

# Montgomery College Facilities Master Plan

**Montgomery College**  
**Rockville, Maryland**

**Project No.**  
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## **FACILITIES MASTER PLAN TEAM MEMBERS**

### **MONTGOMERY COLLEGE TEAM**

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## INTRODUCTION

Montgomery College was founded in 1946 and is Maryland's oldest community college. In 1950 Takoma Park became the College's first campus. The Rockville Campus was added in 1965, and the Germantown Campus in 1978. From 1946 to the present over half of a million students have attended classes at Montgomery College. All three campuses have experienced significant increases in enrollment. The Facilities Master Plan will quantify campus needs and identify solutions within the guidelines of the State of Maryland.

In order to address new opportunities and challenges, the College undertook a comprehensive update of its Collegewide Facilities Master Plan to support its increasing enrollment, define facilities needs, and justify major new facilities initiatives anticipated as a result of this effort. Einhorn Yaffee Prescott was commissioned in October of 2001 to prepare this Collegewide Facilities Master Plan. The Facilities Master Plan covers the 10-year period from 2002 to 2012 and responds to the dramatic enrollment growth expected at the College and the critical capital need to address this growth. This comprehensive collegewide effort includes five plans covering the Germantown, Rockville, and Takoma Park Campuses, Workforce Development/Continuing Education, and Central Administration. In addition to the ten-year Facilities Master Plan, the overall planning effort also includes a 20-year land use plan (2002-2022) for the three campuses to provide broad direction for campus growth. The Plan's purpose is to establish a framework for development of these campuses, as well as the off-campus operations of the College, that is cohesive, integrated, and visionary. Some components of a Master Plan, such as space usage and academic and administrative requirements, are readily quantifiable, while other components may be described as quality of life issues, or qualitative components. Equal attention has been given to quantitative and qualitative components in order to develop a Facilities Master Plan that will truly support the role, mission, and educational plans of Montgomery College. The overall plan satisfies the Maryland Higher Education Commission (MHEC) requirements for a Facilities Master Plan to support the capital planning processes and capital funding requests of the College.

This master planning effort updates the 1991 Collegewide Facilities Master Plan for the three campuses, Continuing Education (now called Workforce Development/Continuing Education) and Central Administration. This earlier five-part plan was approved with conditions by the State in June 1994. Since that time the Board has approved a series of master plan amendments that have provided for the expansion of the Takoma Park Campus into South Silver Spring (March 1998), allowed for the purchase of the former Giant Food bakery site (January 2001), relocated the planned Cultural Arts Center to Georgia Avenue (September 2002), and modified the Germantown Campus Master Plan with the purchase of the adjacent Kay property (September 2002), as well as approved the site locations of four future buildings for the Rockville and Germantown Campuses (June 2003).

The Master Plan process consists of four major phases:

Programming/Interviewing  
Discovery  
Analysis  
Report

During the Programming and Interviewing Phase planning data was gathered, and programmatic deficiencies or requirements determined. In this phase, interviews, campus tours, numerous meetings, and intensive planning sessions were held throughout the College with the affected constituent groups to discuss needs and program requirements; to refine enrollment, faculty, and staff projections; and review campus development options. Over 100 stakeholders were interviewed for this Facilities Master Plan and the input and feedback collected not only provides key information about Montgomery College, but is also an important first step in consensus building.

The Discovery Phase is where background information on the campuses was compiled and reviewed. This effort included the compilation, analysis, and confirmation of the MHEC-endorsed 2012 enrollment projections for the College. These projections were further refined by the College into the three campus components. In addition, the College developed enrollment projections for Workforce Development/Continuing Education, as well as faculty and staff projections for the College. This data-driven backbone to the Facilities Master Plan results in a very defensible plan for the future that identifies a significant additional instructional and support space need to provide for the College's growth. The planning team and the College worked together to define, document, and prioritize campus-planning issues.

The Analysis Phase examined possible solutions to programmatic requirements, and documented campus opportunities and constraints. Campus charettes were held during this phase. A design charrette is a consensus-building workshop that provides an open forum for stakeholders and the team to synthesize individual knowledge and expertise. The primary objective during this phase was to identify, evaluate, and plan possible avenues of focus, or approach, for campus development.

A large component of the Analysis Phase is campus design. Design is a collaborative process that explores alternatives for the future. Information from the Discovery and Analysis Phases was collated, alternatives for the future were explored, and solutions were proposed that seek to reveal new opportunities within the surrounding context of existing sites, buildings, and infrastructure.

During the Report Phase the final document was compiled for review and approval by Montgomery College.

The key component to a successful Master Plan is an integrated and continuous level of input from the College community. This plan has been structured to provide opportunities for such input throughout the entire Master Planning process. As discussed above, extensive stakeholder interviews were conducted during the Programming Phase, meetings

and workshops were conducted during the Discovery Phase, and design charrettes were held on all of the campuses during the Analysis Phase. This synthesis of institutional knowledge and expertise helps to develop a 'whole view' from many perspectives. We learn from inhabiting a place, and we also learn by looking at a place with fresh eyes. To this end the Montgomery College Community was very much a part of the Master Planning team at all phases of the project. This 2002-2012 Facilities Master Plan is the result of this collaborative methodology.

## **ENROLLMENT**

Using a consistent set of data for both the Facilities Master Plan and the parallel Academic Master Plan effort, the College's enrollment growth is significant over the 2002-2012 period. Overall, the College is projected to experience credit Full Time Equivalent (FTE) growth of 21% by 2012. The distribution of this growth indicates that the Rockville Campus is expected to grow 7% while more substantial growth of 35% is anticipated at the Germantown Campus and dramatic growth of 54% projected for the Takoma Park Campus. The College's non-credit FTE enrollment in Workforce Development/ Continuing Education is also projected to experience dramatic growth of 136% by 2012. Overall, the College is projecting faculty growth of 20% and staff growth of 21% consistent with student enrollment growth over the ten years. For campus libraries, annual growth of 1.5% in Physical Bound Volume Equivalents (PBVE) is projected for the Rockville and Takoma Park Campuses. Slightly higher PBVE growth is projected for the Germantown Campus due to the new biosciences curriculum and upper division science courses being offered on the campus by the University of Maryland.

The MHEC-endorsed data developed for this plan presents a more conservative evaluation of the enrollment growth facing Maryland community colleges than that provided in the recently released report by the Joint Community College/USM Workgroup. The Workgroup's analysis anticipates significantly higher rates of enrollment growth for Montgomery College. The potential impact of this anticipated higher enrollment growth rate is significant on the instructional requirements and physical space needs of the College. The College will monitor the enrollment situation over the next several years to determine whether the Facilities Master Plan should be updated earlier than a typical five-year update.

## **BUILDING CONDITIONS ASSESSMENT**

In 2002, as part of the assessment process supporting the Facilities Master Plan, the College completed a comprehensive facilities conditions assessment that identified significant building condition deficiencies on all three campuses, and for Central Administration. An engineering consultant surveyed the College's total building space inventory of 1.5 million gross square feet (gsf), including all campus roadways, parking lots and garages, and underground utility systems. This study identified a total replacement value of \$205,000,000 for the College's physical plant.

Among the critical conclusions of the condition assessment considered during the master planning process is the fact that a significant share (39%) of the College's existing buildings are inefficient in size, being smaller than 50,000 gsf. Small buildings are more inefficient to operate and constrain opportunities for growth both in terms of the land commitment to the building footprint and an inability to renovate for the larger program needs identified by the College. In addition to a high proportion of small buildings, nearly three-quarters of the buildings have significant systemic deficiencies equivalent to 28% of the replacement value or \$57.9-million. This condition is exacerbated by the prevalence of a high proportion of 30-year or older buildings, particularly on the Rockville and Takoma Park Campuses. The critical information provided by the conditions assessment was used during the master planning process to evaluate options for new buildings, renovations, and/or recommendations for building demolition and replacement.

The large capital renewal requirement identified by the conditions assessment is being used to support the College's capital requests to Montgomery County for increased funding. With the County's support, the College has started to address some of the \$57.9 million in deferred maintenance need.

### **FUNCTIONAL ADEQUACY OF FACILITIES**

The extensive evaluation effort expended during the master planning process reinforced the impression that insufficient space constrains the College's academic programs and services across all campuses and units. The problems range from fragmented support services that reduce department productivity and hinder discipline identity to inflexible teaching environments and physical accessibility issues. To make matters worse, the College's enrollment growth is outstripping the current plan for new buildings on all three campuses. Even with the three approved buildings at the Takoma Park Campus, and three planned projects that include one new building on each Campus, the College will have a significant space deficiency without the construction of additional facilities.

### **NEEDS ASSESSMENT**

The Facilities Master Plan provides a detailed response that addresses all of the capacity needs of the College, as reconciled against the State space planning guidelines. Within the context of growing each campus, the facility planning goals that guide the master plan include retaining the respective campus character as expansion occurs. The intent is to reinforce the College and campuses as community resources while eliminating fragmentation of disciplines, programs, and services. Where appropriate, the plan recommends removal and replacement of inefficient and small campus buildings. Each campus master plan begins with the addition of new facilities to provide relief to crowded conditions before proceeding with building renovations. The College's on-going investment in building system upgrades supports the overall planning goal of improved campus facilities. And finally, the master plans are developed to support the campus communities with adequate learning, working, recreational and celebratory environments.

Overall, the College faces a significant current space deficit and even larger 10-year space deficit that, if not addressed, will continue to be a serious constraint on the College’s ability to respond to the educational and cultural needs of students and the community. In summary, the College’s space deficiencies (net assignable square feet) include:

<u>Area</u>	2002 <u>Deficit</u>	2012 <u>Deficit</u>
Germantown Campus	65,843	155,919
Rockville Campus	203,911	325,586
Takoma Park Campus	93,686	126,665
WDCE	14,266	32,209
<u>Central Administration</u>	<u>13,488</u>	<u>39,239</u>
College Total	391,194	679,618

**MASTER PLAN RESPONSE**

The Facilities Master Plan provides a framework to guide the physical development of the Takoma Park, Germantown and Rockville campuses for the next ten years, and also identifies Workforce Development/Continuing Education, and Central Administration space needs. The five plans address the need for new buildings, renovations, additions, and site improvements (roads, parking lots, open space improvements, and major utility infrastructure improvements) to accommodate the enrollment increases expected on all three campuses while maintaining and enhancing the unique identity and character of each campus. The specific projects developed as part of this master plan are reconciled with campus identified needs and may not always match the exact amount of the identified space deficit shown in the above table. More detailed facility programs will be developed in the future for proposed projects included in the Facilities Master Plan.

**Takoma Park Campus:**

The Facilities Master Plan for the Takoma Park Campus is designed to support a 54% increase in enrollment through construction of approximately 163,000 nsf (296,000 gsf) of new space, and the renovation and reallocation of additional space in existing campus buildings. The new construction includes the three proposed buildings now being designed or planned - the Student Services Center, the King Street Art Center, and the Cultural Arts Center. The Health Sciences Center is already included in the Campus current inventory.

**Germantown Campus:**

The Germantown Campus Facilities Master Plan is designed to support a 35% increase in enrollment through construction of approximately 156,000 nsf (284,000 gsf) of new space, and the renovation and reallocation of additional space in existing campus buildings.

**Rockville Campus:**

The Facilities Master Plan for the Rockville Campus is designed to support a 7% increase in enrollment through construction of approximately 315,000 nsf (573,000 gsf) of new space, and the renovation and reallocation of additional space in existing campus buildings. These totals exclude a proposed Child Care Center, whose size has not yet been determined.

**Workforce Development/Continuing Education:**

With five current locations, the Workforce Development/Continuing Education Facilities Master Plan is coordinated with campus developments for the planned expansion of the programs and services offered by the unit. The unmet space need of the unit is 32,000 nsf. In addition, the plan anticipates that Workforce Development/Continuing Education will continue to expand at its existing off-campus locations and/or develop new sites within new market locations, such as an east County location. The underlying assumption of this plan is that all of the existing space leases serving the unit are continued beyond the 10-year period. The new space need is therefore for additional space and represents nearly a doubling of the current inventory (34,182 nsf).

**Central Administration:**

With two primary locations, the Central Administration Facilities Master Plan indicates an unmet space need of 39,000 nsf. The plan assumes that the space lease occupied by the Office of Information Technology will be terminated within the 10-year period and therefore this space is also included in the overall need. While the underlying assumption of this plan is to consolidate the central units when their space needs are addressed, the long-term resolution of central administration space needs are anticipated to be addressed in the context of the lease decision for the Office of Information Technology within the next five years. The unmet space need is split approximately two-thirds to respond to the needs of the Office of Information Technology and one-third to cover the space needs of all other central units.

**IMPLEMENTATION**

The Facilities Master Plan contains a proposed project-phasing plan that identifies the desired project sequence in response to the College's needs. The Facilities Master Plan also includes budget estimates for this work.

**Master Plan Facility Projects (College-wide)**

<b>Project</b>	<b>Budget Estimate in Dollars (1/04)</b>
<b>Takoma Park Campus</b>	
Pedestrian Bridge	3,290,000
Student Services Center including Central Plant and demolition of Social Sciences Pavilion	29,806,000
Central Plant Utility Distribution	2,080,000
Commons Renovation	6,040,000
Information Systems and Student Services Pavilions Renovation	4,420,000
King Street Art Center Renovation including interior parking	28,500,000
Pavilion of Fine Arts Renovation	4,031,000
Cultural Arts Center	24,270,000
Parking Structure #2 (existing parking structure is Parking Structure #1)	6,300,000
Communication Arts Center Renovation	5,790,000
Science and Math Center in two phases including demolition of Science North and South	45,126,000
Resource Center in two phases including demolition of existing Resource Center, North Pavilion and Mathematics Pavilion.	31,332,000
Falcon Hall Addition and Renovation	5,762,000
<b>Takoma Park Campus Subtotal</b>	<b>196,747,000</b>
<b>Germantown Campus</b>	
Child Care Center	911,000
Bioscience Education Center - including extension of Observation Drive and parking	47,610,000
Science and Applied Studies Building Renovation - Phases I and II	8,670,000
Student Resource Center	36,365,000
Parking Garage - including loop road and access to Route 355	10,548,000
Physical Plant Addition	3,378,000
Humanities and Social Sciences Renovation - Phases I and II	7,360,000
High Technology Renovation	5,341,000
Physical Education Center Renovation and Associated Athletic Field Development	8,174,000
<b>Germantown Campus Subtotal</b>	<b>128,357,000</b>

<b>Project</b>	<b>Budget Estimate in Dollars (1/04)</b>
<b>Rockville Campus</b>	
Interim Surface Parking Lot	500,000
Parking Structure #1	23,200,000
Science Center	43,930,000
Physical Plant	9,111,000
Science East and Science West Renovation - in two phases	25,708,000
Parking Structure #2	13,700,000
Student Services Center with Central Plant and Associated Road Extension, Site Improvements and Student Services Building Demolition	31,705,000
Library Resource Center and Associated Site Improvements and Underground Utility Distribution	42,520,000
Macklin Tower Renovation and Computer Sciences Demolition	9,124,000
Humanities Building Addition and Renovation	31,759,000
Technical Center Alterations	8,944,000
Parilla Performing Arts Center Renovation and Addition	13,706,000
Art Building Addition and Associated Counseling and Advising Building Demolition	23,367,000
Physical Education Center Renovation and Addition and Associated Outdoor Athletic Facilities	16,527,000
Campus Center Renovation	5,527,000
Parking Structure #3	7,700,000
Child Care Center (3 Units)	3,600,000
<b>Rockville Campus Subtotal</b>	<b>310,628,000</b>
<b>Workforce Development/Continuing Education</b>	
Inclusion of Biotechnology Work Force Development/Continuing Education in Bioscience Center (Germantown Campus)	Refer to Germantown Campus Implementation Plan
Consolidation of Campus-Based Work Force Development Staff in Science and Applied Studies Renovation (Germantown Campus)	Refer to Germantown Campus Implementation Plan
Alteration of Gudelsky Institute for Technical Education and Replacement of the Interim Technical Training Center (Rockville Campus)	11,590,000

Reallocation of South Campus Instruction Building for Work Force Development (Rockville Campus)	2,656,000
<b>Subtotal</b>	<b>14,246,000</b>
<b>Central Administration</b>	
Lease, Construction or Acquisition of Office of Information Technology (OIT) Building	18,015,000
Central Administration Building	14,125,000
Mannakee Building Alterations	Included in Central Administration Building
Roof Replacements	2,361,000
<b>Subtotal</b>	<b>34,501,000</b>

## **1.0 MONTGOMERY COLLEGE**

### **1.1 FACILITIES MASTER PLAN SUMMARY**

The development of the 2002-2012 Facilities Master Plan for Montgomery College was initiated in 2001 and completed in January 2004. The Master Plan analyzes both a ten-year facilities master planning period and a twenty-year planning period for the Land Use Plan. The goal of this plan is to establish a framework for the development of capital projects to support the role, mission, and academic vision of Montgomery College. This Facilities Master Plan addresses the key issues of adequacy of space, density, adjacency, circulation, and open space and infrastructure. It also addresses the relationship between the College and adjoining business and residential communities.

