that PGCC follow a Low Impact Development (LID) approach to future facility development on campus. The LID approach works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product. There are many practices that have been used to adhere to these principles such as bio-retention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements. By implementing LID principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed.

All future facility development on campus involving storm drains and storm water management will be required to comply with the design and engineering requirements and permitting processes of Prince George's County and the Maryland Department of the Environment. A majority of the storm drain is-

sues identified in the 2008 Facilities Master Plan are expected to be addressed by the Circulation and Roadway Improvements Project. Specific recommendations regarding the existing storm drain system and storm water management improvements on campus include:

- Existing vegetation adjacent to SWM facilities should be actively maintained in accordance with industry standards; including trimming of shrubs, weeds, and trees since these may impact the performance and/or integrity of facilities.
- In accordance with the Circulation and Roadway Improvements project, extend the existing 24" culvert below the Maintenance Access Road to alleviate issues in the flood prone area. However, special consideration should be given to any development in this area. Although it does not fall within the current FEMA 100-year flood plain, we suggest conducting a detailed study to determine the exact location of the 100-year flood plain in this area. Such a study may determine the cause of current flooding issues. Additional suggested improvements (if needed) could be determined at that time.
- Programming and design of future capital projects should include the evaluation of existing stormwater inlets within and adjacent to the project site. Inlets identified as needing replacement and/or upgrade should be included in scope of work for the capital project.

6.4.3 Water System

It is recommended that PGCC incorporate measures into future facility development projects to reduce water consumption, operating expenses and be better stewards of the environment. Strategies and measures to be considered and evaluated include:

- Native plantings.
- Low flow fixtures.
- Waterless urinals.
- Dual flush toilets.
- Rainwater harvesting.
- Grey water reuse.

- Incorporate rainwater as a makeup water source for cooling towers, supply to water closets and irrigation.
- Capture HVAC condensate for use for flushing water closets and/or for irrigation.

All future facility development on campus involving new or reconfigured water service will be required to comply with the design and engineering requirements and permitting processes of WSSC. Specific recommendations regarding the existing water system on campus include:

- Conduct a study to determine the required capacity of water lines throughout campus. The study should utilize flow projections based upon anticipated future build-out conditions for the campus.

6.4.4 Central Heating and Cooling Plant

As part of the FMP, a future capital project has been proposed for Bladen Hall that includes a comprehensive upgrade and replacement of the central heating and cooling plant equipment and system. Ideally, much of the existing equipment, that is near the end of its functional service life, will remain operational until funding is made available to complete the project. However, in the event that some or all of the equipment fails prior to project completion, the College should be prepared to replace the equipment listed below on an as needed basis.

- Boilers.
- Screw Chiller.
- Pumps in boiler/chiller rooms.
- HVAC system.

It is recommended that the central plant equipment in Bladen Hall be replaced with more energy efficient equipment. The new equipment should be selected to optimize efficiency and total expected operating cost based on a life cycle cost analysis that considers initial capital costs, required maintenance costs, reliability, and projected energy costs. The equipment with the lowest projected life cycle cost that meets reliability standards should be selected and installed. The design of this equipment replacement/upgrade, should include an engineering evaluation to assess opportunities to connect other buildings to the central plant and to determine the amount of final capacity

needed in the new equipment. The impact of increased efficiency on efforts to obtain future LEED certification of other buildings connected to the central plant should also be considered since the efficiency of the central plant will influence the energy conservation points available for those buildings.

The following measures to improve energy efficiency and reduce carbon footprint should be considered and evaluated as part of the HVAC system design for individual buildings:

- Solar hot water heating, using hot water solar panels installed on the roof, for primary domestic hot water service.
- Solar Photovoltaic systems.
- Enthalpy wheel heat recovery on the exhaust systems.
- High efficiency boiler and chillers, including the potential for heat recovery chillers.
- Heat recovery for domestic hot water or boiler feed water preheat.
- Chilled water, variable volume air handling systems.

6.4.5 Natural Gas

It is recommended for future capital projects, not connected to the central plant, that natural gas service be extended, if feasible and capacity exists, to serve as the preferred fuel source. It is further recommended that the College work with the Washington Gas Company to plan for and coordinate future service and capacity needed to support the proposed FMP build out.

6.4.6 Electrical and Emergency Power

When buildings are upgraded or renovated, and new buildings are constructed, new equipment and systems should be state-of-the-art and energy-efficient. The following should be included:

- The plan to upgrade the existing incoming service switchboards in the older buildings should be completed.
- Pad-mounted transformers should be sized to accommodate building loads plus spare capacity.
- Incoming service switchboards, feeders and panel boards should be sized to accommodate building loads plus spare capacity. Energy monitoring should be provided in all switchboards.

- Surge protection device (SPD) should be provided on all switchboards, panel boards, and telecommunication systems.
- K-13 rated transformers and panel boards with 200% neutrals should be provided for computer equipment and receptacles.
- Emergency generators should be provided and sized to accommodate building loads plus spare capacity. Generators should provide power for emergency lighting, exit signs, alarm systems, telecommunication systems and associated air conditioning, an elevator, sump pumps, fire pumps, and other required loads with the proper automatic transfer switches.
- Diesel generators should be converted to gas-fired types when ever possible (Refer to individual building descriptions).
- Equipment rooms should be provided with air conditioning and emergency power.
- A campus-wide study of lightning protection should be performed.

6.4.7 Lighting

- Lighting levels should be provided with fixtures, lamps, ballasts, and controls in accordance with the IESNA and ASHRAE/ Standard 90.1.
- The most efficient light fixtures types available should be selected for future building projects or major renovations. LED light fixtures should be a primary consideration, as technology is improving and costs are shrinking at a quick pace.
- Future exterior lighting upgrades at quads, pathways, parking lots and roadways should be in accordance with the criteria of the International Dark Sky Association and the recommended criteria of the Illuminating Engineering Society (IESNA). Strongly consider LED fixtures, as well as dark-sky type fixtures that reduce light pollution upward and to surrounding areas.
- As buildings are renovated and new buildings are constructed, energy-efficient lighting fixtures, lamps, and ballasts should be utilized. The energy-efficient lamps in general use T-8 and T-5 linear fluorescent, compact fluorescent (in lieu of incandescent), metal-halide and LED. Ballasts should be electronic type.

- Lighting controls to include time clock, occupancy sensors, day light harvesting, etc., should be utilized.
- New lighting should be designed in accordance with the ASHRAE/IESNA Standard 90.1- Energy Standards for Buildings and the U.S. Green Building Council - LEED Criteria.

6.4.8 Security and Mass Notification Systems

Security systems should be provided and connected to the campus system. It is also recommended that the electronic access control (ACS) system be expanded as follows:

1. Expand the use of a centrally managed electronic door locks with proximity card readers, to better control and monitor access to spaces. Consider converting all doors on campus (even in older buildings) to include having electronic door locks. The components of the ACS should be classified into the following levels:
 - Level 1: Central equipment processing, recording, software, and database.
 - Level 2: Controllers for intelligent field processing (e.g., data gathering panel).
 - Level 3: Peripheral devices (e.g., card readers, request to exist devices, door contacts and electrified door hardware/locks).
 - Level 4: Credentials (e.g., cards, RFID/fobs, biometrics, personnel identification numbers, and passwords).
2. Expand use of video surveillance systems (VSS) in circulation and other public spaces, as part of an integrated security system that links recorded CCTV with emergency call boxes, "blue light" speaker phones, and mass notification systems. The VSS is the extension of human vision to areas requiring surveillance. Some primary functions of the VSS should be identified as one of the following:
 - Observation: Optimized to provide continuous viewing of scene content.
 - Forensic review: Optimized to provide high resolution recording of scene content or digital media content.

- Recognition: Optimized for recognition functions of vehicle license plates, facial recognition, face location, smoke or fire detection, object recognition, pattern recognition, etc.
- In most cases, observation and forensic review should be used on campus for scene content.

3. Implement a Radio Frequency ID-based asset tag tracking systems for monitoring the location of valuable physical assets (computers, printers, tools, AV equipment, wireless devices, etc.).
4. Implement an automated parking space occupancy system. This would significantly reduce wasted time while reducing vehicular traffic, fuel use and air pollution by more efficiently guiding drivers directly to open spaces. This will be particularly important when multi-level parking structures are built on the campus.

It is also recommended that the College continue implementation of its planned Mass Notification system, which includes an electronic messaging system that transmits emergency messages to College desktop computers. Consider expanding this system to allow transmission of text messages to cell phones and other portable electronic devices so that emergency communication will reach all students, faculty and staff immediately following an event.