Several new buildings from the 1991 Facilities Master Plan for Montgomery College have been realized. The High Technology and Science Center was constructed at the Germantown Campus and the Health Sciences Center was constructed at the Takoma Park Campus, with one additional building for Takoma Park (Student Services Center) ready to be bid for construction in spring 2004. While these new facilities address some of the space deficiencies identified in the 1991 Facilities Master Plan, they do not fulfill all of the current needs for academic space. Also of concern is the erosion of “quality of life” spaces. Indoor “quality of life” spaces tend to be meeting or breakout areas and lounges and are often the first to be converted to classroom or office use as space deficiencies grow. Outdoor “quality of life” spaces are not just important for social gathering, but they also serve as places where lifelong learning occurs. There is also the need to seek ways to improve pedestrian circulation and college entryways, or gateways. Gateways strengthen the individual identity of each campus and that of the institution as a whole. Other issues identified in the previous Plan were a need to increase building density and to consolidate student service functions.

Space deficiencies, identity, and community relations are issues that all institutions of higher education face. Montgomery College has been very proactive in its goal of academic excellence, and the 2002-2012 Facilities Master Plan continues to build upon this momentum.

The goals established for the Facilities Master Planning process were to:

1. Guide planning that articulates and supports the College’s institutional vision
2. Provide a framework for future buildings and development
3. Continue responsible stewardship of natural and built resources
4. Build consensus within the campus community, and with its neighbors

Key objectives of the resulting Facilities Master Plan were to:

1. Identify appropriate sites and provide phasing for potential new buildings, campus projects, and infrastructure improvements
2. Improve pedestrian circulation routes, parking, and vehicular roadway systems

3. Provide signage and beautification of campus gateways to enhance the identity of Montgomery College and of individual campuses

## 1.2 MISSION STATEMENT

Montgomery College states its mission as follows:

### Our Mission

#### Changing Lives

We are in the business of changing lives.  
 Students are the center of our universe.  
 We encourage continuous learning  
 for our students, our faculty, our staff, and our community.

#### Enriching our Community

We are the community's college.  
 We are the place for intellectual, cultural, social and political dialogue.  
 We serve a global community.

#### Holding Ourselves Accountable

We are accountable for key results centered around learning.  
 We will be known for academic excellence by every high school student  
 and community member.  
 We inspire intellectual development through a commitment to  
 the arts and sciences.  
 We lead in meeting economic and workforce development needs.

#### We Will Tend to our Internal Spirit

### Our Internal Spirit

We are committed to high academic and performance standards and take pride in our collective achievements.  
 We are welcoming, compassionate,  
 and service-oriented to our diverse communities.  
 We operate in a creative, innovative, flexible,  
 and responsive manner.  
 We practice collaboration, openness, honesty,  
 and widely shared communications.  
 Integrity, trust, and respect guide our actions.  
 We value and respect academic vitality and excellence.  
 Our spirit is renewed through enthusiasm, celebration,  
 a sense of humor, and fun.

### **1.3 COLLEGE WIDE GOALS AND OBJECTIVES**

Montgomery College is committed to “changing lives, enriching our community and holding ourselves accountable,” as the Mission Statement declares. Based on these principles, the College commits itself to meet the educational needs of its diverse community. The College will seek to provide academic programs of the highest quality so that its diverse student body can achieve its educational goals. As one College providing multiple programs and services to students at various stages of their academic careers, the College dedicates itself to the following eight goals to serve students and the community.

#### **GOAL 1**

The first goal of the College is to ensure student satisfaction and student success through programs and support services. The College will continue to foster student achievement through excellence in curriculum, teaching, learning and services that meet multiple needs. Student-centered programs and support services will identify student goals and individual needs, and will facilitate student retention, completion, and goal achievement.

Objective 1: To use the College’s curriculum and program review processes and the input of advisory committees and community assessment initiatives to revise and develop curricula that are characterized by currency, comprehensiveness, relevance, transferability, and the appropriate use of technology.

Objective 2: To continue to promote effective instruction and instructional support and to develop fresh approaches to instruction and instructional support that foster learning through the Center for Teaching and Learning and other internal and external opportunities.

Objective 3: To develop and implement effective processes and procedures to identify and support students’ educational and career goals, including degree completion, transfer, skill development, credentialing and intellectual exploration, through enhanced support for advising and career and transfer planning.

Objective 4: To develop mandatory orientation processes to meet the transition needs of its diverse student populations.

Objective 5: To develop additional distinct and focused services and programs for the College’s diverse student population, including first-generation college attendees, students with disabilities, students with English as a second language and international students, so that all students’ educational and employment potential is strengthened.

Outcome: Student success will increase as will student satisfaction with services. Student goal achievement, retention, completion, employment and transfer rates will increase. Curricula will be considered current and appropriate by students, employers and transfer institutions.

#### **GOAL 2**

The second goal of the College is to ensure broad-based education. The College is committed to developing life-long learners who are competent problem-solvers, critical

thinkers, effective communicators, ethical citizens and technologically literate contributors to the global community. Students will achieve a broad-based perspective through liberal learning.

Objective 1: To continue to support and promote strong collegiate-level liberal arts and transfer programs.

Objective 2: To further incorporate in curriculum and instruction a commitment to interdisciplinary studies, respect for diversity, critical and information literacy, and appropriate use of technology concepts in the arts, humanities, social sciences, sciences, mathematics, business, economics, technologies, and career programs.

Objective 3: To enrich the College's global learning environment by identifying and mobilizing the cross-cultural experience of its community, faculty, staff and students.

Objective 4: To expand cultural and intellectual activities that highlight and explore social issues for both internal and external audiences.

Outcome: Students will develop critical and information literacy and communication skills, an ability to apply knowledge effectively, a respect for diversity and an appreciation of the value of lifelong learning. The community will recognize and value the College as an intellectual resource and venue for cultural, cross-cultural, and social issue discussions.

### **GOAL 3**

The third goal of the College is to meet the demands of a growing high school population. The College will increase its ability and strengthen partnerships to serve more high school students and graduates.

Objective 1: To expand partnership initiatives with the local public and private high schools to increase college readiness and facilitate the transition or access to college programs.

Objective 2: To increase concurrent enrollment of qualified high school students taking appropriate college coursework.

Outcome: The numbers of Montgomery County Public Schools (MCPS) graduates enrolling at Montgomery College will increase, greater numbers of MCPS graduates will enter Montgomery College prepared to do college level work and more high school students will earn college credits through attendance at Montgomery College. As a result, the reputation of the College as an institution of excellence will be enhanced.

### **GOAL 4**

The fourth goal of the College is to develop a regional workforce for the Washington Metropolitan area. The College will make workforce and business development and preparedness a primary part of its activities.

Objective 1: To assess the community's needs regularly to ensure that its curricula, policies, schedules and partnerships reflect changing workforce needs and practices. Particular attention will be paid to meeting the community's growing needs for certified teachers.

Objective 2: To ensure that courses and programming are responsive to employers' priorities, needs and quality standards.

Objective 3: To ensure that the organizational structure provides a readily identifiable single point of contact within the College to respond to inquiries relating to workforce development, education, and training.

Objective 4: To implement a marketing strategic plan to increase internal and external awareness of the College's workforce development partnerships and initiatives.

Objective 5: To enhance the role of the industry advisory committees in guiding the development of the College's career programs.

Outcome: Montgomery County employers will turn to Montgomery College as their first choice for employee training and development. Employers will express increased satisfaction with employees hired from its career programs. Montgomery College will rank among the top four continuing education providers in the state for workforce development and training.

## **GOAL 5**

The fifth goal is to expand the College's commitment to professional development. The College will create an intellectually stimulating, innovative, and exciting environment that encourages all of its employees to grow professionally and personally, to seek out and implement best practices and to contribute to the College's nurturing and student-centered environment.

Objective 1: To make professional development one of the College's highest institutional priorities and commit sufficient funds to support this priority.

Objective 2: To establish a single entity that coordinates and emphasizes professional development as an expectation of all employees.

Objective 3: To create professional development plans that meet the needs of the individual employee and the institution. These plans will be developed collaboratively by the employee and the supervisor and will become an important component of the performance review process.

Objective 4: To enhance the interchange between full-time and adjunct faculty to take advantage of their respective contributions and meet their differing needs; and to create and support mentoring programs, especially for employees new to their positions.

Outcome: All employees will participate in an expanded professional development program focused on better meeting the needs of students and employees, and the percentage of College resources devoted to professional development will increase.

### **GOAL 6**

The sixth goal of the College is to strengthen pedagogy. The College will incorporate innovation and quality in pedagogy that is responsive to the learning needs of its students.

Objective 1: To ensure that all faculty and instructional support staff continually research and develop classroom and instructional strategies that focus on understanding, enhancing, and facilitating the learning process.

Objective 2: To continue to develop instructional alternative delivery methods for quality programs and access to the College at convenient places and times.

Objective 3: To review, identify and incorporate, as appropriate, in College courses the most effective strategies for ensuring that students acquire communication, computational, and critical and information literacy skills required by employers and transfer institutions.

Outcome: Student outcomes will be improved through incorporation of improvements in teaching and learning by faculty.

### **GOAL 7**

The seventh College-wide goal is to maximize resource distribution. The College will enhance its ability to change lives by focusing resources more efficiently and effectively, implementing a more data-driven planning and budgeting process that supports a student-centered focus, investing in a strong collegiate-level program and incorporating increased accountability into evaluation processes.

Objective 1: To include regular review of academic programs and support services in the College's strategic planning process.

Objective 2: To define a process to determine the College's core programs and disciplines in order to guide growth opportunities, funding priorities, student services, and long-term planning.

Objective 3: To develop and regularly update an integrated academic and facilities master plan as an outgrowth of the strategic plan. This academic and facilities plan will identify programmatic, staffing, and facility needs to enable the College to address changing and diverse student populations.

Objective 4: To provide sufficient student-life facilities and improve the quality of student-life support on each campus by integrating these needs in the budget and planning process of each campus and the College.

Objective 5: To continue to provide state-of-the-market information technology for academic and administrative purposes, consistent with the availability of resources.

Objective 6: To ensure that employee reward systems appropriately recognize participation in a combination of professional development, high job performance and community service.

Outcome: Budget and planning decisions and evaluation processes will reflect the College mission. College facilities, services and staffing will be modified to meet student needs more appropriately.

### **GOAL 8**

The final College-wide goal is to model community leadership. The College will build stronger community ties and model community leadership by serving as a catalyst, resource, and convener for enlightened discourse on vital community issues regarding social justice, economic concerns, environmental stewardship, non-partisan politics, public policy, and culture.

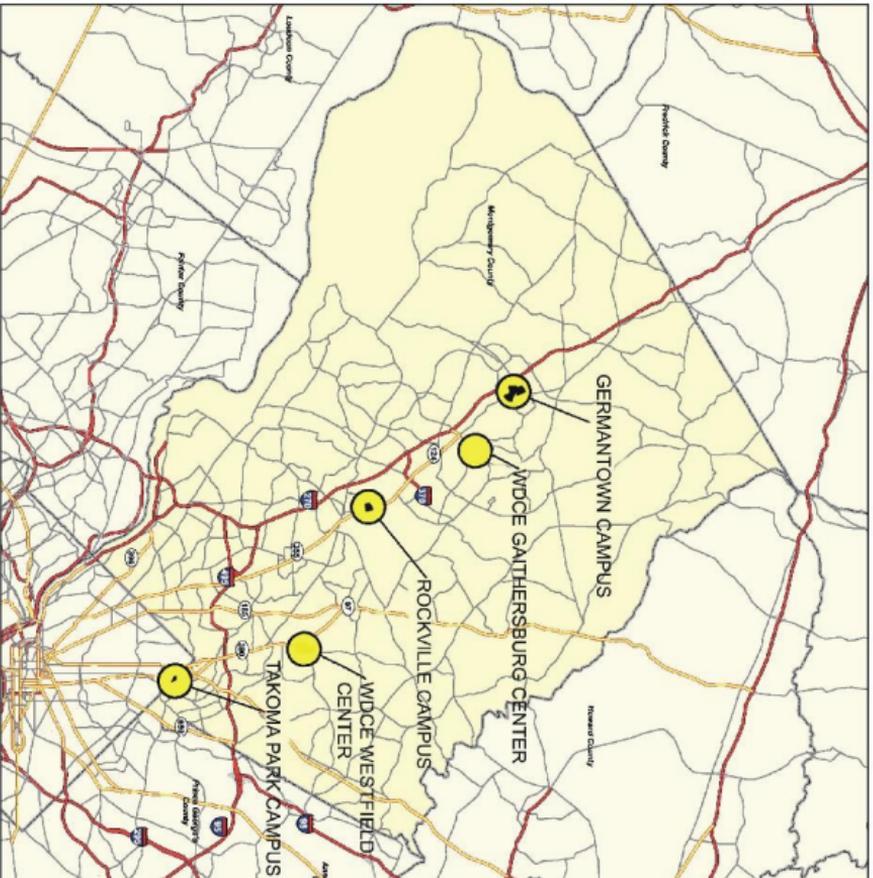
Objective 1: To name a Community Advisory Board to advise the College on issues of community importance and on planning and implementing discussions, including town meetings, instructional television programs, Internet discussions and teleconferencing.