6.4.9 Information Technology

The existing telecommunications cabling infrastructure, particularly the new ductbank system and blown fiber tube system has positioned the campus for technology growth beyond 2020. It is recommended that all new buildings also be linked into the ductbank system, and that new construction and renovation projects adhere to current industry and campus standards. Several existing buildings have premise cabling challenges, due to the lack of IT room centralization or lack of IT room space all together. Existing buildings with these challenges include Kent Hall, Bladen Hall, Largo Hall, Marlboro Hall and Novak Field House. The use of Zone/Consolidation points could provide a more flexible approach to horizontal cabling, and facilitate necessary adds, moves and changes. Consolidation points can provide a zone focused approach for premise cabling and reduce the need for new IT Room space in existing buildings. Some emerging technology that should be evaluated for new construction

and renovation projects is Gigabit Passive Optical Networking (GPON). This zoned-based approach has the additional benefits of minimizing IT room space, power consumption, and concentrated cooling loads. Additionally, the demand for wireless access is increasing on campus every day, as more tablets and smart phones are in the hands of students for access to campus resources and internet access in general. The College should pursue future wireless upgrades and adoption of the IEEE 802.11 ac wireless standard and devices. Proper implementation of the new wireless standard equipment could more than triple current available capacity to add more student notebooks, tablets and smart phones, as well as potentially reduce the need for some hard-wired connections on campus.

Video is also on demand over the campus network and instructional spaces will need to be built or renovated to receive video in high definition and later, ultra high definition. Instructional spaces that have a demand for video should utilize high definition AV equipment. The high definition AV equipment should use cabling that supports high definition and will integrate with the current campus cabling methods. Additionally, classrooms and other instructional spaces will need adequate ceiling heights to support 16:9 screens to display computer information that considers every viewer in the room. Space for AV sources and control equipment such as DVD players, document cameras, smart podiums, etc. is required in all instructional technology classrooms.

It is very important that all new construction and renovations provide pathways, spaces, power, lighting, HVAC, and architectural treatments to support cabling infrastructure and electronics current and in the future. Adhering to the minimal standards and best practices listed in this document as well as current industry standards related to information technology systems will ensure that the campus will have the capabilities necessary to deliver reliable high bandwidth and embrace newer technologies as they become available.

Specific guidelines and recommendations to consider when designing new buildings and/or renovating existing ones include:

Architectural recommendations for IT Spaces:

- Rooms and closets must be stacked vertically, if possible.
- No carpet, use dust and static electricity resistant flooring and wall treatments. Light colored paint to enhance lighting.

- Doors should be fully open, lockable, and 36-in wide and 80 in tall.
- Closets should be centrally located on each floor and accessible to hallways and common areas.
- These rooms and/or closets should not be shared with building or custodial services.
- The minimum size for MDF or Building Distribution (BD) is 200 sq. ft. (10' min. with x 20' min. length).
- The minimum size for an IDF or Floor Distribution (FD) is 150 sq. ft. (10' min. with x 15' min. length).

Mechanical recommendations for IT Spaces (Systems should operate 24 hours/day 7 day/week):

- Rooms housing active equipment should maintain range of 64 degF to 75 degF. The humidity range should be 30% to 55% RH.
- Rooms with no active equipment should maintain range of 50 degF to 95 degF. It is preferable that temperature be maintained to within +/- 9 degF of adjoining office space and that humidity be kept below 85% RH.
- Thermal load: 500 – 2000 BTU/Thermal load for closets.
- 7000 – 14000 BTU/Thermal load for Equipment Rooms.

Plumbing recommendations for IT Spaces

- No restrooms or janitor's closet should be above nor should plumbing run through BD or FD Rooms.

Fire Protection recommendations for IT Spaces:

- If sprinkler heads are provided, install wire cages to prevent accidental operation.
- To prevent water damage, consider using "dry" sprinkler systems.
- If wet pipe systems are used, drainage troughs are recommended to protect equipment from any leakage that may occur.

Structural recommendations for IT Spaces (BD and FD Rooms):

- The floor should have a minimum loading of 50 to 250 lb/FT² as per ANSI/TIA 569-C.

Electrical (Lighting) recommendations for IT Spaces:

- Provide a minimum equipment of 50 foot candles measured 3 ft above-finished floor.
- Locate light fixtures a minimum of 8 ft., 6 in above the finished floor.
- Emergency lighting should be provided.

Electrical (Power) recommendations for IT Spaces:

Telecommunications closets must be equipped to provide a minimum of two dedicated 3-wire 120V AC duplex electrical outlets which are on separate branch circuits and 20-ampere rated. Separate duplex 120V AC convenience outlets (for tools, test sets, etc.) which are:

- Located at least 6 in. above the finished floor (outlet heights of less than 15 in. are allowed because the telecommunications rooms are not considered a public space) and placed at 6-ft. intervals around perimeter walls.
- All outlets must be on non-switched circuits (outlet power must not be controlled by a wall switch or other device that may lead to inadvertent loss of service).
- Convenience outlets should be identified and marked.
- Additional outlets or power strips may be required depending on the amount and type of equipment planned for the closet.
- Consider providing emergency power to the closet with automatic switchover capability.
- Consider installing a dedicated power panel to serve the closet.
- Provide one 208V NEMA L6-30R power receptacle on a separate 30 amp circuit (preferably on generator backup) adjacent to each network equipment rack.
- Provide grounding and bonding from each Distribution Room to building ground.
- Provide UPS and emergency power for phone and data network system.
- Equipment not related to the support of Telecommunication/ Information Technology rooms and closets such as piping, duct work and building power must not be located in or pass through the spaces.

6.5 LARGO CAMPUS BUILDING RECOMMENDATIONS - CAPITAL PROJECTS

6.5.1 Previously Funded Projects

The following three projects have been previously approved and funded for design and/or construction. They are in process of design, with construction to start within two years.

Lanham Hall

Renovation and addition, previously approved and design underway. A renovated Lanham Hall will house the Academy of Health Sciences, WDCE classrooms and offices, Academic Affairs and Student Support Services. In the future, with the anticipated expansion of the Academy of Health Sciences, it is recommended that the Academy be allowed to expand in Lanham Hall, that Student Support Services be relocated to a renovated and expanded Largo Student Center and that WDCE offices be relocated into a future building proposed for Parking Lot G.

Queen Anne Fine Arts

A major renovation and addition, previously approved and design underway, will add about 135,000 GSF to the building and provide expanded space for the Music, Theatre, Speech, and Television, Radio, and Film curricula. The expanded building will include offices, classrooms, an 800-seat theatre, a 250-seat Proscenium theatre, a 200-seat Blackbox Studio, Instructional Theater and Educational Technology (IET) Labs, flexible performance and instructional spaces, Radio, Television and Film Broadcast and Production labs, a 125-seat Recital Hall, band and rehearsal space, dance studios, and an Art Gallery.

Facilities Management

A major renovation and addition has been previously approved and constructed is slated to start in early 2014. The project will add about 8,200 GSF to the building and provide expanded space to support space requirements for Campus Police and the Facilities Management department. The renovation will provide additional office space, conference room, additional storage and review spaces to include a secure records room for timekeeping and sensitive documents, a blueprint room to keep campus drawings, and facilities reference materials. The building will feature new ADA compliant locker and

restroom facilities, installation of a new fire sprinkler and alarm system; a new campus police dispatch and campus command center, a rollcall and training room, and secure police evidence, processing and holding rooms.

6.5.2 Proposed Capital Projects

Capital facility projects described below and located on Figure 6.1 comprise the proposed capital improvement program and are listed in priority order to address phasing logistics and conflicts between projects. Please note that all capital building projects will be required to be designed and constructed to achieve a minimum of LEED Silver certification. Furthermore, all proposed capital projects must be reviewed by applicable County and State agencies. Those reviews will include the Mandatory Referral applications to the County Planning Department, Department of Public Works and Transportation, as well as State archaeological and historic reviews for those projects planned on undisturbed areas. A detailed implementation strategy and budget plan for these projects is included in Chapters 7 and 8. A summary space inventory and guidelines comparison that reflects the space impact of proposed projects is included at the end of the section as Table 6.2. Note that Table 6.2 includes the space impact of proposed capital projects #1 through to #10 only.

1. Creation of a “Surge Village”

This project is in the planning stages and involves renovating and re-allocating use of the Former Childtime facility to general classroom use for surge space. Also included is relocation of two of the three temporary buildings, TO and TS, to be adjacent to the Former Childtime/Surge facility, thereby creating a “Surge Village” that will temporarily house programs and personnel that will be displaced by proposed renovations and/or new construction. The College is planning to remove TZ from their inventory as it is outdated and in poor condition. The College is funding this project in FY 2014. Note that the “Surge Village”, including the Former Childtime/Surge facility, are recommended for demolition toward the end of the planning period to make way for Parking Garage 2.

2. New Culinary Arts Building

Construction of a new Culinary Arts building to accommodate the culinary arts and hospitality programs currently offered at John E. Howard Elementary School. The project is currently programmed at 12,750 NASF/ 19,500 GSF, but

is anticipated to grow in the future and should be designed to accommodate an expansion of two or more stories and/or expansion of the footprint. The new Culinary Arts building will be located facing Maryland Route 202, and will be the first structure to be built according to the guiding principle that encourages a new active “facade” for PGCC facing this busy roadway. At the end of the ten-year build-out, the Culinary Arts building will be enlarged and integrated with the addition of a new Conference Center, as well as Parking Garage 1 to be built adjacent to the site of both facilities. Because of its proximity to Maryland Route 202, loading and service areas need to be carefully screened from view. Project funding is scheduled for: Design FY 14 and Construction FY 15.

3. Marlboro Hall Renovation & Addition

A Part I and Part II program is currently being written. It is anticipated the project will renovate portions of the 88,667 NASF/158,156 GSF existing building, and add approximately 11,000 NASF/18,500 GSF of new space. The purpose of the project is to correct structural and long-standing infrastructure and code deficiencies, modernize building systems and reconfigure space to expand academic programs and offer enhanced curricula in areas such as Liberal Arts and Learning Foundations.

The purpose of the small addition (11,000 NASF) on the southeast corner (near Queen Anne) is to co-locate and accommodate ceramics and sculpture. A part of that facility should include both a screened working courtyard for large and outdoor sculptures, as well as an outdoor “display” space that would help activate the Marlboro outdoor space and engage the sculpture students and those passing by the new facility. A new entrance to Marlboro Hall at the northeast corner facing the new wide pedestrian path should also be included as part of the project, as well as screening or other architectural elements at both of the long elevations to break down the large brick mass, and screen the large expanses of glass.

During design of the proposed addition, the need to relocate the existing cooling tower should be investigated.

Project funding from the State and County is currently scheduled for: Design FY 16 and Construction FY 18.

4. New Health and Wellness Center

The FMP proposes a new Health and Wellness Center of up to 133,000 GSF, depending on final programming. This project will deliver facility space to expand programming in the health, nutrition and physical education areas. The multi-use, multi-purpose facility will be designed as a daily activity center where students and staff can develop and practice healthy habits, in addition to being used as a premier Division III athletics performance venue. The facility will include a 5,000 seat arena with some telescoping seating that can be retracted to accommodate two full size basketball courts that run in the opposite direction from the main event floor to allow men and women varsity teams to practice concurrently, allowing for increased use and better flexibility and scheduling. A facility of this size would also allow for graduation and convocation ceremonies to be held on campus. The building design would also include a strength and conditioning facilities for academic, public and athletic use, locker rooms, training rooms, synthetic poured flooring specifically tuned for multi-sport activity to support tennis, track, baseball, softball and volleyball to be played on a single surface, racquetball courts, classrooms, class labs, faculty and staff offices, campus recreational offices, academic suites, 40' climbing wall and a dance studio continually reinforcing the synergy between public, academic and recreational space. Academically, the facility will support the Physical Education program and student preparation for transfer to four year Colleges and Universities that offer programs in Physical Education, Kinesiology, Sports Management and Athletic Training.

The project is proposed to be constructed in two phases to allow academic and athletic programs and classes to continue with as little interruption as possible.

4a: Phase 1 will include the construction of all the components not included in the arena, including offices, classrooms, a multi-purpose space and other support facilities. Phase 1 will accommodate the occupants of the Continuing Education building and allow it to be vacated. At the completion of Phase 1, Continuing Education and the Steel Building (occupants relocated to the new addition to Marlboro) can be demolished to provide space for Phase 2 construction. Novak Field House could either be demolished or partially renovated to fit into the construction of Phase 2.

4b: Phase 2 construction will include the arena and supporting facilities.

In both phases, careful attention needs to be paid to entries to and through the building. Ideally, an open, glassy through-passage should be included to facilitate circulating between the future Parking Garage 2, the new Quad and the academic core. And since the structure backs up to the outer ring road, locations for service and loading need to be carefully considered and screened from view.

Design and construction of the new landscaped Quad (currently Parking Lot H) should be performed as part of this project. Project funding is scheduled for: Design FY 17 and Construction FY 19.

5. Parking Garage 1

A four or five level parking garage for 850 spaces or more to meet half the projected demand, inclusive of replacing spaces planned to be lost to capital construction projects. Parking Garage 1 will be constructed on the current site of Parking Lot A adjacent to the Culinary Arts Center and future Conference Center and will result in a net gain of 610 spaces over what is currently provided in Lot A. Both the Culinary Arts Center and future Conference Center buildings should be designed as "wrappers" to screen the facade of Parking Garage 1 facing Maryland Route 202. Additional building wrapper, screening and/or landscaping should be considered for portions of the garage that will nonetheless be visible from the main roadway as well as portions of the academic core. Parking Garage 1 will be used to serve the daily parking needs of campus and be conveniently located to patrons of the expanded Queen Anne Fine Arts Center. In addition to the parking garage, the project scope of work includes:

- Modification and reconfiguration of the outer ring road to serve as the main vehicle circulation roadway for campus for entering, exiting and circulating to, from and on campus respectively.
- Converting the existing inner ring roadway to a wide pedestrian path with lighting conveniently connecting the Academic Core of campus with structured and surface parking while eliminating existing vehicular-pedestrian conflicts. The new wide pedestrian path will be designed and constructed for limited use by service and emergency vehicles. In particular, service vehicle access, parking and handicapped accessibility issues need to be addressed as part of the design for the expanded Queen Anne Fine Arts Center.

- Roadway, utility and infrastructure reconfigurations and upgrades from the Maryland Route 202 entrance and along the outer ring road.

Project funding is currently not in the CIP schedule. This capital project is not directly tied to any other project and is based on parking demand. The funding schedule recommendation is: Design FY 17 and Construction FY 19.

6. Largo Student Center Renovation & Addition

Renovate and reconfigure the existing building in coordination with a 23,850 NASF/45,000 GSF addition. The addition should be located on the northwest corner of the building and serve as a new architectural element and beacon for campus at the corner of Maryland Route 202 and Campus Way South. The project should incorporate spatial elements such as a large open common area, an outdoor plaza, and greater social, educational and retail offerings including ballroom and meeting spaces to accommodate 300, new food service, study lounges, student and staff offices, club activity spaces, bookstore, student government offices and spaces, College Life Services offices, classrooms, social spaces, a games center, integrated technology and expanded retail. Other spaces such as office space and computer facilities will also be included in the renovation. Screening of service and loading areas should be provided.

The majority of HVAC and plumbing systems in the building are aged and in need of a complete renovation.

Project funding is scheduled for: Design FY 18 and Construction FY 20.

7. Kent Hall Renovation & Addition

Renovate and reconfigure the entire building (19,247 NASF/30,738 GSF) in coordination with the construction of a 9,620 NASF/15,000 GSF building addition. Kent Hall contains the offices for the president, five vice presidents, chief of staff, and their support staff including accounting, payroll, procurement and purchasing, marketing and public relations, planning and institutional research, human resources and continuing education. Kent Hall also contains a meeting room for the Board of Trustees. Institutional advancement, fundraising and government affairs are currently located in Accokeek Hall and will be relocated to Kent hall as part of the project. The space and layout of the building is ineffective and administration has outgrown the building. Makeshift offices have been placed in closets, cubicles and workstations have been located in all open space, and vice presidents, directors, deans and managers have

been placed in spaces too small. In addition, by the time of the renovation the building's mechanical and electrical systems such as switchgear, electrical system, piping systems, lighting, flooring, air handling units, roof top split systems, chiller, air compressor, controls, pumps and motors will have reached the end of their service life and require replacement.

The addition provides the opportunity to create a new building "front" along Campus Way South. It appears that Kent Hall may have been originally constructed to allow for an additional story - an addition either on the side or on the roof would also help enhance the presence and stature of this centrally-located building.

Project funding from the State and County is scheduled for: Design FY 19 and Construction FY 21.

With the relocation of Institutional Advancement, Fundraising and Government Affairs offices from Accokeek Hall into the expanded Kent Hall, there is opportunity for giving over the extra space in Accokeek to more large conference rooms, student study space and offices for Library use.

8. Bladen Hall Renovation & Upgrade

Renovate the 2nd and 3rd floors of Bladen Hall to create up-to-date classrooms, faculty offices and student and faculty meeting spaces. These areas will be used for Liberal Arts, Social Sciences and Business departmental space to create greater visibility and improved facilities for these departments. Renovate/upgrade the central plant in the building. Replacement or modernization of the boilers, the chillers and associated piping, along with the building HVAC distribution system is also recommended. Due to the extensive work needed to renovate and upgrade the central plant, this work could be performed as a separate project.