Objective 2: To initiate a community research service through a partnership with Workforce Development and Continuing Education, the Office of Institutional Research and Analysis, deans, faculty, staff, and appropriate community groups.

Objective 3: To take a leadership role in working with the community to narrow the digital divide by improving equal access to technology.

Outcome: Public discourse events involving people of diverse cultures in the community regularly will improve understanding and enhance its commitment to improving life in Montgomery County. The community will value Montgomery College for its role in initiating inclusive discussions and supporting research of the issues that affect the community. The College will be recognized for its efforts in helping to increase community access to technology for education.

# Montgomery College Location Plan



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MONTGOMERY COLLEGE  
FACILITIES MASTER PLAN 2003-2012

JANUARY 2004  
MC-F1 FIGURE 1



## **2.0 TAKOMA PARK CAMPUS**

### **2.1 BACKGROUND INFORMATION**

#### **2.1.1 Facilities Master Plan**

Montgomery College began this Collegewide Facilities Master Plan effort in 2001. The major components of the Master Plan are the Rockville, Germantown and Takoma Park Campuses, Workforce Development/Continuing Education, and Central Administration. The time frame for the Facilities Master Plan is ten years, 2002 to 2012, and the time frame for twenty-year Land Use Plan extends out to 2022. The overarching goal of the Facilities Master Plan is to establish a framework for the development of capital projects to support the role, mission, and academic vision of Montgomery College.

The Takoma Park Campus of Montgomery College was founded in 1950 and was the College's first campus. The main campus is situated on approximately 15 acres with 15 academic and administrative buildings, including the new Health Sciences Center that opened in January 2004. The majority of campus buildings lie within the City of Takoma Park; however, the Health Sciences Center and three future building sites are located in Silver Spring.

The 1998 Master Plan for Takoma Park outlined a strategy for the campus that directed growth toward existing commercial development in Silver Spring and away from residential neighborhoods, some of which are located within the Takoma Park Historic District. The intent of this strategy was to allow the College to begin to address its academic space deficiencies while retaining a positive presence within the City of Takoma Park's diverse economic and residential communities.

One of the major challenges for the College in the next ten-year planning period will be to develop a cohesive campus identity. A major railway corridor bisects the Takoma Park Campus, with one portion of the campus in a primarily residential area, and the other portion within a major commercial area. A pedestrian bridge to connect the campus over the railway is currently under construction, and is anticipated to open for use by June 2004.

Another challenge is the condition of the existing campus buildings. The majority of the campus was constructed during the late 1970's and these facilities are aging and in need of renovation. Typically the floor configurations and irregular shapes of the academic buildings are not ideal spaces for learning and instruction. Academic space should be flexible and responsive in order to adapt to rapidly changing technological and pedagogical shifts in education.

To address these and other issues, and to establish a coherent, logical framework for development of capital projects, the Facilities Master Plan has established goals and priorities. This Facilities Master Plan for Takoma Park focuses on:

- supporting the College’s goal of establishing and nurturing unique roles and partnerships for the Takoma Park Campus in meeting the multi-leveled educational, economic, and work force development needs of Montgomery County as they relate to the health sciences and in the arts;
- providing sufficient and adequate space—classrooms, labs, offices, study, meeting rooms, and support facilities—based on existing and projected needs, so that each and every area can contribute creatively and productively every day to helping students change their lives;
- co-locating departments and functions rationally so that students, visitors, and the College community itself benefit from the ease, energy, and excitement generated by the synergy of proximity;
- presenting students the needed range of opportunities to study and learn collaboratively in supportive environments with the special assistance of faculty, librarians, counselors, and staff;
- affording students opportunities to meet and develop socially through formal programs of leadership, recreation, and athletics, and informally in inviting indoor and outdoor spaces;
- maximizing the land resources available on the campus while retaining its unique character, quality, and setting, and yet meeting the needs of the students, faculty, staff, community members, and visitors who come to the campus every day;
- inviting students, faculty, staff, community members, and visitors to participate in the varied campus and College activities by organizing the campus—including buildings, parking, outdoor athletic facilities, and circulation for pedestrians, the disabled and elderly, cars, and trucks—to make their experience pleasant and successful; and
- anticipating the campus’ future development beyond the ten-year planning horizon.

### **2.1.2 Institutional Characteristics**

The Takoma Park Campus lies at the edge of Washington, D.C., in the midst of tree-lined streets and Victorian houses. Opening in 1950, it is the oldest of Montgomery College’s three campuses. The relatively small size and compactness of the campus enhances the quality of academic life on the campus, promoting a cohesiveness and sense of identity difficult to match on most college campuses. The educational offerings of the Takoma Park campus are organized into three instructional divisions of:

- Humanities and Social Sciences (“HSS”), comprised of the departments of English, Reading, Foreign Languages, Philosophy, and the American English Language Program (“AELP”); Social Sciences; and Visual, Performing, and Communication Arts
- Health Sciences (“HS”), comprised of the Biology and Nursing Departments and programs related to allied health and physical education
- Natural and Applied Sciences, Business, Management, and Information Science (“NASBMIS”), comprised of the departments of Physical Sciences, Mathematics, and Business, Management, and Information Sciences

These divisions are extended and supported by the Student Development Division with the Office of the Vice President and Provost providing campus leadership and management. The campus’ intercollegiate athletic program sponsors teams in men’s and women’s

basketball and coed tennis. Campus-based central administration services include the library, information technology support, admissions and registration, financial aid, cashier's office, physical plant, and auxiliary services including child care, bookstore, and food services.

The Takoma Park campus, apart from its unique physical setting, distinguishes itself as being the College's focus for programs related to the health sciences. The new Health Sciences Center, opened in January 2004, supports the Health Sciences Division (except for the Biology Department and the physical education program), the Health Sciences Institute in Workforce Development and Continuing Education, and the College's partnership with Holy Cross Hospital. The building includes a functioning health clinic, allowing students to work in the clinic as part of their rotations, thereby gaining much needed practical experience. Holy Cross Hospital personnel will serve as clinical adjunct faculty, working with campus faculty in supervising and evaluating students. Concomitantly, campus faculty will, as part of their assignments, spend time in the clinic, thus maintaining currency in their respective disciplines and staying abreast of current clinical practices.

The campus is also expanding its program offerings in the Visual, Performing, and Communication Arts, with campus expansions associated with the planned new Cultural Arts Center and the planned renovated King Street Art Center. The later facility will support the forthcoming merger of Montgomery College with the Maryland College of Art and Design ("MCAD").

This campus also is home to the College's only planetarium, offering astronomical and planetarium shows to College and community constituencies. The 42-seat planetarium shows 1,834 naked-eye stars, the Milky Way, and 5 naked-eye planets—Mercury, Venus, Mars, Jupiter, and Saturn—under a 24-foot dome.

### **2.1.3 Academic Programs**

Montgomery College is authorized by the Maryland Higher Education Commission to offer four degrees: the Associate of Arts (A.A.), the Associate of Science (A.S.), and the Associate of Arts in Teaching (A.A.T.) for students wanting to transfer to baccalaureate programs, and the Associate of Applied Science (A.A.S.) for those seeking immediate employment. The College also awards certificates ("Cert") that focus on the development of technical skills, as well as letters of recognition ("L of R") for non-degree seeking students who satisfactorily complete certain courses.

In addition to General Education, Student Development, Honors, Cooperative Education, and Women's Studies courses, the Takoma Park campus offers 28 different degree programs, 11 certificate programs, and 5 letter of recognition programs. Academic programs uniquely offered at the Takoma Park are related to the health sciences and include the A.A.S. degree and two certificates in Health Information Technology, the A.A.S. degree in Mental Health, the A.A.S. degree and certificate in Diagnostic Medical Sonography, and the A.S. degree in Nursing, the A.A.S. degree in Physical Therapy Assistant, the A.A.S. degree in Radiologic Technology, and the A.A.S. degree in Surgical

Technologist. In addition, the A.A.S. degree and certificate programs in Diagnostic Medical Sonography are approved as statewide programs. These State-wide programs are available to students from other geographic areas where the local community college does not offer the same program. The College’s Cooperative Education Program also finds its home on the Takoma Park campus. Serving all Montgomery College students and the County and area’s business community, this program matches meaningful work and career experiences with student academic interests and goals. Not included here are the programs offered by Workforce Development and Continuing Education.

**Table 2.1.3-1  
2002 Academic Programs Offered at the Takoma Park Campus**

Program Area	AA	AS	AAT	AAS	Cert	L of R
Art	1 GT; 3 R				2 GRT	
Business Administration	2 GRT					
Biological/Life Sciences		1 GRT				
Computer Application				1 GRT	3 GRT; 1 R	1 R; 1 GRT
Chemistry/Life Sciences		inc				
Computer Science/Technologies	1 R; 1 GRT				1 GRT	1 GRT
Education			1 GRT	1 R	1 R	
Electrical Engineering				1 GRT		
Engineering Science				9 GRT		
Health Information Technology				1 T	2 T	
Paralegal Studies				1 GT	1 GT	1 GT
Mathematics		1 GRT				
Management				1 GRT; 2 R;1 GR	1 GRT; 2 GR; 1R	2 GRT
Mental Health				1 T		
Diagnostic Medical Sonography				1 T	1 T	
Nursing		1 T				
Physics		1 GRT				
Physical Therapist Assistant				1 T		
Radiologic Technology				1 T		
Surgical Technologist				1 T		
American Sign Language				1 GRT	1 GRT	
General Studies	1 GRT					
Liberal Arts	3 GRT					
Pre-Professional	5 GRT					

GRT: Germantown, Rockville, Takoma Park  
 G: Germantown only  
 R: Rockville only  
 T: Takoma Park only  
 Inc: included

Delivery of all these programs is expected to change substantially over the coming decade. The College has made significant and substantial investments in its classroom environments to incorporate smart instructional technology and to provide and support technology-based learning centers that help students learn effectively and efficiently. Distance learning alternatives will become more available as options, including both entire and partial course and service delivery. Apart from technology, the College must also prepare to address other changes in pedagogy, including increased and earlier instructional use of specialized learning environments and a continued emphasis on collaborative learning.

These instructional delivery changes, together with the increases projected for enrollment, can be expected to have impact on Takoma Park’s contact hour productions. The ratio of contact hours (WSCH) to credit hours (SCH), which shows the extent to which time scheduled in class is greater than the credit hours earned, is expected to increase at Takoma Park from 1.24 to 1.36 in 2012, primarily because of increased availability of labs and lab courses, especially in the health sciences. The majority, 69%, of Takoma Park’s contact hours are expected to be generated during the day (from 8:00 a.m. to 5:00 p.m., Monday through Friday), slightly lower than in 2002 (70%). Finally, the relative percentage of contact hours in lab environments is projected to increase from 26% in 2002 to 34% in 2012, reflecting increased availability of lab environments and changes in pedagogy in disciplines such as Mathematics.

**Table 2.1.3-2  
2002 and 2012 Credit and Contact Hours at the Takoma Park Campus**

Contact Hour (WSCH) to Credit Hour (SCH) Ratio

	2002 WSCH	2002 SCH	2002 WSCH/ SCH	2012 WSCH	10 yr % Chg	2012 SCH	10 yr % Chg	2012 WSCH/ SCH	10 yr % Chg
Takoma Park	43,960	35,367	1.24	73,969	68%	54,527	54%	1.36	10%
College	222,719	189,471	1.18	280,110	26%	228,662	21%	1.23	7%

Day and Evening Contact Hour

	2002 Day WSCH	2002 Evening WSCH	2002 Total WSCH	2002 % Day WSCH	2012 Day WSCH	10 yr % Chg	2012 Evening WSCH	10 yr % Chg	2012 Total WSCH	10 yr % Chg	2012 % Day WSCH
Takoma Park	30,935	13,025	43,960	70%	51,121	65%	22,848	75%	73,969	68%	69%
College	161,681	61,038	222,719	73%	198,428	23%	81,682	34%	280,110	26%	71%

Day Lecture and Lab Contact Hour

	2002 Day Lecture WSCH	2002 Day Lab WSCH	2002 Day Total WSCH	2002 Day % Lab WSCH	2012 Day Lecture WSCH	10 yr % Chg	2012 Day Lab WSCH	10 yr % Chg	2012 Day Total WSCH	10 yr % Chg	2012 Day % Lab WSCH
Takoma Park	22,775	8,160	30,935	26%	33,744	48%	17,377	113%	51,121	65%	34%
College	118,046	43,635	161,681	27%	123,128	4%	75,300	73%	198,428	23%	38%

To support academic programs and the merger being planned with the Maryland College of Art and Design, changes in the Takoma Park library collection are also planned. Overall, in terms of Physically Bound Volume Equivalents (“PBVE”), the library’s collection is expected to grow by 15%. This rate is below that usually expected for higher education institutions, where rates of increase for collections are typically planned at 2% to 3% per year. The College will also acquire the collection of the Maryland College of Art and Design. Although this collection has not been completely evaluated, planning by the College has assumed that the majority of the collections overlap and that additional space will not be needed beyond that being currently planned for the King Street Art Center facility.

**Table 2.1.3-4  
2002 and 2012 Takoma Park Library Collection and PBVE\***

Category	Collection		PBVE	
	2002	2012	2002	2012
Books	57,618	66,261	57,618	66,261
Folios	2,687	3,090	5,374	6,180
Bound Periodicals	156	179	188	216
Documents/Pamphlets	0	0	0	0
Microfilm reels	6,035	6,940	2,012	2,313
Records	0	0	0	0
Maps	86	99	11	12
Maps in Cases	0	0	0	0
Microform (non-reel)	330	380	4	5
Newspapers Unbound	16	16	286	286
Newspapers Bound	0	0	0	0
Reference Books	6,523	7,501	19,185	22,063
Slides	0	0	0	0
Periodicals Unbound	441	441	1,764	1,764
Video Disks	0	0	0	0
Audio Tapes	162	186	41	47
Computer Diskettes	127	146	25	29
Compact Disks	347	399	69	80
Videotapes	2,079	2,391	1,733	1,992
Films (Reel-to-Reel)	0	0	0	0
Total PBVE			88,309	101,248
% change				15%

\* Physically Bound Volume Equivalent

**Table 2.1.3-5**  
**2002 and 2012 Maryland College of Art and Design Library Collection and PBVE\***

Category	Collection		PBVE	
	2002	2012	2002	2012
Books	500	575	500	575
Folios	11,000	12,650	22,000	25,300
Bound Periodicals	0	0	0	0
Documents/Pamphlets	0	0	0	0
Microfilm reels	0	0	0	0
Records	0	0	0	0
Maps	0	0	0	0
Maps in Cases	0	0	0	0
Microform (non-reel)	0	0	0	0
Newspapers Unbound	0	0	0	0
Newspapers Bound	0	0	0	0
Reference Books	0	0	0	0
Slides	75,000	86,250	3,750	4,313
Periodicals Unbound	40	40	160	160
Video Disks	0	0	0	0
Audio Tapes	0	0	0	0
Computer Diskettes	0	0	0	0
Compact Disks	0	0	0	0
Videotapes	60	69	50	58
Films (Reel-to-Reel)	0	0	0	0
	Total PBVE		26,460	30,405
	% change			15%

\* Physically Bound Volume Equivalent

**2.1.4 Enrollment**

Over the past three-year period, headcount enrollment has increased 15%, from 4,207 students in 1999 to 4,821 in 2002. Over this same period, however, the average student credit hour load has decreased slightly from 8.4 credits to 7.3 credits, with the result that FTE student enrollments have remained essentially the same. The College 2002 average credit hour load is 8.7 credits, and the expectation is that the average credit hour load at Takoma Park will increase by 2012 to 7.5 credits, still below the projected College average credit load of 9.0 credits, but above the 2002 level for Takoma Park. As a result, the projected 7,224 headcount students are expected to equate to 3,635 FTE students, an increase of 54% over 2002 FTE enrollments.