Project funding is currently not in the CIP schedule. This capital project is not directly tied to any other project. However, there is a limited life left to some of the mechanical equipment that will be replaced as part of the project. Failure of this equipment may impact the operation of several other buildings, thus making completion of this component of work a higher priority. The funding schedule recommendation is: Design FY 18 and Construction FY 20.

9. Warehouse Renovation & Addition. Currently not in CIP. Proposal: FY 18 Design/Construction.

The program envisions renovation of the existing building and a single story 8,000 NASF/10,000 GSF addition to the existing Warehouse Building to add capacity for central storage on campus. Currently, the College is using large, unconditioned metal shipping containers to store surplus furniture. The addition will replace the metal containers and provide an acceptable environment for storing surplus without being damaged until it can be sold or repurposed. Landscape screening should be provided as a green buffer between the Warehouse and the athletic fields.

Project funding is currently not in the CIP schedule. This capital project is not directly tied to any other project. The funding schedule recommendation is: Design/Construction FY 20.

10. Parking Garage 2

A four or five level parking garage for 750 spaces or more to meet half the projected demand, inclusive of replacing spaces planned to be lost to capital construction projects. Parking Garage 2 will result in a net gain of 750 spaces near the Campus Way South entrance and will be constructed on the current site of the Former Childtime/Surge building and the soon-to-be relocated temporary buildings, which will be demolished to make way for the garage construction. The parking garage will be located adjacent to the new Health and Wellness Center, which includes the multi-purpose arena. The garage will serve the new arena as well as the daily parking needs of campus. Given its location near the Campus Way South campus entrance, this parking garage has the opportunity to be designed as a major gateway building. The main stair/elevator should be located adjacent to a new wide crosswalk that leads directly to the new Health and Wellness Center. Consideration should also be given to screening the main facade of the garage facing Campus Way South and the outer ring road. In addition to the parking garage, the project scope of work includes:

- Roadway, utility and infrastructure reconfigurations and upgrades from the Campus Way South entrance and along the outer ring road.

Project funding is currently not in the CIP schedule. This project needs to come on line to support the Health and Wellness Center/Arena. The funding schedule recommendation is: Design FY 21 and Construction FY 23.

11. New Academic Building

This new building will be programmed for 62,000 NASF/109,000 GSF at the Maryland Route 202 entrance, where the temporaries are currently located, to relocate Mathematics, Social Science and Mathematics Learning Foundations programs out of Marlboro Hall. Labs for mathematics, social science and business will be key spaces in the building. The proposed site provides an opportunity to help strengthen the new active face along Maryland Route 202 started by the Culinary Arts building. The new facility will become part of the new welcoming arrival experience to campus and reinforce the new campus gateway. A plaza/ drop-off area could be the main entry for the building and allow for service/ fire access to adjoining buildings. The funding schedule recommendation is: Design FY 21 and Construction FY 23.

12. New Conference Center

A project for a new conference center facility of 20,600 NASF/35,000 GSF, co-located with and as an addition to the new Culinary Arts building, on Lot A will complete the new Maryland Route 202 gateway to campus. The new Conference Center should be designed to create convenient connections to the Academic Core and further screen Parking Garage 1.

The building program will include a large multi-purpose meeting space (for 500 person seated banquet and a minimum of 800 lecture style) that is sub-dividable space. The facility will have several breakout spaces (smaller 50 to 75 person for meeting), support and hoteling offices, food service, and business center, lounge and retail space. Because of its proximity to Maryland Route 202, loading and service areas need to be carefully screened from view.

Project funding is currently not in the CIP schedule. This capital project is not directly tied to any other project. The funding schedule recommendation is: Design FY 21 and Construction FY 23.

13. New Child Care Building

A project for a new child care facility of 11,000 NASF/16,100 GSF to meet campus and community needs. The new facility will support an educational partnership with the College's current credit/non-credit early childhood, teacher education, professional development and children developmental programs. A playground and a small adjoining parking lot for parents and staff will be required.

The proposed Child Care Building could be paired with a variety of developmental clinics on the campus for applied learning, physical therapy training, learning labs for credit/non-credit students and a special ED clinic that offers work-base experience.

The programmatic requirements for the new Child Care Building include:

- A learning/observation lab where students can interact with the children and observe the classrooms in order to gain real life experience which could be used by allied health, nursing, psychology and Special ED.
- Facilities/space to allow for shadowing teachers/professors.

Project funding is currently not in the CIP schedule. This capital project is not directly tied to any other project. The funding schedule recommendation is: Design FY 22 and Construction FY 23.

14. Athletic Facilities/Fields Improvements

The project will include:

- A new 5,000 GSF centrally located restroom and storage building.
- A new expanded competition track encircling a new synthetic turf competition soccer field, both in compliance with National Junior College Athletic Association standards.
- A minimum of 1,000 spectator seats, a scoreboard, a score table/controls, and supporting utility infrastructure for the competition track and soccer field.
- New lighting systems for the track/soccer facility, and softball and baseball fields.
- Demolition of the existing handball courts and replacement with a picnic pavilion.
- A new surface parking with a minimum of 20 spaces adjacent to the baseball and softball fields.
- Since there are golf classes, consideration should be given to expanding or renovating the driving range and possibly adding space for golf chipping or putting.

All facilities should be coordinated with the proposed extension of and enhancements to campus greenways proposed in the FMP to advance a more pedestrian friendly campus. In addition, it should be noted that the outdoor handball courts proposed for demolition will be relocated into the new Health and Wellness Center proposed in the FMP - that building will also house indoor tennis courts.

Project funding is currently not in the CIP schedule. This capital project is not dependent or tied to any other project recommended in the FMP. The funding schedule recommendation is: Design/Construction FY 24.

Table 6.2 summarizes the total impact of capital projects, those in progress and those proposed in this section, on the PGCC space inventory in comparison to the guidelines.

6.6 LARGO CAMPUS MAINTENANCE AND INFRASTRUCTURE PROJECTS

Roof replacement is recommended for the following buildings: Kent Hall, Bladen Hall, Largo Student Center, Chesapeake Hall in 2019 (roof will be at the end of its useful life), Lanham Hall, Marlboro Hall and Warehouse.

Marlboro Hall should also be investigated for structural masonry cracking by a licensed structural engineer.

Mechanical

Kent Hall: Mechanical building systems are aged and in need of a complete renovation. If funds are not available for a complete renovation, or if renovation is delayed in excess of 10 years, the following items should be addressed separately from the renovation:

- Install sprinkler system
- Replace hot water heater.
- Replace sump pumps and condensate pump.
- Replace piping and pumps in mechanical room.
- As part of systemic renovations to toilet rooms, replace associated HVAC and plumbing systems.

- Replace steam converter.

Accokeek/Bladen Hall:

- Evaluate the condition of the low pressure steam lines serving Accokeek Hall from Bladen Hall to determine condition and need for replacement.

Bladen Hall:

With the exception of renovated portions of the first floor and fan coils throughout the building, mechanical systems are aged and need a complete renovation. If funds are not available for a renovation, or if renovation is delayed more than 10 years, the following items should be addressed separately from the renovation:

- Re-balance the existing HVAC system and provide additional cooling in rooms where sufficient chilled water flow cannot be achieved with the existing fan coils.
- Add an air-cooled chiller for winter cooling requirements.
- Replace the two small boilers serving the Learning Center.
- Upgrade the controls system to be one vendor (Siemens) for the entire building.
- Replace AHU-1 and controls.
- As part of systemic renovations to toilet rooms, replace associated HVAC and plumbing systems.

Largo Student Center: The majority of HVAC and plumbing systems in the building are aged and in need of a complete renovation. If funds are not available for a complete renovation, or if renovation is delayed in excess of 10 years, the following items should be addressed separately from the renovation:

- Replace cooling tower and chiller.
- Replace chilled water and heating water pumps
- Upgrade kitchen equipment and associated mechanical systems.
- Replace toilet room plumbing, fixtures, and exhaust systems.
- Replace grease hood wash-down system.

Chesapeake Hall:

- Replace boilers, heating water pumps, and associated chemical tanks.
- Replace or repair hood and chemical room exhaust system, including fans.
- The building infrastructure was constructed in 1999 and consideration should be given to replacement of major HVAC and plumbing equipment when the building approaches 20 years of age in 2019.

Lanham Hall: Mechanical building systems are aged and in need of a complete renovation. If funds are not available for a complete renovation, or if renovation is delayed in excess of 10 years, the following items should be addressed separately from the renovation:

- Renovate the entire HVAC system; including: replace all unit ventilators, replace chilled water and heating piping, replace heating and cooling pumps.
- As part of systemic renovations to toilet rooms, replace associated HVAC, and plumbing systems.

Marlboro Hall: Mechanical building systems are aged and in need of a complete renovation. If funds are not available for a complete renovation, or if renovation is delayed in excess of 10 years, the following items should be addressed separately from the renovation:

- Replace chillers.
- Replace air handlers.
- Replace rooftop units.
- Replace heating, chilled, and condenser water pumps.
- Replace exhaust systems, including ductwork and fans.
- As part of systemic renovations to toilet rooms, replace associated HVAC and plumbing systems.
- Replace sump pumps.
- Replace auxiliary hot water heater.
- Replace two cooling towers.

Queen Anne Fine Arts Center: Mechanical building systems are aged and in need of a complete renovation. If funds are not available for a complete renovation, or if renovation is delayed in excess of 10 years, the following items should be addressed separately from the renovation:

- Replace air-handling units
- Provide HVAC to costume rooms/orchestra pit to improve comfort/indoor air quality.
- As part of systemic renovations to toilet rooms, replace/upgrade associated HVAC, and plumbing systems.
- Extend wet pipe sprinkler system throughout entire building for improved life/safety.

Facilities Management: Mechanical building systems are aged and need a complete renovation. If funds are not available for a complete renovation, or if renovation is delayed in excess of 10 years, the following items should be addressed separately from the renovation:

- Replace AHUs.
- Replace boiler.
- Remove underground oil tank.
- Upgrade toilet room HVAC and plumbing systems.

Warehouse:

- Upgrade HVAC to include humidity control.
- Provide wet pipe sprinkler system.

Queen Anne Fine Arts Center, Lanham Hall, Largo Student Center, Kent Hall and Marlboro Hall:

- Evaluate the condition of the low pressure steam lines serving these buildings from Bladen Hall to determine condition and need for replacement.

Electrical/Lighting

Kent Hall:

- Replace the existing panels including the FPE distribution panels.
- Replace existing T-12 and incandescent lights with energy efficient fluores-

cent lighting fixtures with T-8, T-5 or LED lamps and electronic ballasts.

- Incorporate occupancy sensors and building automation system to shut down the lighting system after hours in accordance with the latest ASHRAE 90.1 requirements.
- Replace the existing exit lights with LED exit lights.

Accokeek Hall: Though relatively new, light fixtures and controls could nonetheless be upgraded for more energy efficiency.

- Replace the existing T-12 lamp lighting fixtures with more energy efficient T-8, T-5 or LED lighting fixtures.
- Replace exterior HID lighting fixtures with LED lighting fixtures.
- Incorporate occupancy sensors and building automation system to shut-down the lighting system after hours in accordance with the latest ASHRAE 90.1 requirements.

Bladen Hall:

- Replace the existing lighting fixtures with T-12 lamps with more energy efficient T-8, T-5 or LED lighting fixtures.
- Incorporate occupancy sensors and building automation system to shut down the lighting system after-hours in accordance with the latest ASHRAE 90.1 requirements.

Largo Student Center:

- Incorporate occupancy sensors and building automation system to shut down the lighting system after hours in accordance with the latest ASHRAE 90.1 requirements.
- Replace the existing old panels including the FPE distribution panels.

Chesapeake Hall:

- Incorporate occupancy sensors and building automation system to shut down the lighting system after hours in accordance with the latest ASHRAE 90.1 requirements.
- Replace the existing ATS.

Lanham Hall:

- Incorporate occupancy sensors and building automation system to shut down the lighting system after hours in accordance with the latest ASHRAE 90.1 requirements.
- Replace the existing panels including the FPE distribution panels.

Marlboro Hall:

- Incorporate occupancy sensors and building automation system to shut down the lighting system after hours in accordance with the latest ASHRAE 90.1 requirements.
- Replace the existing panels including the FPE distribution panels.

Queen Anne Fine Arts Center:

- Replace the existing old panels including the panels in the corridors.
- Incorporate occupancy sensors and building automation system to shut down the lighting system after hours in accordance with the latest ASHRAE 90.1 requirements
- Replace the existing T-12 and compact fluorescent down-lights with energy efficient fluorescent lighting fixtures with T-8, T-5 or LED lamps and electronic ballasts.

R. I. Bickford Natatorium:

- Incorporate occupancy sensors and building automation system to shut down the lighting system after hours in accordance with the latest ASHRAE 90.1 requirements.
- Replace the existing T-12 and compact fluorescent down-lights with energy efficient fluorescent lighting fixtures with T-8, T-5 or LED lamps and electronic ballasts.

Facilities Management:

- Incorporate occupancy sensors and building automation system to shut down the lighting system after hours in accordance with the latest ASHRAE 90.1 requirements.
- Replace electrical distribution panel.

Warehouse:

- Replace the existing electrical panels inside the building.
- Replace the existing T-12 fluorescent lights and high pressure sodium (HPS) lighting fixtures with energy efficient fluorescent lighting fixtures with T-8 or T-5 lamps and electronic ballasts or LED lighting fixtures respectively.

6.7 LARGO CAMPUS SUSTAINABILITY RECOMMENDATIONS

In making PGCC a more sustainable place to teach, learn and work there are many actions, policies and practices that can be considered for implementation. PGCC has taken a very important step by identifying the development of a “College-Wide Sustainability Plan” as an institutional priority in the latest strategic plan, Envision Success FY 2014 –FY 2017. The stated objective is to “Increase the use of renewable energy and sustainable products.” In accomplishing the objective a plan is to be developed to identify “regular measurements of sustainability” to accomplish:

- Reduced utility usage.
- Increased use of recycled products and materials.
- Increased investment in sustainable products.

The Sustainability Plan should include short and long term strategies. Much like any other academic or campus program, planning and implementing sustainability initiatives will require personnel resources to manage the development and implementation efforts.

As part of developing a Sustainability Plan for campus, some areas and strategies to consider in the development of the plan include:

- Education, research and outreach.
- Energy conservation and efficiency.
- Site Development Strategies.
- LEED buildings and renewable energy.
- Procurement.
- Water conservation.

- Alternative modes of transportation.
- Solid waste minimization.

6.7.1 Education, Research and Outreach

By training and educating future leaders, scholars, workers, and professionals, the College is positioned uniquely to prepare students to understand and address sustainability challenges and equip these students to lead society to a sustainable future. Successfully integrating sustainability education, research and outreach into the curriculum is an effective way of making PGCC more sustainable through educated College users, while preparing students for their future after college.

6.7.2 Energy Conservation and Efficiency

Energy to heat, cool and power campus buildings is typically one of the biggest expenditures for a college. Within the Sustainability Plan the College should develop strategies to promote and facilitate energy conservation measures and programs on campus, especially those that only require behavior change (i.e., turn out the lights or turn off the water). The benefits of conservation include a high return on investment in terms of money saved and the reduction of energy use. In addition, other more facility oriented strategies should be considered in the plan including: policies and procedures for more efficient scheduling of buildings and associated temperature settings for occupied and unoccupied settings, developing renewable energy sources as part of capital projects, Energy Services Contracting (ESCO) and Demand Side Management programming.

6.7.3 Site Development Strategies

A variety of measures should be considered to increase the overall sustainability on the Largo Campus. These include:

- Preserve existing green and open spaces.
- Provide trees and landscape features at all roadways.
- Increase the number of shade trees at all open spaces.
- Consider permeable paving systems for walkways so as to reduce impermeable surfaces on campus and reduce stormwater runoff into storm drain systems.

- Design sidewalks to allow stormwater run-off to sheet flow over grass to help reduce stormwater runoff into storm drain systems.
- Undertake restoration of stream channels, as needed, to address areas of erosion and removal of invasive plant species.
- Provide bioretention areas directly adjacent to buildings.
- Consider green roofs for every building.
- If green roofs aren't feasible, consider a "cool roof" strategy - i.e. white or light-colored roofs with high reflectivity - to reduce the heat island effect.
- Consider passive solar technologies and creative ventilation for new building projects.
- Investigate the feasibility of using geothermal systems for new building projects.

6.7.4. LEED Buildings

Many colleges are making sustainable principles a fundamental part of their campus design. PGCC has a mandate that requires a LEED rating of Silver or higher for all capital projects. The College should continue this practice, and moving forward, should consider aiming even higher with ratings of LEED Gold or Platinum for future capital projects. Accomplishing these goals will help further reduce energy consumption and increase awareness of sustainability issues on campus.

LEED ratings apply to new construction and renovation and generally focus on a few major categories:

1. Sustainable Sites—for example, erosion and sediment control, access to mass transit, bicycle storage, storm water treatment.
2. Water and water efficiency—for example, reduce or eliminate irrigation by using water-efficient landscaping, reduce water consumption by using water-efficient plumbing fixtures.
3. Energy and Atmosphere—for example, building systems commissioning, eliminating HCFC's, using insulating glazing and building insulation.
4. Materials and Resources—for example, using recycled and recyclable building materials, certified wood, regional materials.

5. Indoor Environmental Quality - for example, using low-emitting materials, increasing ventilation, providing daylight and views.