**Table 2.1.4-1  
Fall Term Takoma Park Campus Enrollment Statistics**

	1999	2000	2001	2002	3 yr % Chg	2012	10 yr % Chg
Headcount	4,207	4,246	4,575	4,821	15%	7,224	50%
Credit Load	8.4	8.2	7.8	7.3	-13%	7.5	3%
FTE Students	2,355	2,320	2,367	2,358	0%	3,635	54%

While credit hours in Student Development, Honors, Cooperative Education, and Women’s Studies will increase at high rates of growth (101% and 50%, respectively), these areas are not where the majority of credit hours (SCH) will be generated. The Health Sciences Division is expected to have the largest increase in credit hours, from 6,351 SCH in 2002 to 10,886 SCH by 2012, an increase of 71%. This projected growth recognizes the impact of shortages in the health professions, coupled with the excellent programs, effective partnerships, and new facilities soon to open at Takoma Park. Credit hours in the HSS Division are anticipated to grow by 53% to 26,502 SCH, while those in the NASBMIS Division are expected to increase by 43% to 16,122 SCH.

**Table 2.1.4-2  
Fall Term Credit Hours by Division at the Takoma Park Campus**

	1999	2000	2001	2002	3 yr Chg	2012	10 yr Chg
Student Dev	276	258	265	347	26%	698	101%
Honors/Other	--	--	--	174	n/a	319	50%
HSS	17,756	17,633	17,838	17,276	-3%	26,502	53%
Health Sciences	5,557	5,137	5,466	6,351	14%	10,886	71%
NASMBIS	11,730	11,766	11,942	11,219	-4%	16,122	43%
Takoma Park (Totals)	35,319	34,794	35,511	35,367	0%	54,527	54%

**2.1.5 Faculty and Staff**

The College projects that its overall number of FTE faculty will increase at a rate comparable to its overall increase in enrollment, from 672.50 to 807.75, an increase of 135.25 FTE faculty, or 20%. Faculty supporting the Takoma Park Campus will increase more, by 42%, from 142.25 FTE faculty to 201.75 FTE faculty. The number of full-time faculty will increase by 49 positions, from 97 to 146, or 51%, while the number of part-time faculty will increase by 42 positions from 181 to 223, or 23%. Campus and division projections of faculty seek to reduce and/or equalize the credit hours loads of faculty and therefore do not necessarily parallel enrollment growth rates. Thus, the growth rate for faculty at Takoma Park is lower than the 54% growth rate in FTE students.

**Table 2.1.5-1  
2002 and 2012 Takoma Park Faculty Positions by Division**

	2002 FT	2002 PT	2002 FTE	2012 FT	10 yr # (%) Chg	2012 PT	10 yr # (%) Chg	2012 FTE	10 yr # (%) Chg
Student Dev	0	12	3.00	0	0 (0%)	16	4 (33%)	4.00	1.00 (33%)
HSS	41	78	60.50	63	22 (54%)	104	26 (33%)	89.00	28.50 (47%)
Health Sciences	29	33	37.25	45	16 (55%)	40	7 (21%)	55.00	17.75 (48%)
NASMBIS	27	58	41.50	38	11 (41%)	63	5 (9%)	53.75	12.25 (30%)
Takoma Park (Totals)	97	181	142.25	146	49 (51%)	223	42 (23%)	201.75	59.50 (42%)

While the College expects its overall numbers of full-time, part-time, and FTE staff to increase 21% from fall 2002 to fall 2012, consistent with its overall projected increase in fall term FTE enrollment, the Takoma Park Campus is anticipating a 32% increase in staff, reflecting the projected enrollment growth and expanded outreach, particularly in the health sciences. Overall, the number of Takoma Park staff is expected to increase by 48.50 FTE positions, with 48 additional full-time staff and 2 additional part-time staff.

The largest growth in positions, not unexpectedly, is planned for the instructional and student development divisions, with increases ranging from 61% to 100%. The increase in staff within the Office of the Vice President and Provost aligns office staffing with staffing on the other campuses. Finally, growth in campus-based Central Administration is based on College-wide ratios of students to staff and faculty to staff to ensure reasonable comparability across campuses, as well as the overall goal of the College to build on economies of scale in projecting the needs for such functional support.

**Table 2.1.5-2  
2002 and 2012 Takoma Park Staff Positions by Division**

	2002 FT	2002 PT	2002 FTE	2012 FT	10 yr # (%) Chg	2012 PT	10 yr # (%) Chg	2012 FTE	10 yr # (%) Chg
VP/Provost	4	1	4.25	6	2 (50%)	1	0 (0%)	6.25	2.00 (47%)
Student Dev	21	4	22.00	40	19 (90%)	5	1 (25%)	41.25	19.25 (88%)
HSS	14	3	14.75	23	94 (64%)	3	0 (0%)	23.75	9.00 (61%)
Health Sciences	5	1	5.25	10	5 (100%)	2	1 (100%)	10.50	5.25 (100%)
NASBMIS	12	3	12.75	23	11 (92%)	3	0 (0%)	23.75	11.00 (86%)
Central Adm	94	2	94.50	96	2 (2%)	2	0 (0%)	96.50	2.00 (2%)
Takoma Park (Totals)	150	14	153.50	198	48 (32%)	16	2 (14%)	202.00	48.50 (32%)

## **2.2 EXISTING CONDITIONS**

### **2.2.1 Location**

The Takoma Park Campus of Montgomery College is located in the southeastern corner of Montgomery County just north of the District of Columbia. The campus is part of the older, inner suburbs of the Washington, D.C. metropolitan area.

### **2.2.2 Campus Character and Image**

Among the Montgomery College campuses, the Takoma Park Campus is the most urban in character. A major railway corridor bisects the campus and divides the campus into eastern and western areas of development. The eastern portion is the most developed portion, and is situated between the railroad corridor to the west and residential properties to the north, east and south. The western portion of the campus is bounded by the heavily trafficked Georgia Avenue commercial corridor to the west, Burlington Avenue to the north, the railway corridor to the east, and the historic Jesup Blair Park to the south.

The eastern part of the Takoma Park Campus can be characterized as a campus in a wooded setting with a strong pedestrian orientation. Mature oaks and other species of shade trees surround many buildings on the east side of New York Avenue and reinforce the wooded and natural image of the campus. The existing buildings are of a similar style and age. The core of the eastern portion of the campus is compact, and was developed to emulate adjacent residential patterns. The complex of buildings creates a series of small interior courtyards, the largest of which is occupied by a pair of tennis courts. This configuration provides only small amounts of open outdoor gathering space for students, faculty and staff on the core campus. The Miller Memorial Garden, located in the northernmost small courtyard, features several paths to adjacent buildings, but is not significant enough in size to accommodate large gatherings of students.

The core campus between Fenton Street and New York Avenue contains a significant topographic change from street level to the lower level interior courtyard. These grade changes are accomplished through a combination of walls, steps and ramps. Campus buildings typically use internal vertical circulation to mitigate level changes that occur from street level entrances to courtyard areas at the interior of the campus.

The western portion of the campus consists of two buildings that border Jesup Blair Park. The scale of these two buildings is larger in height and/or footprint size than the scale of the buildings on the eastern side of the campus. Buildings or hardscape occupy the majority of the western portion of the campus, with the exception of the landscaped area behind the Health Sciences Center and the underdeveloped, grass-covered lot to the north.

There is a slight topographical change spanning the western portion of the campus that becomes steeper towards the railway overpass at the northeast edge of the site and in the loading area of the King Street Art Center.

### **2.2.3 Adjacent Land Use**

Directly to the south of the western portion of the campus lies Jesup Blair Park. The park includes the historic Jesup Blair House, many mature trees, tennis courts, basketball courts, a non-regulation soccer field, and picnic and play areas.

Directly adjacent to the railroad tracks on the western portion of the campus is the former Giant Bakery building and site. The complex is now owned by the College and is currently named the King Street Art Center. Adjacent to, and west of the King Street Art Center is the new Health Sciences Center. Because the campus is split by the railway corridor, a new pedestrian bridge is currently under construction to link the eastern and western portions of campus.

Along the west of Fenton Street uses are primarily commercial but also include a campus parking structure. The remaining surrounding adjacencies are residential.

### **2.2.4 Campus Entrance Experience**

Circulation to the Takoma Park Campus is via city streets with a variety of route choices. There is no obvious campus gateway, although the pedestrian bridge (opening June 2004) over the railroad tracks and Fenton Street, and the Student Services Center will create a new first impression to those approaching from the north, the primary access route to campus. The existing campus identification signs are low key. A sign near the Communications Arts Center identifies the College presence at the busy intersection of Chicago Ave and Philadelphia Ave. A small sign is also located on Takoma Ave near Falcon Hall. Signage on Fenton Street is limited to the parking garage and a location on the grassy area in front of Falcon Hall. More prominent identification signage will be incorporated into the design of the plaza which will be located at the intersection of Fenton Street and New York Avenue when the planned Student Services Center is constructed. A segment of the Metropolitan Branch Trail, a proposed bike trail that will run north from DC's Union Station to Silver Spring, runs in a northwest-southeast direction along Fenton Street.

The Health Sciences Center sits in a prominent location on Georgia Avenue and is currently the only identifiable College building along that thoroughfare. Its primary orientation faces Jesup Blair Park and is visible from the southern approach. The currently undeveloped site north of King Street is positioned to act as a gateway from the northern approach along Georgia Avenue.

### **2.2.5 Building Usage**

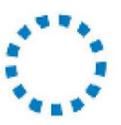
Buildings on this campus generally fall into five categories of use: Administrative, Academic, Operations, Recreational, and Service (student, faculty, and staff oriented). Although some facilities have a mixed-use function, categorizing them in this way assists with the recognition of zones of use that occur on the campus.

The majority of buildings on the Takoma Park Campus are academic in use. The major grouping of academic buildings, including the Resource Center which is classified as an

# Takoma Park Campus Site Character Analysis



## LEGEND

-  CAMPUS PERIMETER
  -  PLACE FOR CAMPUS IDENTIFY
  -  GATEWAY
  -  RESIDENTIAL
  -  COMMERCIAL
  -  PARKS
  -  BARRIER
- 
- CA - COMMUNICATIONS ARTS CENTER
  - CM - THE COMMONS
  - CU - (FUTURE) CULTURAL ARTS CENTER
  - DC - CHILD CARE CENTER
  - FH - FALCON HALL (PHYSICAL EDUCATION)
  - GR - PARKING GARAGE
  - HC - HEALTH SCIENCES CENTER
  - KS - KING STREET ART CENTER (UNOCCUPIED)
  - IS - INFORMATION SCIENCES PAVILION
  - MP - MATHEMATICS PAVILION
  - NP - NORTH PAVILION
  - PB - PEDESTRIAN BRIDGE
  - PF - PAVILION OF FINE ARTS
  - RC - RESOURCE CENTER
  - SC - (FUTURE) STUDENT SERVICES CENTER
  - SN - SCIENCE NORTH
  - SS - SCIENCE SOUTH
  - SP - SOCIAL SCIENCES PAVILION
  - ST - STUDENT SERVICES PAVILION

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EYP

MONTGOMERY COLLEGE  
MASTER PLAN 2002-2012  
TAKOMA PARK CAMPUS

FEBRUARY 2004  
TP-F1 FIGURE 1



# Takoma Park Campus Existing Site Plan



- Existing Campus Building
- Project under Construction

- CA - COMMUNICATIONS ARTS CENTER
- CM - THE COMMONS
- DC - CHILD CARE CENTER
- FH - FALCON HALL (PHYSICAL EDUCATION)
- GR - PARKING GARAGE
- HC - HEALTH SCIENCES CENTER
- KS - KING STREET ART CENTER (UNOCCUPIED)
- IS - INFORMATION SCIENCES PAVILION
- MP - MATHEMATICS PAVILION
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- SP - SOCIAL SCIENCES PAVILION
- ST - STUDENT SERVICES PAVILION



# Takoma Park Campus Existing Conditions Building Usage Plan



- Administrative usage
- Academic usage
- Operations usage
- Recreational usage
- Service usage

- Existing Campus Building
- Project under Construction

- CA - COMMUNICATIONS ARTS CENTER
- CM - THE COMMONS
- DC - CHILD CARE CENTER
- FH - FALCON HALL (PHYSICAL EDUCATION)
- GR - PARKING GARAGE
- HC - HEALTH SCIENCES CENTER
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- SC - STUDENT SERVICES CENTER
- SN - SCIENCE NORTH
- SS - SCIENCE SOUTH
- SP - SOCIAL SCIENCES PAVILION
- ST - STUDENT SERVICES PAVILION



## Takoma Park Campus Existing Access, Circulation and Parking Plan



- Parking
- Major vehicular circulation
- Minor vehicular circulation
- Service road
- Metropolitan Branch Trail
- Major pedestrian route
- Minor pedestrian route
- Interaction/gathering point
- B Bus stop
- Campus access point
- \* Pedestrian/Vehicular conflict
- Traffic signal

- CA- Communication Arts Center
- CM- The Commons
- DC- Child Care Center
- FH- Falcon Hall
- GR- Parking Garage
- HC- Health Sciences Center
- IS- Information Sciences Pavilion
- KS- King Street Art Center
- MP- Mathematics Pavilion
- NP- North Pavilion
- RC- Resource Center
- SN- Science North
- SP- Social Science Pavilion
- SS- Science South
- ST- Student Services Pavilion



academic building, are located along New York and Chicago Avenues. Science North and Science South, two larger academic buildings, are located along Fenton Street. Along Takoma Avenue, building use shifts from academic to other uses. The Child Care facility is student service oriented, the Commons Building is administrative and student service oriented, and Falcon Hall is primarily recreational, although it also contains academic uses.

On the western side of campus, the Health Sciences Center serves an academic function, and the King Street Art Center, currently unoccupied but pending renovation, is classified as academic and operations usage.