If the College aspires beyond LEED, it should consider developing net zero or net positive building(s). Note that there is a first-cost associated with achieving LEED certification at various levels, and funding should be allocated as appropriate to the LEED level aspiration.

6.7.5 Energy (Green Power)

As part of the development of capital projects, renewable energy sources should be studied to determine the feasibility of using such sources to meet LEED requirements and provide educational demonstration projects that can be displayed on campus. Demonstration projects are an excellent way for students and the entire campus community to see first-hand how various renewable energy sources work in application.

6.7.6 Procurement

Some best practices and areas for consideration include:

Desktop computers, laptops and monitors: These items are found throughout campus and use significant amounts of electricity, and can be made of materials that are toxic such as cadmium, mercury, polyvinyl chloride, and others. The Electronic Product Environmental Assessment Tool (EPEAT) measures performance in both energy usage and other impacts. EPEAT has become a widely accepted industry standard. EPEAT Gold is recommended for purchases of these items.

Copiers, fax machines, printers and multi-function devices: These products can consume significant amounts of electricity. For that reason, a preference for Energy Star compliant equipment is recommended, along with the retirement of analog machines to be replaced with digital machines. Additionally, it is recommended that inkjet printers be eliminated because they typically cost more than printing devices using toner. Connecting copiers to computer networks and duplexed copies is encompassed in this recommendation as well. The elimination of personal printers and the use of network copiers is a best practice.

Toner cartridges: Remanufactured toner cartridges reduce waste, save natural resources and cut costs by reusing components rather than disposing of single use products from original equipment manufacturers. Furthermore, it is recommended that all cartridges be recycled.

Cleaning supplies: Purchase and use of janitorial supplies, soaps and sanitizers that are environmentally friendly, preferably Green Seal or Eco Logo certified products should be considered. These actions will reduce toxicity, waste, and exposure to both building occupants and janitorial staff.

Recycled content: Purchase and use products and supplies that contain recycled content. These may include: paper, toner cartridges, flooring materials (carpet, tile, etc.) and a variety of plastic products to name a few.

Fuel Efficient Vehicles: Consider a policy and guidelines for purchase of fuel efficient campus fleet vehicles.

6.7.7 Water Conservation

Domestic: Consider low flow plumbing fixture standards such as toilets, urinal flush valves, shower heads, and lavatory sink flow controls. Also consider automated controls. These standards are intended to reduce unnecessary water use and minimize maintenance requirements. The next step beyond low flow fixtures are waterless urinals.

Irrigation: The College should consider limiting areas that are irrigated and monitor the frequency of use of irrigation systems on campus to minimize domestic water used for these purposes. In planning for future landscape areas, the College should utilize native and drought-tolerant species to further reduce reliance on irrigation.

6.7.8 Alternative Modes of Transportation

The College should continue to promote bus ridership to campus to reduce the number of automobiles coming to campus and the number of parking spaces needed. Other best practices and strategies to be considered include: off campus shuttle service, mass transit subsidy, carpooling incentives, preferred parking for fuel-efficient vehicles, and encouraging biking and walking, including developing future bike lanes on the outer ring road. PGCC senior leadership should increase their involvement in County and regional mass transit discussions with the intent of bringing regional light rail to campus.

6.7.9 Solid Waste Minimization Strategies

Some best practices and strategies to consider:

Reducing Waste: The College could consider initiatives to reduce waste such as going “bagless” at the Book Store, implementing a reusable mug and/or bottle program, and/or going “trayless” in food service facilities.

Recycling: Study and develop upgrades to the campus collection system to make it more user-friendly and effective. These revisions may include more receptacles for convenience, additional instructional signage and user education.

Construction Demolition Reuse and Recycling: Consider requiring that all campus construction projects, including non-capital projects, recycle construction and demolition wastes to the greatest extent practical. At a minimum, all carpet replacement projects should include a contractual requirement for recycling/reprocessing of the old carpet.

6.8 LARGO CAMPUS 2022 TO 2032 RECOMMENDATIONS

This Facilities Master Plan also takes a look at a time beyond the planning year 2022-2032 and proposes some strategies for managing growth in the future on this campus. Four key strategies are proposed:

1. Proposed sites for future buildings are shown on the Facilities Master Plan, Figure 6.1. Future buildings are proposed generally to be built on existing surface parking lots. Building on existing green space is discouraged though additions to existing buildings like Kent Hall and Parking Garage 1 could be positioned to form and activate the existing open space. Added buildings should fill in the area within the outer ring road, reinforce the pedestrian walk formed from the inner ring, and allow for circulation/space to radiate out from the core of campus set up by the parking layout/landscaping.
2. Better accommodate and encourage mass transit that is expected to improve throughout the county and region. Allow for lanes/ pull offs for transit vehicles and well located, comfortable stations.
3. If additional parking is still needed, consider adding a floor each to Parking Garage 1 and Parking Garage 2. A third garage might have to be added to

the middle of campus (inside the ring road) to satisfy parking demand if mass transit is not improved.

4. Based on the recommended study of north and south county locations for additional extension centers or a new campus, start developing those new facilities.

6.9 LARGO CAMPUS PROPOSED FURTHER STUDIES

The following studies are recommended:

- Landscape and Beautification Plan to include native and low-maintenance plants.
- Environmental Study to investigate potential development on protected areas.
- Architectural campus standards.
- Signage plan.
- Feasibility Study for new North County and/or South County campus.
- Sustainability Plan.
- Archaeological surveys (where required.)