### **2.2.6 Functional Adequacy of Facilities**

Many of the functional problems affecting programs are inherent in the original design of the buildings. Small floor plates, typically less than 2,500 net assignable square feet, limit flexibility and room size. Small bay sizes further limit the size of classrooms and laboratories that can be accommodated column-free, as well as the number of spaces that can be accommodated on each floor. In addition, irregular shaped spaces reduce efficiency and limit flexibility.

Outdoor corridors and stairs and elevators shared between buildings sacrifice comfort and convenience and are particularly ill suited to winter weather. Also, the circulation network in and through buildings inadequately addresses the accessibility challenges of this campus. Many campus facilities are not compliant with the Americans with Disabilities Act (ADA).

The campus is severely deficient in both the size and quantity of office and instructional space, study, meeting rooms, and support spaces for lounging and recreation. In general, available building space has dictated programs and services – limiting the campus' ability to respond to program needs and changes in instructional delivery. This situation has severely limited the College's ability to support collaborative learning and collaboration efforts between students and faculty. Lack of space has also resulted in fragmenting disciplines, program identities, and services, and limits the ability of the campus to be a full community resource.

Descriptions of the programs and functions in each building are included below. The general adequacy of each building to support these programs and functions is also presented.

**The Commons (16,580 NASF, 25,070 GSF)**, constructed in 1978 as a two story structure, houses the campus Provost administrative offices, the cashier, physical plant administrative offices, the bookstore, food services, security offices, student lounge, the Bliss Room, and Student Life functions.

Except for the Provost and physical plant administrative offices, the remaining functions will be accommodated in a new Student Services Center which is currently under design, and anticipated to be completed in 2006.

**Communications Arts Center (8,996 NASF, 15,873 GSF)**, a three story structure constructed in 1980, includes general purpose classrooms, a Black Box Theatre, and faculty offices. Most classrooms are accessed directly from the exterior, resulting in poor climate control. In addition, back-of-house support for the Theatre is less than marginal.

**Falcon Hall (28,633 NASF, 39,063 GSF)**, a two story structure constructed in 1978 houses the campus' Health and Physical Education Department and Athletic resources including a gymnasium, swimming pool, racquetball courts, fitness center, a Physical Therapist Assistant (PTA) laboratory, offices, and one general purpose classroom. The PTA laboratory will be relocated to the Health Sciences Center when it opens in January 2004.

The classroom is not acoustically separated from the athletic space and can only accommodate 24 students. In addition, the fitness center is undersized, the gymnasium is not air conditioned, and it is recommended that the existing gymnasium floor be replaced with a new wood floor.

**Mathematics Pavilion (4,332 NASF, 6,942 GSF)**, a two story structure constructed in 1975, accommodates general purpose classrooms, the Mathematics Center, the Honors Program, Mathematics faculty offices, and the campus mail room and main telecommunications hub.

The absence of an internal stair connecting the two floors of the building is a functional drawback, along with a lack of adequate storage. Due to the irregular configuration of spaces, there is a loss of efficiency in both classrooms and offices.

**Resource Center (33,094 NASF, 44,906 GSF)**, a two story structure constructed in 1978, houses the campus library collection, study and support space, as well as the Reading/Writing Language Center, Information Technology Service Center including the campus Information Technology (IT) center, Student Development functions (Assessment, Disabled Services, and Learning support), a 90 seat lecture room, several general purpose classrooms, campus audio visual support, and offices for the Department of Social Sciences.

There is insufficient stack, study (especially group study rooms), and support space for the campus collection. In addition, access to the Resource Center by individuals who require an elevator is extremely difficult. Circulation throughout the building is indirect and not easily comprehensible.

**Science North (26,810 NASF, 39,950 GSF)**, a three story structure constructed in 1978, houses two lecture halls, one with 50 seats and the other with 126 seats), biology, chemistry, and physical science laboratories as well as faculty and staff offices for these programs, the Math-Science Laboratory, and shops and storage space for physical plant (operations and maintenance).

There is a shortage of laboratory and support space, elevators do not service all floors, classrooms are under-sized, and there is insufficient storage space and shop space for Operations and Maintenance.

**Social Science Pavilion (4,362 NASF, 6,942 GSF)**, a two story structure constructed in 1975, includes general purpose classrooms, offices for English, Reading, English as a Second Language (ESL), Foreign Languages, the Philosophy Department, and the Social Sciences Department.

The classrooms are small and irregularly shaped, resulting in wasted space as well as the inability to accommodate group activities or collaborative teaching strategies.

This building is scheduled for demolition in 2004 to make way for the new Student Services Center.

**Pavilion of Fine Arts (10,596 NASF, 15,013 GSF)**, a two story structure constructed in 1975, houses the offices for the Visual, Performing, and Communication Arts Department (“Arts”) and English disciplines, offices of the Dean of Humanities and Social Sciences, and the “Arts” laboratories, a gallery, and support spaces (drawing, printmaking, ceramics, 3D, and photography), a kiln room, and general purpose classrooms.

The general purpose classrooms are irregularly shaped, have wasted space, and limited seating. The “Arts” studios have limited capacity at 20 students each and inadequate storage and support/work space. The absence of a computerized laboratory limits current and future teaching technology strategies.

**Science South (14,951 NASF, 23,757 GSF)**, a three story structure with a partial lower level and connected Planetarium constructed in 1978, houses Biology and Physical Science laboratories including a greenhouse and Planetarium, offices for the sciences, general purpose classrooms, Health Science and Technology program and Nursing offices, Dean of Health Science Division, and Operations and Maintenance shops and support space.

The Health Science and Technology program and Nursing functions have been relocated to the Health Sciences Center, opened in January 2004.

Functional inadequacies include a shortage of lab space, elevators that do not service all floors, classrooms that are under-sized, and insufficient storage space.

**Information Sciences Pavilion (4,334 NASF, 7,386 GSF)**, a two story structure constructed in 1975, houses faculty of the Business, Management, and Information Science Department, computer teaching laboratories, and one open laboratory.

There is an insufficiency of space resulting from small sizes of both teaching and open laboratories.

**North Pavilion (4,167 NASF, 6,942 GSF)**, a two story structure constructed in 1975, houses offices for faculty and staff and a general purpose classroom.

The Classroom sizes are insufficient to meet both the existing student enrollment and projected number of students, and there is insufficient support/storage space.

**Student Services Pavilion (4,654 NASF, 7,385 GSF)**, a two story structure constructed in 1975 houses financial aid, student development counseling, admissions, records, and registration functions for the campus.

The Financial Aid Office has inadequate space for its staff, students, and for record and file storage. The Financial Aid waiting area utilizes the hallway and student lines block access to the elevator and exit door. The Counseling area does not promote positive interaction between students and counselors and restricts the type of services that can be offered. Counseling space for staff lacks adequate storage space and the waiting area is shared with the Admissions and Records Office.

The Admissions and Records Office lacks confidential office space and there is a severe shortage of storage space for publication material.

**Child Care Center (1,592 NASF, 3,310 GSF)**, a two-story structure with basement constructed in 1924 as a private residence, was renovated in 1994 and is currently licensed for an enrollment of approximately 20 students. Demand for child care far exceeds available staff and facilities.

**Parking Garage (224,310 GSF)**, constructed in 1980, is located on Fenton and King Streets and provides 665 spaces for faculty, staff, and students.

**Leased Space (7,157 NASF, 8,000 GSF)**. The College leases space on the second floor of the Fenton Building at 8561 Fenton Street in Silver Spring, Maryland. This space provides students at the Takoma Park campus with open computer laboratory (90 work stations) opportunities seven days a week. The facility also includes an office, conference room, staging areas, technical support space, and a lounge area. The primary drawback is that it is physically separated, approximately 1 mile from the main campus.

### **2.2.7 Building Conditions**

Montgomery College hired Vanderweil Facility Advisors (VFA) to perform a web enabled software-based facilities condition analysis of each of its three campuses which included buildings and site infrastructure components such as electrical utilities, storm sewer, sanitary sewer, parking lots, etc. The primary focus of this effort was to:

- Provide a baseline condition assessment of the College's facilities to include infrastructure components and building systems.
- Provide the College with budget estimates for funding required to implement safety improvements and reduce the deterioration of campus buildings and infrastructure components.

- Assist the College with building code and accessibility compliance and to ensure that the facilities are operated as required.
- Utilize the assessment in the implementation of an ongoing process of the identification and prioritization of maintenance and capital repair projects.
- Provide decision support capabilities with VFA's facility management software solutions.

The facilities analyses include the following:

- Current Condition Analyses – existing facility deficiencies including deferred maintenance, deferred renewal, near-term anticipated renewal, recommended discretionary improvements, and code non-compliance issues.
- Anticipated capital renewal analyses – projections of ongoing degradation of facilities' components and costs associated with renewal or replacement of these components as they reach the end of their useful life.
- Capital funding analyses – scenario comparisons showing various funding levels and the effect of each on the condition and value of the building.

### **Assessment Methodology**

The deficiencies were classified in several different ways. In addition to detailed specific descriptions, each deficiency was assigned a category, priority, and primary system association. This parallel differentiation allows for multiple queries of the database, facilitating analysis of the data. It is possible, for instance, to query the database for all Priority 1 deficiencies in the electrical systems or all Priority 5 accessibility code issues. The criteria used to determine the priorities, categories, primary systems, and cost estimating are as follows:

- Priority One – Immediate Concerns: Should be undertaken immediately including violations of life safety, building, and electric codes.
- Priority Two - Short Term Concerns (1-2 years): Should be corrected in the near future to maintain the integrity of the building, including systems which are functioning improperly or not at all, and problems that, if not addressed, will cause additional deterioration.
- Priority Three – Long Term Concerns (3-5 years): Should be corrected in the more distant future to maintain the integrity of the building, including systems that have exceeded their expected useful life but are still functioning.
- Priority Four – Improvements: Required or desirable to bring the facility to perform as it should, including systems upgrades and aesthetic issues.
- Priority Five – New Code Requirements: Do not conform to codes instituted since the construction of the building, therefore, they are grandfathered in their existing condition. These should be addressed in any major renovation effort, if not before.

Deficiency Categories:

- Code Compliance (violation of the 2000 International Building Code or conditions which pose a hazard to building occupants)

- Building Integrity (components or systems which are broken or in poor condition)
- Functionality (conditions which inhibit current use of space and do not necessarily affect the integrity of the building’s systems such as poor temperature control, insufficient electrical service, etc. )
- Aesthetics (problems with the building’s appearance which are not functional in nature)
- Energy (conditions which adversely affect energy usage)
- Air/Water Quality (conditions which affect the environmental quality of the water or air)
- Hazardous Materials (Visible observations or College reporting indicating probable presence of hazardous materials)
- Life Safety (violations of the Life Safety Code, NFPA 101)
- Building Code Accessibility (Compliance with the accessibility requirements of 28 CFR part 36, ADAAG and the Maryland Accessibility Code of COMAR 05.02.02 dated February 1, 1995).

**Facility Condition Index**

An automated standard process for assessing the relative condition of buildings and site infrastructure components was established to facilitate comparison both within and among the campuses. For each building or site component, a Facility Condition Index (FCI) was developed which measures the relative amount of current deficiencies in the building including recommended improvements and grandfathered issues. The total value of recommended corrections is divided by current replacement value for the building or site component resulting in the FCI. The higher the FCI, the poorer the condition of the facility of system component. The FCI ranges for the standard of services for each building or site component are:

- Good: .00 to .05
- Fair: .05 to .10
- Poor: Greater than .10

FCI is a standard measure used throughout the country; it is recommended by both the National Association of College Business Officers (NACUBO) and the Association of Higher Education Facility Officers (APPA). In the following tables, this is represented by a Deficiency % which takes the FCI and converts it to a percentage of replacement. For example, an FCI of .10 translates into a Deficiency percentage of 10%.

Referencing the following tables, the results of VFA’s survey clearly show that the majority of campus facilities, including infrastructure, are in fair to poor condition. It should be further noted that this does not reflect “true functional” needs involving general purpose as well as programmatic or departmental needs such as inadequacy of space to accommodate current or future teaching methodology and technology, proper sizing of instructional space and office space, student gathering space, student support services, etc.

**Table 2.2.7-1  
Total Replacement Value and Current Deficiency Cost**

Fifteen structures including King Street Art Center (170,000 GSF) and a Parking Garage (224,310 GSF) totaling 636,849 GSF. Excluding the parking structure there are thirteen major buildings (412,229 GSF) and a Child Care Center (3,310 GSF).

	Replacement Value	Current Deficiency	Deficiency as % of Replacement*
<b>Priority One - Five</b>			
Building Systems	\$53,960,179	\$27,039,838	50%
Infrastructure	\$8,103,913	\$7,588,502	94%
CAMPUS TOTAL	\$62,064,092	\$34,628,340	56%
<b>Priority One-Three Only</b>			
Building Systems	\$53,960,179	\$19,112,366	35%
Infrastructure	\$8,103,913	\$613,497	8%
CAMPUS TOTAL	\$62,064,092	\$19,725,863	32%

\* FCI is derived by dividing the Deficiency as % of Replacement by 100.

**Table 2.2.7-2**  
**Age of Buildings & GSF (Excludes Parking Structure- 224,310 GSF; 1980's)**

Pre-1960's (2 Buildings)	173,310	GSF	42%
1970's (11 Buildings)	223,356	GSF	54%
1980's (1 Building)	15,873	GSF	4%
TOTAL	412,539	GSF	100%

**Table 2.2.7-3**  
**Size of Buildings (Excludes Parking Structure)**

Less than 25, 000 GSF (9 buildings)	93,550	GSF	23%
25-50,000 GSF (4 Buildings)	148,989	GSF	36%
Greater than 50,000 GSF (1 Building)	170,000	GSF	41%
TOTAL	412,539	GSF	100%

**Table 2.2.7-4**  
**Building Deficiency Category Amount (1-5) and % of Replacement (Excludes Parking Structure)**

Less than 25% deficiency (1 building)	\$44,569	0.2%
26% to 50% deficiency (10 buildings)	\$10,792,268	41.0%
51% or greater Deficiency (3 buildings)	\$15,451,142	58.8%
TOTAL	\$26,287,979	100%

NOTE: The Parking Structure adds \$751,859 to 2.2.7-4 Building Deficiency in the Less than 25% category bringing the Total Building (System) Deficiency to \$27,039,838.

**2.2.8 Utilities**

As part of this Facilities Master Plan process, the 1991 Utilities Master Plans and 1998 update, and the 1991 Facilities Master Plan were reviewed to determine the adequacy of existing systems and to ascertain the potential for future expansion. In addition, the facilities managers for each campus were interviewed to identify completed and planned improvements and to verify existing information.

**Water**

The Takoma Park Campus receives all of its water from the Washington Suburban Sanitary Commission (WSSC) on meters placed on the individual buildings. The water system is adequate for the present and future domestic water needs but inadequate for present and future fire flows based on simulations using the Kentucky Pipe Model Program using flow requirements of the Insurance Service Office (ISO) Fire Suppression Rating Schedule as identified in the 1991 Utilities Master Plan.

**Sanitary Sewer**

The College owns its own sanitary sewer collection system that flows into the WSSC system at various locations along New York and Chicago Avenue. For the eastern side of campus, the system is adequate to handle all present and future flows based on recommendations and capacity charts in the 1991 Utilities Master Plan.