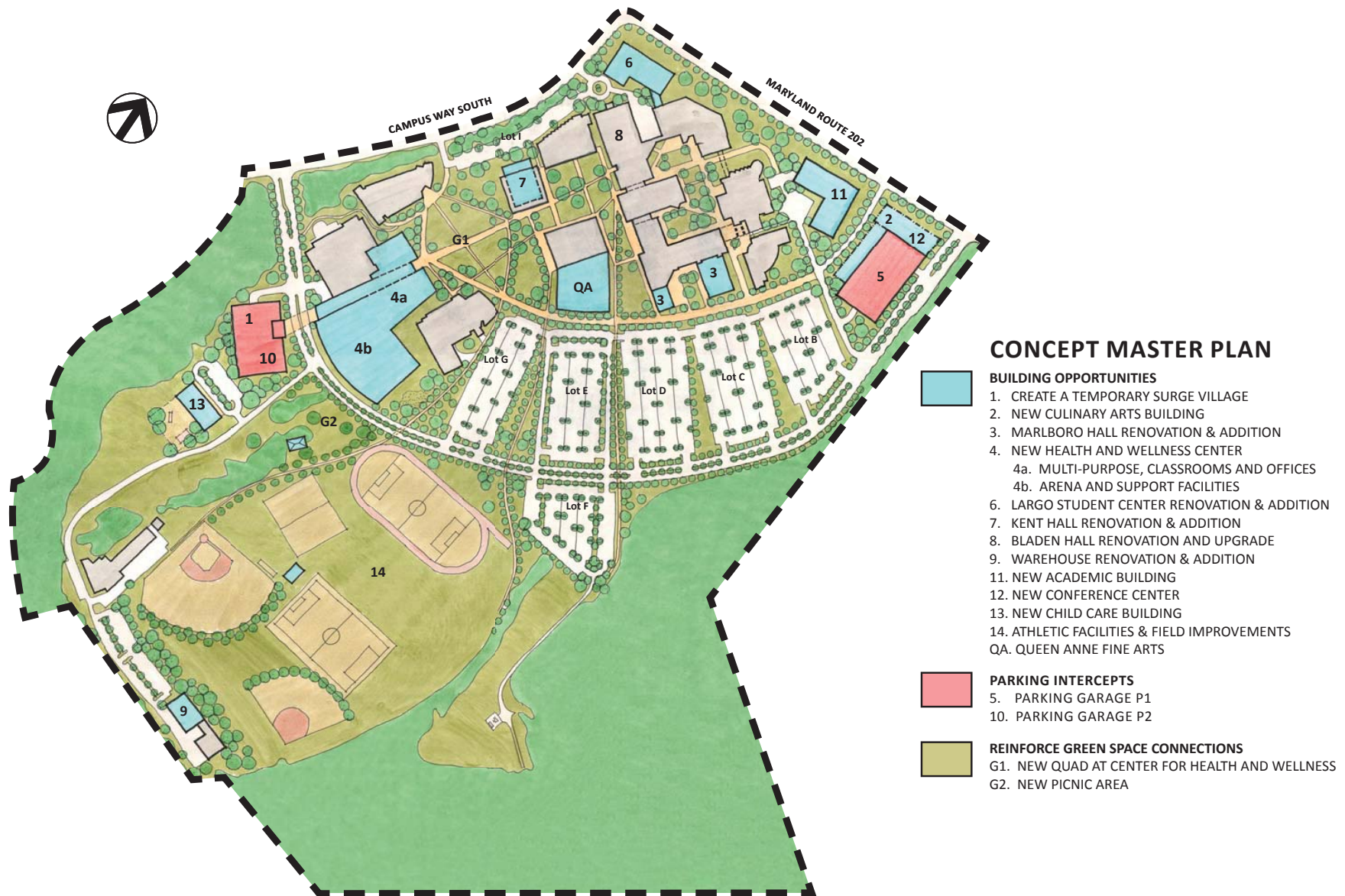


Figure 6.1 Largo Campus Illustrative Facilities Master Plan - Concepts

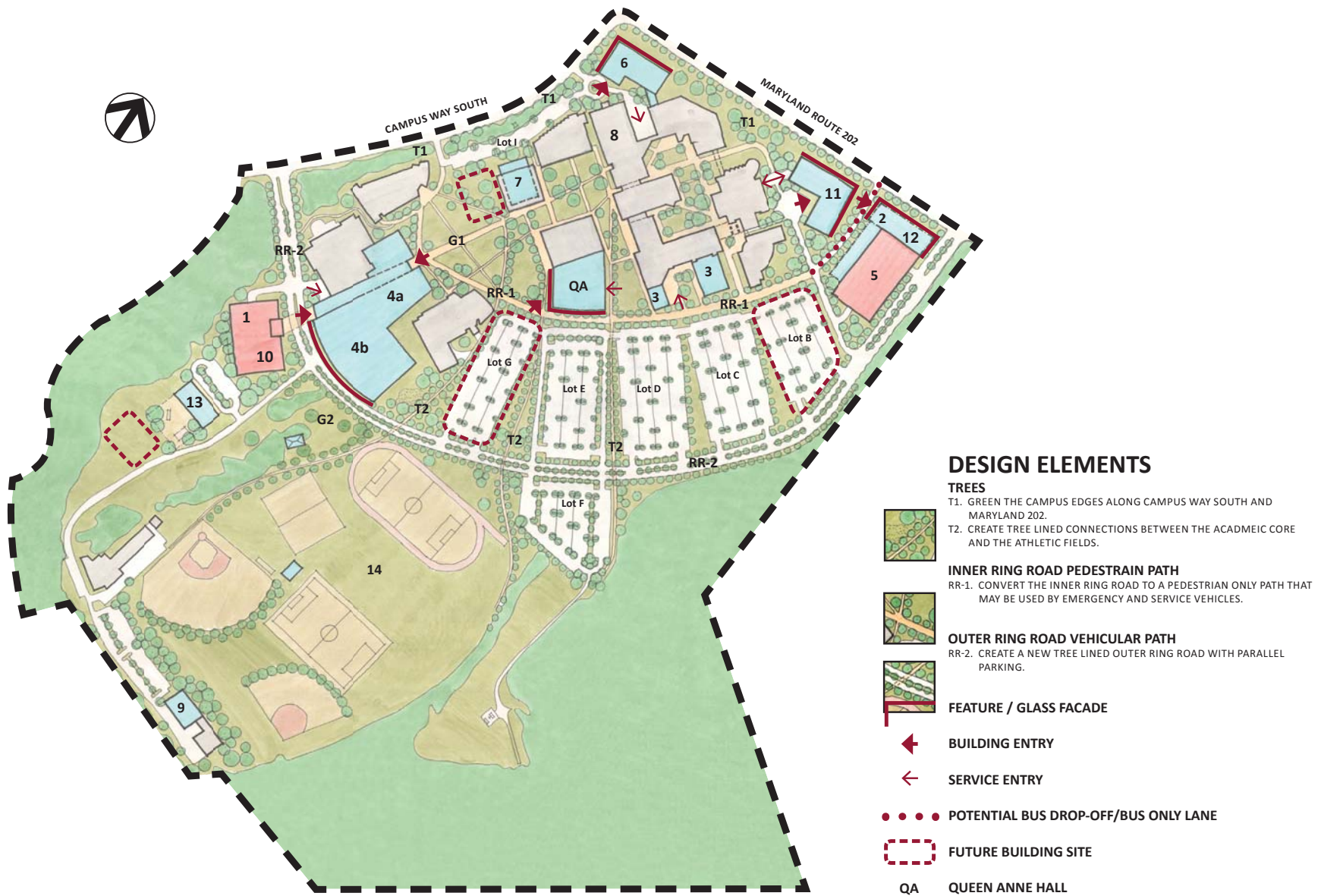


Figure 6.2 Largo Campus Illustrative Facilities Master Plan - Design Elements

Action	Impacted Lot or Garage	Existing Spaces	Change in Spaces	Campus Total	Overall Net Change
Current 2013				2,965	
Renovate Facilities Management Bldg	na	59	21	2,965	21
Build Culinary Arts	A	240	-120	2,845	-99
Build Queen Anne addition	K	74	-74	2,771	-173
Marlboro Renovation & Addition	na	0	0	2,771	-173
Build Health Wellness Phase 1	H	197	-100	2,671	-273
Build Health Wellness Phase 2	M	33	-10	2,661	-283
Green Lot H into new Quad	H	97	-97	2,564	-380
Reconfigure outer ring road w/parallel parking	na	0	250	2,814	-130
take over Lot A for construction	A	240	-240	2,574	-370
Build North Parking Garage #1	Garage	0	850	3,424	480
Build Largo SC Addition	L	62	-62	3,362	418
Build Warehouse addition + parking	na		90	3,452	508
Build South Parking Garage #2	na	0	750	4,202	1258
Build new Academic Bldg	J	9	-9	4,193	1249
Build Conference Center	A	0	0	4,193	1249
Greening of Parking Lots	B, C, D, E, G	1,607	-160	4,033	1089
New Childcare bldg	New	0	40	4,073	1129
2022 projected parking deficit	na		-1,091	2,982	38

Table 6.1 Parking Impacts

HEGIS/FICM CODE	HEGIS/FICM CATEGORY	Need Current 2012	Inventory Current 2012	Surplus/ (Deficit) 2012	Need 10 Years 2022	Inventory 10 Years 2022	Surplus/ (Deficit) 2022
100 (110-115)	CLASSROOM	63,284	84,175	20,891	86,248	114,257	28,009
200	LABORATORY	138,817	141,212	2,395	189,190	170,944	(18,246)
210-15	Class Laboratory	119,661	132,392	12,731	163,083	160,946	(2,137)
220-25	Open Laboratory	19,156	8,820	(10,336)	26,107	9,998	(16,109)
250-55	<i>No Allowance</i>						
300	OFFICE	164,839	162,340	(2,499)	223,932	209,423	(14,509)
310-15	Office/ Conf. Room	161,808	153,242	(8,566)	220,074	202,077	(17,997)
320-25	Testing/Tutoring	3,031	9,098	6,067	3,858	7,346	3,488
350-55	<i>Included w/ 310</i>						
		2012	2012	2012	2022	2022	2022
400	STUDY	40,914	47,557	6,643	55,268	60,011	4,743
410-15	Study	28,506	19,247	(9,259)	38,850	31,701	(7,149)
420-30	Stack/Study	8,863	24,145	15,282	11,727	24,145	12,418
440-55	Processing/Service	3,545	4,165	620	4,691	4,165	(526)
500	SPECIAL USE	73,332	69,590	(3,742)	93,192	139,301	46,109
520-23	Athletic	64,610	60,228	(4,382)	81,160	131,948	50,788
530-35	Media Production	7,722	9,362	1,640	11,032	7,353	(3,679)
580-85	Greenhouse	1,000	0	(1,000)	1,000	0	(1,000)
600	GENERAL USE	63,805	78,510	14,705	80,203	93,812	13,609
610-15	Assembly	18,122	28,167	10,045	21,432	29,151	7,719
620-25	Exhibition	3,031	2,426	(605)	3,858	2,218	(1,640)
630-35	Food Facility	23,226	14,894	(8,332)	31,651	22,094	(9,557)
640-45	<i>No Allowance</i>						
650-55	Lounge	8,295	11,832	3,537	11,304	17,358	6,054
660-65	Merchandising	3,131	8,757	5,626	3,958	9,057	5,099
670-75	<i>No Allowance</i>						
680-85	Meeting Room	8,000	12,434	4,434	8,000	13,934	5,934
700	SUPPORT	30,068	37,218	7,150	40,564	39,884	(680)
710-15	Data Processing	2,921	11,617	8,696	4,162	10,941	6,779
720-25	Shop/ Storage	22,143	21,402	(741)	29,594	22,404	(7,190)
730-35	<i>Included w/ 720</i>						
740-45	<i>Included w/ 720</i>						
750-55	Central Service	4,561	3,453	(1,108)	6,216	5,793	(423)
760-65	Hazmat Storage	443	746	303	592	746	154
800	HEALTH CARE	1,112	1,244	132	1,443	1,244	(199)
900	<i>No Allowance</i>						
050-090	<i>No Allowance</i>						
	Total NASF:	576,171	621,846	45,675	770,040	828,876	58,836