**Heating System**

Currently all buildings in the Takoma Park Campus have stand alone systems heated with electric strip heat, gas or oil fired equipment. The systems are adequate, but the high cost of electric heat makes conversion to a central gas fired boiler plant a feasible option. The College is currently undertaking the design of a central heating plant to be constructed in the new Student Services Center to serve the eastern side of campus. Also proposed is a central heating plant in the King Street Art Center to serve the western side of campus.

**Chilled Water System**

There is no chilled water system currently on the campus. All buildings have stand-alone packaged systems or individual chillers sized for the building load. The College is currently undertaking the design of a central chilled water plant with thermal storage to be constructed in the new Student Services Center. Also proposed is a central chilled water plant with thermal storage in the King Street Art Center to serve the western side of the campus.

**Electrical**

As part of this Facilities Master Plan process, the 1994 Revision 1 Utilities Master Plans and the 1991 Facilities Master Plan were reviewed to determine the adequacy of existing systems and to ascertain the potential for future expansion. In addition, the Facilities managers for each campus were interviewed to identify completed and planned improvements and to verify existing information.

The current electrical power to the campus is supplied directly from the utility company, PEPCO. There is no existing central power plant on the campus.

Each building on the campus is served and metered separately from the secondary side of the PEPCO's transformers. Primary feeders and transformers are owned and maintained by PEPCO.

### **2.2.9 Stormwater Management**

Stormwater management for this campus consists of a number of storm drainpipes that connect the surface flow and the roof drains to storm filters.

On the eastern portion of campus, the on-site drainage collection system is owned by Montgomery College and discharges into City of Takoma Park storm sewers. The campus's stormwater collection system is divided into three drainage areas. One drainage location is sited where the Student Services Center will be built. Two storm drainpipes have been constructed in the parking lot north of the Science North building to provide stormwater quality control measures for the Fenton Street relocation and the planned Student Services Center. The second drainage area flows to the southeast into a 24-inch storm sewer located in New York Avenue, south of Chicago Avenue. This drainage system also contains leaching fields that infiltrate stormwater into the ground. The third drainage area is located east of New York Avenue and south of Chicago Avenue. Open drainage ways and leaching fields convey the stormwater run-off in this area. The leaching fields on the campus are no longer functioning as intended. Isolated flooding and ponding of water occurs outside of the Pavilion of Fine Arts. The leaching fields may also be a contributing factor to moisture penetration through the exterior, below-grade walls in the Resource Center.

On the western side of campus, one stormfilter was provided for stormwater management on the site of the Health Sciences Center. This stormfilter is located beneath the parking lot to the northeast of the building between it and the King Street Art Center.

The Montgomery County Department of Permitting Services has waived stormwater quantity control measures for this campus.

### **2.2.10 Circulation and Parking**

#### **Vehicular Access and Circulation**

The Takoma Park Campus is bounded by Philadelphia Avenue (MD 410) to the north, Georgia Avenue (US 29) to the west and Takoma Avenue to the east. The CSX/Wmata Railroad Corridor divides the campus into eastern and western sections, which are located within the City of Takoma Park and South Silver Spring, respectively. Regional and local access to the campus is provided by Georgia Avenue and Philadelphia Avenue. Other roadways providing local access include Fenton Street as well as Chicago, New York and Takoma Avenues. Figure 4 illustrates the existing campus access and circulation situation. That figure also shows the key locations of on- and off-street parking and public transportation facilities within the campus area.

Substantive transportation studies were undertaken for the campus' Facilities Master Plan Update in 1998, and the Maryland-National Capital Park and Planning Commission (M-NCPPC) Mandatory Referral Review Process in 2001. The latter process pertained to

the design and implementation of the planned Student Services, Cultural Arts, and Health Sciences Buildings. Based on these studies, it was determined that the intersections serving the immediate access needs of the campus all operate within acceptable level-of-service planning standards, and without any significant capacity, operational and safety constraints.

Based on the location of the campus, access to the campus is well distributed, minimizing the impact of the campus on the adjacent roadway network. The campus vehicle trip distribution pattern is as follows:

<b>Roadway Approach</b>	<b>Distribution</b>
From North on Fenton St.	50%
From West on Philadelphia Ave.	10%
From South on Georgia Ave.	5%
From South on Takoma Ave.	20%
From North on Takoma Ave and Chicago Ave, and East on Philadelphia Ave.	15%

The build-out and full occupancy of the Facilities Master Plan would result in a minor modification of the above trip distribution pattern, due to a shift of vehicle trips from the eastern to western campus. The potential traffic impacts of the projected trip distribution pattern were analyzed and found to be quite minimal.

**Parking**

Extensive parking surveys and projections conducted for the campus indicate that parking provisions are adequate until a new parking garage is needed in conjunction with the construction of the Cultural Arts Center. This is based on the following considerations:

- The main campus is provided with over 784 parking spaces within a parking deck and surface lots. The overall peak occupancy is approximately eighty-five percent (85%). This is below the practical capacity (95%), at which there is inefficient vehicle circulation and a poor quality of service associated with the search for available parking spaces.
- Over ninety (90) on-street parking spaces are provided within the immediate area of the eastern campus. The observed peak demand is in the range of eighty percent (80%).
- The new Health Sciences Center will be provided with over one hundred (100) on-site parking spaces in an existing lot to the north of the future King Street Art Center.
- Over one hundred seventy (170) public on- and off-street parking spaces, with low occupancy ratios, are available immediately west of Georgia Avenue in the vicinity of the western side of the campus.

**Pedestrian Circulation**

Pedestrian movements associated with the eastern side of the campus occur across all the adjacent streets. The dominant movement occurs between the Fenton Street parking deck and the main campus, with crossings made at the New York Avenue intersection where a crosswalk is provided. Significant pedestrian activity also occurs along the New York Avenue and Chicago Avenue segments situated adjacent to campus buildings. No significant vehicle pedestrian conflicts were observed. This situation is supported by accident data obtained from the Maryland State Highway Administration Traffic Safety Analysis Section, for the last three (3) years for which such data is available.

**Public Transportation**

The campus is well served by public transportation. The WMATA and Montgomery County Ride-On systems provide several bus routes along the Philadelphia Avenue and Georgia Avenue corridors. These routes provide connections to the Silver Spring and Takoma Park rail stations on the WMATA red line. In addition, the College provides financial support for a “Campus Connection” bus service between the Takoma Park and Rockville Campuses with stops at three intervening Metro stops, as well as at the Shady Grove Campus of the University of Maryland.

**Issues**

Based on the above, key transportation related issues which should be considered during the subsequent master plan development phases are as follows:

The new Student Services Center is to be located at the intersection of Fenton Street and Chicago Avenue. Associated roadway changes include the completed realignment of Fenton Street. Site design has emphasized pedestrian safety.

Future pedestrian activity across Georgia Avenue, to and from the Health Sciences and Cultural Arts Centers, would also need to be addressed from a safety perspective.

The 12 parking spaces behind the Health Sciences Center and the 108 spaces in the surface lot north of the King Street site are primarily accessed from Georgia Avenue at the King Street intersection. This intersection, which is currently unsignalized, provides access to commercial developments situated along this roadway to the west of Georgia Avenue. The intersection would also provide primary, if not exclusive access to the future redevelopment of the King Street site. Based on the above, the need for a traffic signal at the Georgia Avenue/King Street intersection, which includes pedestrian crossing phasing, would need to be investigated.

**2.3 FACILITIES PROGRAM****2.3.1 Needs Assessment**

Assessments of the current and projected facilities needs at the Takoma Park Campus are generated by applying current and projected planning data related to enrollment, instructional delivery, library collections, faculty, and staff to the State of Maryland

Guidelines for facilities at community colleges. Refer to Table 2.3.2-1 for this planning data.

Current and projected space needs are then computed for each type of space in the campus inventory for which a guideline is available. Comparisons with the campus' current inventory and the one planned for 10 years later, given approved capital projects, are made, and surpluses or deficiencies relative to the respective space categories are identified. Table 2.3.2-2 shows this analysis.

Currently the Takoma Park Campus, excluding Central Administration and Work Force Development and Continuing Education, shows an overall deficiency of -93,686 NASF, a significant amount of space representing 55% of the campus' current inventory. The Takoma Park Campus has two approved facility projects over the planning period of 2002 to 2012, including (1) the new 49,110 NASF Health Sciences Center, completed in January 2004 and (2) the new 53,250 NASF Student Services Center, which is scheduled to begin construction in the Spring of 2004. Two planned projects include (1) the new 23,400 NASF Cultural Arts Center and (2) the renovated 52,415 NASF King Street Art Center. These four projects will also result in the demolition of the 4,362 NASF Social Sciences Pavilion and the conversion of 45,583 NASF of campus space. The net addition of 166,844 NASF is roughly equal to the current inventory of 169,790 NASF, including leased space.

Despite the projected doubling of the campus size in terms of amount of assignable space, space projections for 2012 show a remaining overall deficiency of -126,665 NASF. When the 45,583 NASF of vacated space in a number of the campus buildings is taken into account, the net deficiency of 81,082 NASF represents approximately 48% of the campus' current inventory. The College is projecting a significant 54% growth in enrollment at this campus over the next ten years, and, if the campus is to meet these College goals, it must still address the remaining deficiencies that exist in most space categories. Almost every department on campus, even many of those involved with approved projects—the academic departments, student development programs, the library and learning centers, information technology, and physical plant—needs to be involved in capital projects to meet these facility needs, or should be carefully monitored over the planning period to ensure that the match between their program growth and development can be met by their facilities.

**Table 2.3.1-1  
Needs Assessment Planning Data for the Takoma Park Campus**

	Fall 2002	Fall 2012
FTDE-Credit	1,659	2,636
FTDE-Noncredit	<u>0</u>	<u>0</u>
FTDE-Joint	1,659	2,636
WSCH-Lecture-Credit	22,775	33,744
WSCH-Lecture-Noncredit	<u>0</u>	<u>0</u>
WSCH-Lecture-Joint	22,775	33,744
WSCH-Lab-Credit	8,160	17,377

WSCH-Lab-Noncredit	<u>0</u>	<u>0</u>
WSCH-Lab-Joint	8,160	17,377
FTE Students	2,346	3,635
Bound Volume Equivalents	88,309	101,248
FTE Faculty	142	202
FT-Faculty	97	146
FT-Staff	150	198
Planning Head Count	976	1,518
Student Headcount	4,821	7,224

**Table 2.3.1-2**  
**Computation of Space Needs for the Takoma Park Campus**

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
100	CLASSROOM	34,163	24,490	(9,673)	50,616	36,657	(13,959)
200	LABORATORY	64,088	47,638	(16,450)	132,710	79,104	(53,606)
210	Class Laboratory	57,120	35,425	(21,695)	121,639	67,615	(54,024)
220	Open Laboratory	6,968	12,213	5,245	11,071	11,489	418
250	<i>No Allowance</i>						
300	OFFICE	51,172	34,528	(16,644)	69,588	49,004	(20,584)
310	Office/Conf. Room	49,592	31,777	(17,815)	67,520	44,734	(22,786)
320	Testing/Tutoring	1,580	2,751	1,172	2,068	4,270	2,202
350	<i>Included w/ 310</i>						
400	STUDY	22,732	16,656	(6,076)	30,650	20,787	(9,863)
410	Study	10,369	816	(9,553)	16,475	3,047	(13,428)
420-30	Stack/Study	8,831	14,713	5,882	10,125	15,913	5,788
440-55	Processing/Service	3,532	1,127	(2,405)	4,050	1,827	(2,223)
500	SPECIAL USE	38,317	28,601	(9,716)	48,869	29,371	(19,498)
520-23	Athletic	35,590	25,597	(9,993)	45,360	25,897	(19,463)
530	Media Production	1,727	2,287	560	2,509	2,757	248
580	Greenhouse	1,000	717	(283)	1,000	717	(283)
600	GENERAL USE	35,645	12,408	(23,237)	45,737	40,987	(4,750)
610	Assembly	12,318	559	(11,759)	14,272	11,419	(2,853)
620	Exhibition	1,580	384	(1,196)	2,068	3,450	1,382
630	Food Facility	9,950	6,087	(3,863)	15,484	13,000	(2,484)
640	<i>Child Care N/A</i>	1,191	1,191	0	1,191	1,191	0
650	Lounge	2,927	2,461	(466)	4,554	5,487	933
660	Merchandising	1,680	1,726	47	2,168	3,990	1,822
670	<i>Recreation N/A</i>	0	0	0	0	0	0
680	Meeting Room	6,000	0	(6,000)	6,000	2,450	(3,550)
700	SUPPORT	16,828	5,383	(11,445)	22,224	18,366	(3,858)
710	Data Processing	2,500	388	(2,112)	2,500	6,105	3,605
720	Shop/ Storage	10,126	4,237	(5,889)	15,416	9,603	(5,813)
730	<i>Included w/ 720</i>						
740	<i>Included w/ 720</i>						
750	Central Service	4,000	334	(3,666)	4,000	2,234	(1,766)
760	Hazmat Storage	203	424	221	308	424	116
800	HEALTH CARE	532	86	(446)	727	180	(547)
900	<i>No Allowance</i>						
550	<i>Demonstration N/A</i>						
060	<i>Conversion N/A</i>	0	0	0	0	45,583	45,583
070	<i>Planetarium N/A</i>						
090	<i>No Allowance</i>						
	<b>Total NASF:</b>	<b>263,476</b>	<b>169,790</b>	<b>(93,686)</b>	<b>401,121</b>	<b>274,456</b>	<b>(126,665)</b>

**2.3.2 Proposed Facilities Programs**

As shown in the following set of projects, the Facilities Master Plan for the Takoma Park Campus adds 45,819 NASF to the campus inventory beyond those already approved. These additions represent 57% of the overall net 2012 space deficiency. Not addressed in this plan is the significant guideline need for athletic space. Given the limited building sites on campus, expansion or replacement of Falcon Hall was not considered feasible at this time. In addition, the guidelines show a significant class lab deficiency. The plans, however, do address most of the class lab needs of the campus' disciplines. Math shows the greatest disparity because, while instruction is expected to transition from a classroom to a class lab environment, the station size required is not as large as is allowed under the guidelines. The Humanities disciplines are also expected to use technology more in instructional delivery, and the addition of classrooms and class labs to support these disciplines must also incorporate appropriate technologies. Together with the new construction, reallocations, and renovations of spaces within existing campus buildings, the new facilities will support the continued growth and development of the Takoma Park Campus. A description of the programs located within these projects follows. The physical aspects of these projects will be discussed in section 2.4, Master Plan.

#### **Student Services Center**

This building will be a "one-stop" center for student activities and student services. The building will house Assessment and Testing, the Registrar, Counseling and Advising, a Career Transfer Center, the Dean of Students, Financial Aid, and the Cashier's office. Space will be provided for student activities including student clubs, the Student Senate, the College radio station and the College newspaper. Amenities will include a dining facility, bookstore, and copy center. The building will also house the main campus security office and computer laboratories, including an open computer lab with 80 workstations. Offices for computer science and technology staff will be located in the building to support these spaces. This project includes the construction of a central mechanical plant that will support the campus buildings east of the railroad tracks.

#### **Cultural Arts Center**

The Cultural Arts Center will house two assembly spaces. The first is a 500 seat auditorium, and the second is a black box theater. The auditorium will be used for lecture and films, as well as dance and musical performance. The black box will be used primarily for theater performance, including experimental theater. Both spaces will be supported by a scene shop, green room, dressing and locker rooms, rehearsal and classroom space. There will also be a meeting room for community events, exhibit space, and a catering kitchen.

#### **King Street Art Center Renovation**

This building, originally a commercial bakery, will be converted to house the College's Art program, now combined with the Maryland Academy of Art and Design. Laboratories for Ceramics, Sculpture, Printmaking, Drawing, Painting and Photography will be provided. General purpose classrooms, computer laboratories, and open computer laboratories will support these programs. The building will also house the College's central computer operations to be relocated from the Rockville Campus. Exhibition space, meeting space, an art gallery, a lecture hall, and catering kitchen will provide opportunities for lecture,

exhibition, and community events. Studios for artists-in-residence will complement the art program and strengthen ties to the artistic community. Also housed in this building will be Facilities operations and maintenance shops and storage.

#### **Renovation of the Commons Building**

This renovation project converts the vacated office, dining, and other support space associated with the construction of the Student Services Center to new uses. The atrium and open spaces are floored over or captured from circulation space and add an estimated 2,170 NASF. This building houses reallocated space for the Office of the Provost and possibly relocates the Bliss Meeting Room. This room, however, is upgraded as a videoconferencing facility and is supported with a catering kitchen and storage. It also houses the Honors program and provides the Honors classroom and two seminar classrooms, as well as technology classrooms and class labs supporting the Humanities Department.

#### **Renovation of the Information Science Pavilion (new Classroom Pavilion)**

This renovation project converts the vacated Information Science (“IS”) Pavilion for use as a general classroom building supporting the Humanities and Social Sciences Departments. The overall efficiency of this building can be expected to be reduced to provide proper internal circulation, elevator access, and other requirements.

#### **Renovation of the Student Services Pavilion (new Child Care Pavilion)**

This renovation project converts the vacated Student Services (“ST”) Pavilion to a child care facility accommodating 40 children and support offices. The site can accommodate the enclosed play areas required for child care operations, although a child drop off location on New York Avenue will need to be provided. This alternative would allow the College to use the existing child care facility as office surge space as capital projects proceed on campus. The overall efficiency of this building is expected to be reduced to provide proper internal circulation, elevator access, and other requirements.

#### **Renovation of the Fine Arts Pavilion (new Humanities Pavilion)**

This renovation project converts the vacated Fine Arts Pavilion to support the Humanities Department primarily as an office building, although a collaborative writing lab is provided. The remainder of classrooms to support the Humanities Department are provided in the renovated Commons Building.

#### **Renovation of the Communication Arts Center (new Social Sciences Center)**

This renovation project converts the vacated Communication Arts Center to support the Social Sciences Department. The renovation involves the enclosure of the first floor open walkways so that individuals can go from one part of the building to another without going outside. The former Black Box Theatre is converted to a lecture hall, replacing the one demolished as part of the renovation and additions to the Resource Center and Library. The second and third floor classrooms are converted to office space, with an expected loss in efficiency to accommodate walls and interior circulation. The amount of classroom space will not meet all of the demand, although the renovation of the Information Science Pavilion as general classroom facility will provide the needed support. Not all of the

Department's office needs can be accommodated either, and only about 260 NASF of standard building support space can be provided. Consideration in this project should be given to the possible conversion of the open courtyard on the first through third levels to usable space, possibly as a classroom or additional office space.

#### **Construction of Resource Center and Library**

This project replaces the existing Resource Center with a new Resource Center and Library so that several learning centers can be co-located for better student access and that adequate space is provided for the collections and to support student study and access to library services. The proposed Library provides 350 patron stations in a wide variety of study seating options. The amount of stack space also reflects the amount projected for the College's collection, incorporating any Maryland College of Art and Design collections beyond those accommodated at the King Street Art Center. This facility also provides a patron lounge outside of the Library proper, but within the facility, to facilitate concentrated use of the Library. In addition to the study functions, the Resource Center and Library houses several of the campus' learning centers, including the Math and Science Learning Center, the Reading and Writing Learning Center, and the Social Science Learning Center, and its media and academic computing functions. Classrooms supporting Business, Humanities, and Social Sciences will also be added.

This project will proceed in two phases to allow for continued operation of the Library and the Learning Centers. The demolition of the North and Math Pavilions during phase 1 will allow construction of two wings of the final building complex. The existing Resource Center will then be demolished, and phase 2 will be completed. The proposed demolition of the two pavilions and the existing Resource Center is supported by the functional inadequacy of the buildings combined with the exceedingly poor condition of the buildings as reflected in their low FCI ratings. Taken together, demolition and replacement is appropriate given the need to also provide for additional space to support program growth.

Careful planning of this project will be required to ensure that relocations of units currently housed in the Resource Center are minimized, that the core collection relocates only once, that a single access point to the Library is provided for appropriate management of the collection, and that building support functions are appropriately aligned with Library processing and collection management functions. These planning factors will necessarily mean that various units cannot be mixed in terms of location with the Library during construction phasing or at completion.

#### **Construction of Science and Math Complex**

This project proposes the construction of a new academic building supporting the science programs within the division of Health Sciences (Biology) and the department of Physical Sciences (Chemistry and Physics) and the Mathematics Department. The Math Learning Center and the Science Learning Center will be co-located with other learning centers within the expanded Resource Center and Library. The Science and Math Complex will be completed in two phases, beginning with the demolition and replacement of Science South, followed by the demolition and replacement of Science North. As part of the

project design stage, consideration must be given to solutions that optimize use of the existing or new planetarium. The College is also making efforts to relocate the Physical Plant shops to the King Street Art Center and offices to Student Services Center. Should these plans not come to fruition, shop space should be provided in the first phase of the project. The replacement of Science South and Science North allows the campus to capitalize on the site capacities with larger buildings, given the restricted building sites available. The proposed demolition of these two buildings is supported by the functional and ADA inadequacies of the buildings combined with the exceedingly poor condition of the buildings as reflected in their low FCI ratings.

### **Renovation of and Possible Addition to Falcon Hall and Outdoor Facilities**

This project renovates and potentially adds to Falcon Hall following the relocation of the Physical Therapy program, and also provides classroom and office space to support the faculty and staff associated with this facility. In addition, it eliminates the one available racquetball court, allocating its space to higher priority functions. Further addition of athletic space should only occur if a substantial increase in the intercollegiate athletic program is planned, particularly given the site constraints. Through the renovation, the configuration and amount of locker room space is converted to other uses, and changes in the building usage flow are created to allow for better, more user sensitive, and safer control of facility use, including better accessibility for older and/or handicapped individuals. Included in this is a redesign of the office suite to allow for better traffic flow, more direct access to instructor and coaches' offices, and better location of equipment and other storage. Overall the project should create an atmosphere that invites people to participate in healthy lifestyle activities. The campus is significantly limited in outdoor athletic facilities. The two adjacent lighted tennis courts are used by staff, students, and residents in the area. The College will also coordinate its use of nearby public park athletic facilities for soccer, softball, and other fields and courts, with the appropriate public agencies.

## **2.4 MASTER PLAN**

### **2.4.1 Campus Structure and Character**

The Facilities Master Plan for the Takoma Park Campus is designed to support a 54% increase in enrollment through construction of approximately 218,000 net square feet (375,000 gross square feet) of new space, renovation of 115,000 net square feet (185,000 gross square feet), and demolition of 83,000 net square feet (122,000 gross square feet) of existing space.

The physical goals of the Facilities Master Plan include the creation of open space within the campus area bounded by New York Avenue and Fenton Street, the development of additional space to meet the College's needs, and renovation of existing space.

The eastern section of the Takoma Park Campus is set into a residential neighborhood, and the design of new buildings along New York Avenue must be sensitive to the surrounding context. The existing pavilions along Chicago Avenue and the northeast side

# Takoma Park Campus Proposed Site Plan 2002 - 2012

- Landscaped area or quadrangle
- Existing building to remain
- Building presently under construction
- New campus building
- Renovated building
- New parking structure
- 3\* Number of floors  
\* Asterisk indicates one floor is below street grade level

- CA - COMMUNICATIONS ARTS CENTER
- CM - THE COMMONS
- DC - CHILD CARE CENTER
- FH - FALCON HALL (PHYSICAL EDUCATION)
- GR - PARKING GARAGE
- HC - HEALTH SCIENCES CENTER
- KS - KING STREET ART CENTER
- IS - INFORMATION SCIENCES PAVILION
- MP - MATHEMATICS PAVILION
- NP - NORTH PAVILION
- PB - PEDESTRIAN BRIDGE
- PF - PAVILION OF FINE ARTS
- RC - RESOURCE CENTER
- SC - STUDENT SERVICES CENTER
- SN - SCIENCE NORTH
- SS - SCIENCE SOUTH
- SP - SOCIAL SCIENCES PAVILION
- ST - STUDENT SERVICES PAVILION



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## Takoma Park Campus Proposed Demolition 2002 - 2012

-  Existing building to remain
-  Proposed demolition
-  Project currently under construction

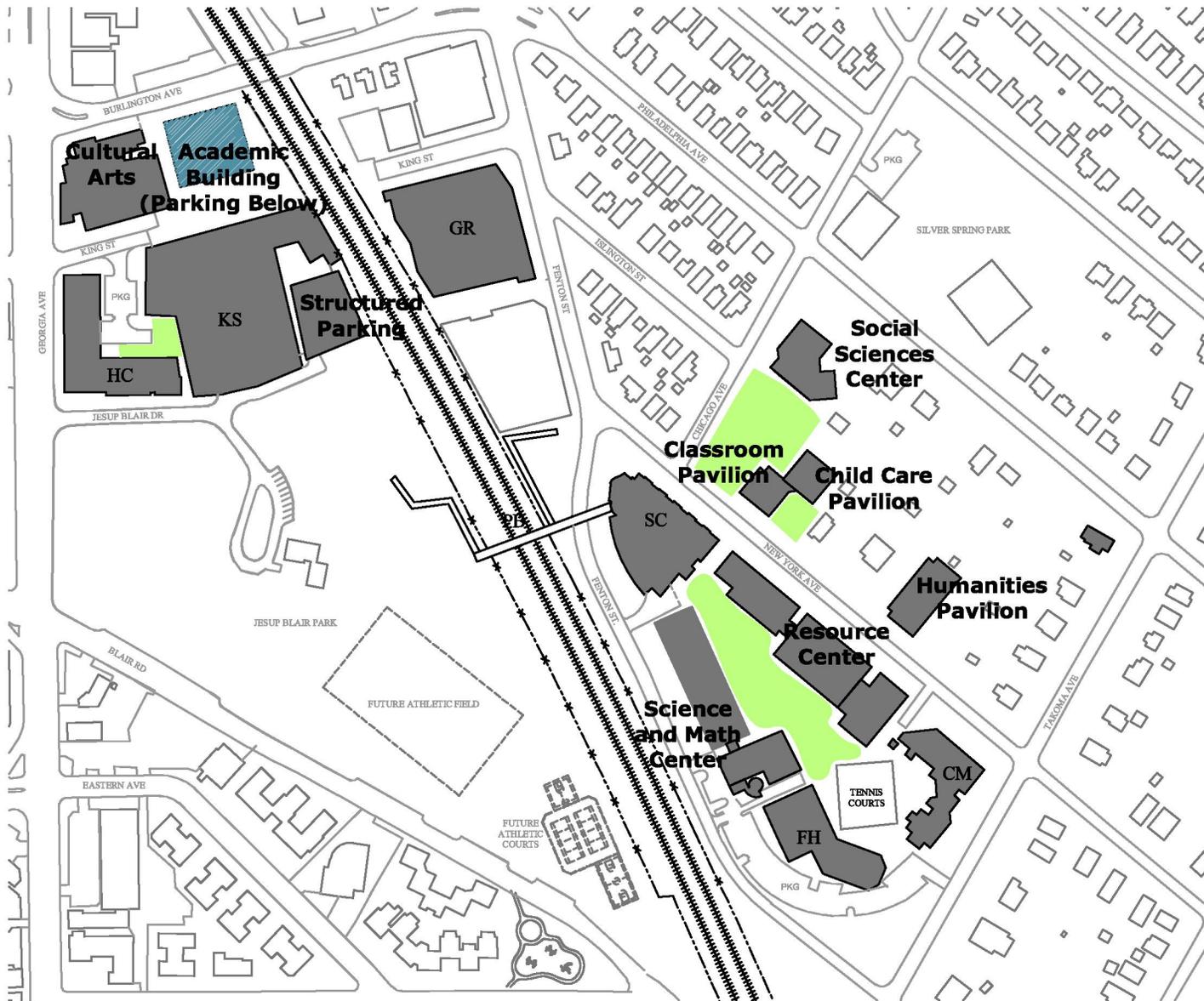
- CA - COMMUNICATIONS ARTS CENTER
- CM - THE COMMONS
- DC - CHILD CARE CENTER
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- SC - STUDENT SERVICES CENTER
- SN - SCIENCE NORTH
- SS - SCIENCE SOUTH
- SP - SOCIAL SCIENCES PAVILION
- ST - STUDENT SERVICES PAVILION



# Takoma Park Campus Proposed Land Use Plan 2012 - 2022

- Major greenspace or quadrangle
- Existing building to remain
- New campus building

- CA - COMMUNICATIONS ARTS CENTER
- CM - THE COMMONS
- DC - CHILD CARE CENTER
- FH - FALCON HALL (PHYSICAL EDUCATION)
- GR - PARKING GARAGE
- HC - HEALTH SCIENCES CENTER
- KS - KING STREET ART CENTER
- IS - INFORMATION SCIENCES PAVILION
- MP - MATHEMATICS PAVILION
- NP - NORTH PAVILION
- PB - PEDESTRIAN BRIDGE
- PF - PAVILION OF FINE ARTS
- RC - RESOURCE CENTER
- SC - STUDENT SERVICES CENTER
- SN - SCIENCE NORTH
- SS - SCIENCE SOUTH
- SP - SOCIAL SCIENCES PAVILION
- ST - STUDENT SERVICES PAVILION



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# Takoma Park Campus Proposed Open Space Concepts 2002 - 2012

- Landscaped area or quadrangle
- Existing building to remain
- Building presently under construction
- New campus building
- Renovated building
- New parking structure

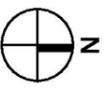


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**EYP** / **EDAW**

MONTGOMERY COLLEGE  
MASTER PLAN 2002-2012  
TAKOMA PARK CAMPUS

FEBRUARY 2004  
TP-F8 FIGURE 8



of New York Avenue are maintained at their current heights. The building footprint for these buildings does not significantly change, although underutilized space at the corners of pavilions and in the center of the Communications Arts Pavilion may be reclaimed in renovations. The Facilities Master Plan proposes that buildings on the southwest side of New York Avenue respond to their residential neighbors with massing that is two stories along New York Avenue, with a third story recessed into sloping terrain below street level. The story below street level grade would open to a central outdoor space for the campus. Another option would be to build on design concepts employed successfully in the design of the Student Services Center. This option proposes massing that is two stories along New York Avenue, with a third story set back from the New York Avenue façade. The plan proposes that buildings bordering Fenton Street be four stories in height. The buildings on Fenton Street do not face residences, so the higher density buildings needed to accommodate the planned expansion should occur on this street.