Table 6.2 Space Inventory Including Proposed Capital Projects (#1 through #8)

7 IMPLEMENTATION STRATEGIES AND COSTS

7.1 IMPLEMENTING THE FACILITIES MASTER PLAN

In order for the FMP to be effectively implemented over the ten year planning period, a phasing plan identifying proposed capital improvement projects in priority order, along with the associated magnitude of construction cost and a proposed funding schedule, has been developed and included as Table 7.1. The plan sets forth a proposed funding schedule to facilitate design and construction efforts in a way that maintains campus functionality throughout project construction. It is important to remember, as discussed in Section 6.5, that some projects can be completed independently at any time, while the success of other projects very much depends on following the proposed sequence. At this time, it is proposed that projects 1 through 6 receive capital funding in the first five years of the ten year planning period, while projects 7 through 10 are proposed to receive funding in the second five years to meet facility/space needs identified in the FMP. Funding and implementation of projects 11 through 14 is dependent on a number of variables; including: if PGCC undertakes more growth in the ten year period than currently planned for and if other County and College needs justify special purpose facilities (such as the Conference Center) sooner.

Currently, PGCC facility projects are funded from three primary sources - state, county and/or college funds. In many instances capital projects involve funding from more than one of these sources. A fourth possible funding source that should continue to be explored includes public/public or public/private partnerships to leverage other approaches to facility funding. A good example of a quasi-public/public partnership, that may apply to PGCC, would be a joint effort with the Prince George's County Revenue Authority in the financing, construction and operation of a parking structure(s) on campus. Using the expertise of another County agency to assist, guide and be involved with the process of developing this specific facility type would be greatly beneficial to PGCC. Public/private partnership opportunities are discussed in more detail in Section 7.1.3.

7.1.1 Lease vs. Own

At this time the College will continue to lease space at all existing extension centers, except at Skilled Trades which is owned by PGCC. As opportunities to purchase existing extension center sites arise, the College will consider this option if it is determined to have enough benefit programmatically and financially. The planned enrollment growth identified in the FMP can be accommodated by land and facilities currently owned at the Largo Campus or leased at extension centers. Opportunities for new extension center sites should be evaluated on a case by case basis regarding the lease versus own issue.

7.1.2 Grant and Fundraising Opportunities

In many instances, campus space serves as an "in-kind" contribution in being able to secure a variety of external grants and contracts available to fund educational programs and research initiatives. In support of pursuing more external grants and contracts the College should identify blocks of space on campus, that may be under-utilized, that could be used as leverage for securing educational grants and contracts.

New and upgraded facilities and space provide great opportunity for use in supporting alumni and donor giving campaigns. These opportunities range from as small as a "buy a brick" program to the naming of a campus building. Some future opportunities include:

- The new wide pedestrian path that will be located where the inner ring road is today.
- The expanded Queen Anne Fine Arts Center, new Culinary Arts Center, new Health and Wellness/Arena Building, expanded Largo Student Center and the new Academic Building.
- The new outdoor quad located between Kent Hall and the future Health and Wellness/Arena Building.
- The new outer ring roadway.
- The new lighting on baseball, softball fields and track.

7.1.3 Public/Private Partnerships

PGCC has a successful history of developing thriving public/private partnerships that benefit the College, the County and the State. By fostering partner-

ships and leveraging funds, the College has positioned itself to advance its strategic goals and objectives as it relates to institutional priorities to provide (1) scholarships and services that maximize access for a broad range of students with diverse needs; (2) academic and workforce development programs that prepare students for the region's high-demand jobs; and (3) technology, equipment, and furnishings to support state-of-the-art teaching and learning. With substantial investment in new and upgraded facilities, the College can utilize these opportunities to develop new partnerships and seek expansion of existing to further the positive role and impact that public/private partnerships have at the institution.

7.2 COSTS

Table 7.1 describes construction costs for each capital project proposed in the FMP. Costs include both building and site construction work. Assumptions and exclusions are listed below:

- costs are current as of January 2014.
- costs do not include costs for design or permitting.
- costs do not include any furniture, fixtures or equipment.
- costs do not include AV or IT equipment.
- site utility costs include stormwater management, water, sewer and electrical service and connections.

SEQUENCE		Reno, Add Demo, New	Existing 2013 GSF	Master Plan 2022 GSF	Change GSF	\$/GSF	Cost Assumptions
3	Marlboro Hall site work	RENO, ADD	130,156	148,656 50,000	18,500	\$381.89 \$12.00	\$56,770,240 RENO @ \$356/sf and ADD @ \$500/sf \$600,000 20% H-scape @ \$15/sf; 80% L-scape @ \$5/sf + \$250,000 utilities
3a	Steel Bldg - Sculpture & Ceramics site work	DEMO	4,866	0 16,000	(4,866)	\$5.00 \$1.00	\$24,330 DEMO; assume no HAZMAT \$16,000 Rough grade and seed only
4a, 4b	Health and Wellness Center site work, New Quad	NEW	0	133,000 430,000	133,000	\$350.00 \$9.25	\$46,550,000 \$3,977,500 20% H-scape @ \$15/sf; 80% L-scape @ \$5/sf + \$550,000 utilities
4b	Continuing Education site work	DEMO	15,320	0 35,000	(15,320)	\$6.50 \$1.00	\$99,580 DEMO; assume no HAZMAT \$35,000 Rough grade and seed only
4b	Novak Field House site work	DEMO	35,616	0 85,000	(35,616)	\$6.50 \$1.00	\$231,504 DEMO; assume no HAZMAT \$85,000 Rough grade and seed only
5	Parking Garage 1 site work inner & outer ring roads	NEW		850 sp 595,000		\$30,000 \$7.56	\$25,500,000 \$4,498,200 L-scape 25% of remainder @ \$5/sf, rough grade & seed 75%, Roads \$500k, Lighting \$756k, \$150k utilities
6	Largo Student Center site work	RENO, ADD	69,116	114,116 90,000	45,000	\$280.00 \$12.55	\$31,952,480 RENO @ \$200/sf and ADD @ \$400/sf \$1,129,500 20% H-scape @ \$15/sf; 80% L-scape @ \$5/sf + \$500,000 utilities
7	Kent Hall site work	RENO, ADD	30,738	45,738 50,000	15,000	\$317.52 \$7.00	\$14,522,730 RENO @ \$277/sf and ADD @ \$401/sf \$350,000 20% H-scape @ \$15/sf 80% landscape @ \$5/sf
8	Bladen Hall renovate upper floors only	RENO	101,136	101,136 60,682	0	\$200	\$12,136,320 RENO @ \$200/sf
9	Warehouse Building site work	RENO, ADD	9,290	19,290 50,000	10,000	\$100.00 \$3.80	\$1,929,000 RENO @ \$50/sf and ADD @ \$150/sf \$190,000 20% H-scape @ \$15/sf; 80% rough grade and seed
10	Parking Garage 2 site work	NEW		750 sp 115,000		\$30,000 \$4.30	\$22,500,000 \$494,500 50% H-scape @ \$5/sf; 50% rough grade & seed + \$150,000 utilities
10	Former Childtime/Surge site work	DEMO	12,826	0 35,000	(12,826)	\$6.50 \$1.00	\$83,369 DEMO; assume no HAZMAT \$35,000 Rough grade and seed only
10	Temp TO	DEMO	7,141	0	(7,141)	\$3.50	\$24,994
10	Temp TS	DEMO	2,821	0	(2,821)	\$3.50	\$9,874
11	New Academic Bldg site work	NEW	0	109,000 100,000	109,000	\$625.00 \$11.50	\$68,125,000 \$1,150,000 20% H-scape @ \$15/sf; 80% L-scape @ \$5/sf + \$250,000 utilities
12	Conference Center site work	NEW	0	35,000 40,000	35,000	\$475.00 \$13.25	\$16,625,000 \$530,000 20% H-scape @ \$15/sf; 80% L-scape @ \$5/sf + \$150,000 utilities
13	Child Care Bldg site work	NEW	0	16,100 50,000	16,100	\$400.00 \$10.00	\$6,440,000 \$500,000 20% H-scape @ \$15/sf; 80% L-scape @ \$5/sf + \$150,000 utilities
14	Athletic Facilities Improvements site work	NEW	0	5,000 10,000	5,000	\$200.00 \$380.00	\$1,000,000 \$3,800,000 Soccer, Athletic track, Seating, Lighting, Picnic and Parking
			419,026	728,636	308,010		\$321,915,120

Table 7.1 PGCC FMP Project Costs