The western portion of the Takoma Park Campus is the newest portion of land acquired for campus growth. Georgia Avenue is a commercial corridor that allows development of a greater density than can be achieved in the eastern section of campus. Development of this portion of the campus can include buildings up to four stories in height, which are also not limited to a narrow footprint as are the buildings along Fenton Street. The design of buildings on the western portion of campus can also take advantage of the proximity to Jesup Blair Park and the views and amenities this public park provides.

#### **2.4.2 Proposed Land and Building Use**

A summary of proposed projects identified for this campus follows. Refer to Figures 5 through 7 for illustration of the suggested locations, building footprints, and heights of the various projects.

##### **Demolition and New Construction Projects**

The Facilities Master Plan proposes construction of a new Resource Center along New York Avenue immediately south of the Student Services Center that is currently in design. The Resource Center will provide appropriate stack space for the projected campus enrollment, 350 patron stations for individual and group study, and offices for library staff. It will also house the Math and Science, Reading and Writing, and Social Science Learning Centers, as well as classrooms supporting Business, Humanities and Social Sciences. Its proposed massing arrangement allows the building to be built in phases, with additions on the north and south of the existing Resource Center. The north addition would require demolition of two existing pavilions. These additions would equal the size of the existing Resource Center and allow the collection and study space to be relocated to the additions to allow for demolition of the existing Resource Center in a second phase, and construction of additional Resource Center space in a third phase.

The Facilities Master Plan also proposes phased construction of a new Science and Math Center on the site of existing Science North and Science South. This building will house the Biology, Chemistry, Physics and Mathematics departments. The first phase would involve demolition of Science South and construction of the first phase of the building after programs are relocated from this building to the newly constructed Health Sciences

Center. The planetarium, which houses a program highly valued by the community, would remain. The second phase would involve demolition of Science North after construction of the first phase is complete. The two phases would be connected by an enclosed pedestrian link.

Development of the portion of the campus west of the railroad tracks was envisioned by updates to an earlier master plan that located a proposed Cultural Arts Center at the intersection of Georgia Avenue and Burlington Avenue, and development of the King Street Art Center. The College issued a request for proposals for development of the King Street Art Center and is in negotiations with the successful bidder. The College anticipates that the King Street Art Center will be renovated to house facilities for the College's art program, now merged with the Maryland College of Art and Design. The lowest level of the building will be used to accommodate parking. Facilities will also be provided for community use, including art studios that will be leased to the public. A second parking structure for the campus, with approximately 150 spaces, will be located east of the King Street Art Center.

The west area of the campus also provides the location for a future academic building on the existing surface parking lot north of the King Street Art Center. The loss of parking would be mitigated by construction of below grade parking beneath the academic building. Figure 7 shows the 20-year land use plan with this facility.

### **Renovation Projects**

Renovations include repositioning many of the campus' existing buildings to new uses. This includes conversion of the Information Sciences Pavilion to a Classroom Pavilion, the Student Services Pavilion to a Child Care Pavilion, the Fine Arts Pavilion to a Humanities Pavilion, the Child Care building to administrative use, and the Communication Arts Pavilion to a Social Sciences Center. These conversions will co-locate programs that are currently distributed on the existing campus and establish beneficial adjacencies between programs and functions. Capital renewal items in these existing buildings will be addressed before the conversions take place to enhance the comfort of existing users. Anticipated renovations also include upgrades to the existing Parking Structure on Fenton Street that will make this facility more inviting to users.

### **Open Space**

The Takoma Park Campus will soon be connected to Jesup Blair Park and the College's Health Science Center located on Georgia Avenue via a pedestrian bridge, providing the campus with a strong link to a major open space. In addition, the future Student Services Building, to be located on a prominent site on the northern tip of the main campus, will include a landscaped plaza at the building entrance, creating a new "welcoming" outdoor space, with a new campus identification sign incorporated into the plaza's design. The plans for the Student Services Building also create an enhanced landscaped entrance into the existing interior campus open space.

The proposed Cultural Arts Center will be located on another campus gateway site, at the corner of Georgia and Burlington Avenues, providing the College with opportunities for a signature building and campus identification on a key site.

New street tree plantings are included in the realignment of Fenton Street, the new pedestrian bridge, and the Student Services Building, all contributing to soften the campus perimeter.

The Facilities Master Plan includes an enhanced interior courtyard space, linking the outdoor space adjacent to the Student Services Building to a continuous interior open space terminating at the existing Tennis Courts. This configuration allows the Miller Memorial Garden to retain its location while expanding in size and function.

### **2.4.3 Proposed Utilities**

#### **Heating System**

The present electric heating system is currently in the process of being replaced with a central plant distributing heating hot water throughout the southeastern portion of the campus. The new heating plant is being installed in the new Student Services Center and will have a capacity of 7,802,000 btu/hr and will serve all of the existing and renovated buildings on the eastern side of campus. The distribution piping to the individual buildings is being planned under this current project, but will be installed in the future. Final connections to the buildings, heat exchanger equipment, and building system conversions shall also be provided in the future. This change in heating medium will result in lower utility costs.

The new Health Sciences Center has been provided with its own stand-alone hot water heating system. A new heating hot water plant is being proposed in the King Street Art Center as part of the comprehensive renovation of this facility. This 6,492,000 btu/hr plant would include capacity and distribution piping for the King Street Art Center (3,240,000 btu/hr), Health Sciences Center (1,632,000 btu/hr), and future Cultural Arts Center (1,620,000 btu/hr).

#### **Cooling System**

In addition to heating hot water, the new plant in the Student Services Center will also provide chilled water to the southeastern portion of the Takoma Park Campus. The system of (2) electric ammonia chillers and (1) gas-fired chiller will deliver 692 tons of cooling. The distribution piping to the individual buildings is being planned under this current project, but will be installed in the future. Final connections to the buildings, heat exchanger equipment, and building system conversions shall also be provided in the future.

The new Health Sciences Center was installed with an electric, water-cooled chiller to provide cooling to the building. A new chilled water plant is being proposed in the King Street Art Center as part of the comprehensive renovation of this facility. This 675 ton plant would include cooling capacity and distribution piping for the King Street Art Center (315 tons), Health Sciences Center (200 tons), and future Cultural Arts Center (160 tons).

#### **Electrical**

The design of electrical systems will comply with the Montgomery County and Montgomery College Energy Design Guidelines, ASHRAE Std 90.1, and the National Electrical Code.

New electric services from PEPCO will be required for the proposed new buildings. Each building will be served at 480 volt from its own PEPCO transformer, separately metered. The transformers will be located on grade adjacent to each building. PEPCO will own primary feeders and transformers. PEPCO will also provide secondary conductors up to the property line. Each building will have a main electrical room. The new electric services are estimated as follows:

- The Science and Math Center will require a 2500 ampere, 480 volt service. A 12-way secondary duct bank from PEPCO transformer to the building will be provided by Montgomery College.
- The Structured Parking Garage will require a 600 ampere, 480 volt service. A 6-way secondary duct bank from the PEPCO transformer to the building will be provided by Montgomery College.
- The new Resource Center will require a 1200 ampere, 480 volt service. (The existing electric service to the building will be upgraded to accommodate this additional load.)

For the proposed building additions, the existing electric services will be evaluated and upgraded to accommodate the additional loads, if required. All these buildings will be served at 480 volts as well. The additional loads are estimated as follows:

- The renovation and possible addition to Falcon Hall will require a 200 ampere, 480 volt service.
- The renovation of the Commons Building, Classroom Pavilion, Child Care Pavilion, Humanities Pavilion, and Social Sciences Center will also require additional loads.

Instead of a separate electric service for each building, the College could request a single point 13.2 kV service from PEPCO. This would require installing a 13.2 kV underground primary loop, which would supply transformers feeding each building. Instead of a separate electric service for each building, a single point 13.2 kV service from PEPCO will also be evaluated. It will require installing a 13.2 kV underground primary loop in a 2-way ductbank around the campus. The 13.2 kV loop will originate from the load side of the PEPCO meter, and will supply power to transformers feeding each building. The College will own and operate all electrical distribution systems on the load side of the meter, i.e. primary and secondary feeders and transformers. The College will also need to enter into a contract with an outside firm to handle both routine maintenance and emergency service. Savings in electrical energy and demand charges would be realized due to a lower rate schedule and reduced campus demand.

A feasibility study will be performed for on-site power generation, including the use of alternate energy sources such as solar power. Central inverters vs. on-site power generation systems will be evaluated for each individual building. An engine generator instead of central inverter is proposed for buildings housing critical functions, such as central security, central telephone and information technology system. If central inverters are used to supply the emergency power, one inverter (25-50kVA) will be provided in each of the proposed new buildings. The inverter will be located in the main electrical room. For additions to existing buildings, the existing emergency power systems will be evaluated and upgraded, if required.

### **Emergency Power Systems**

Emergency power will be required for life safety systems (i.e. emergency and egress lighting, fire alarm system, etc). In addition, emergency power may be needed to support telephone and security systems.

Central inverters will be used to supply the emergency power. One inverter (25-50kVA) will be provided in each of the proposed new buildings. The inverter will be located in the main electrical room. For additions to existing buildings, the existing emergency power systems will be evaluated, and if required, upgraded.

An engine generator instead of central inverter is proposed for buildings housing critical functions, such as the central security office and the central telephone and information technology system. If a generator is provided, the emergency equipment will be segregated into Emergency, Legally Required Standby, and Optional Standby Systems in accordance with NEC Article 700-702. The generator will be located adjacent to the building.

The requirement for an Uninterruptible Power Supply (UPS) system to protect any non-interruptible loads will be evaluated at schematic design stage for each project.

#### **Building Automation Control Systems**

To the maximum extent possible the building systems shall be integrated using IP technology to provide the maximum cost savings and flexibility. The building automation control systems will comply with the ASHRAE Standard 135, Building Automation Control Network, An Open Protocol (BACnet).

#### **Fire Alarm System**

An upgrade of the existing fire alarm system is required where additions to existing buildings are proposed. An addressable type fire alarm system is recommended for all new buildings. Provisions should also be made for remote monitoring at a central fire command center. Fire alarm systems will have an open protocol, and will be compatible for integration with other building management systems.

#### **Information Technology Systems**

The telephone and information technology system will be centralized and designed in accordance with Montgomery College's Cable and Wire Infrastructure Specifications, and Information Technologies and Security System Design Guidelines.

The system will include copper and fiber optic cabling, underground ductbank and manhole systems to the central hub. Presently, the central hub for the information technology system is located in the Resource Center, and the main telephone room is located in the Math Pavilion. However, these facilities will be moved to the new Student Services Center under the 10 year plan. The conduits must be sized to accommodate the required amount of cabling being routed from one location to another, and the inner duct partitioned to separate the conduits into a series of multiple partitioned raceways. Telephone and data outlets, and cable tray systems will be provided throughout buildings. Moreover, telecommunication rooms housing MDF/IDF should be provided.

**Security**

The design of building security systems will comply with Montgomery College Information Technologies and Security System Design Guidelines. Security systems will have an open protocol, and will be compatible for integration with other building management systems.

The security system for the proposed new buildings will be based on a centralized computer-based Security Management System (SMS) for the safety and protection of students, faculty, assets, property and buildings. The overall SMS will integrate and incorporate CCTV where campus personnel or property may be at risk, access control for various spaces in the building and ground floor entrances, intrusion alarm system at areas subject to robbery or break-in, and alarm monitoring functions.

The security system will consist of a host, workstations, and monitoring and control systems, intelligent data gathering panels, and video transmission equipment.

An Uninterruptible Power Supply (UPS) system will support and sustain key functions of the security system during a power outage.

**2.4.4 Proposed Stormwater Management**

Stormwater management quantity control will be waived per current standards if the impervious area in pre-development condition and post-development condition remains the same.

The proposed site plan shows a slight increase in impervious area on the eastern section of the Takoma Park Campus. As such, any future building in this area will be required to provide for stormwater quality control. Due to the restriction of available space and for ease of construction, stormfilters are recommended. A stormfilter is recommended for the Cultural Arts Center site as well.

**2.4.5 Proposed Circulation and Parking**

This section presents a generalized assessment of the Facilities Master Plan from a transportation perspective. As earlier sections note, the plan proposes several land use initiatives for the 2012 horizon period. The key proposals and potential transportation impacts and needs associated with those changes are discussed and evaluated below.

**Vehicular Access**

The campus plan proposes no changes to the existing vehicular access situations. The eastern section of the campus (situated east of the CSX/WMATA Railroad Corridor) is accessed directly from Fenton Street, Chicago Avenue, New York Avenue and Takoma Avenue. The western section is accessed from Georgia Avenue (US 29) at the King Street and Jesup Blair Drive intersections. The two sections are connected by Burlington Avenue (MD 410), which intersects with Fenton Street and Georgia Avenue.

**Vehicle Trip Generation Impacts**

The potential traffic generation and circulation impacts of the Master Plan are primarily based on the types and distribution of land use changes proposed, as well as the projected

# Takoma Park Campus Proposed Roadway Improvements 2002 - 2012



- Landscaped area or quadrangle
- Existing building to remain
- Building presently under construction
- New campus building
- Renovated building
- New parking structure

- CA - COMMUNICATIONS ARTS CENTER
- CM - THE COMMONS
- DC - CHILD CARE CENTER
- FH - FALCON HALL (PHYSICAL EDUCATION)
- GR - PARKING GARAGE
- HC - HEALTH SCIENCES CENTER
- KS - KING STREET ART CENTER
- IS - INFORMATION SCIENCES PAVILION
- MP - MATHEMATICS PAVILION
- NP - NORTH PAVILION
- PB - PEDESTRIAN BRIDGE
- PF - PAVILION OF FINE ARTS
- RC - RESOURCE CENTER
- SC - STUDENT SERVICES CENTER
- SN - SCIENCE NORTH
- SS - SCIENCE SOUTH
- SP - SOCIAL SCIENCES PAVILION
- ST - STUDENT SERVICES PAVILION



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changes in the campus population. The Master Plan proposes building demolitions, renovations and the development of new building facilities within the eastern and western sections of the campus. The proposed new facilities include the Student Services Center to be located east of Fenton Street in the area of Chicago Avenue; the newly completed Health Sciences Center east of Georgia Avenue and south of King Street; the King Street Art Center located east of the Health Sciences Center; and the Cultural Arts Center to be developed within the southeastern quadrant of the Georgia Avenue/Burlington Avenue intersection.

The new Health Sciences Center is expected to generate the highest vehicular demand during the period 10:00 AM- 4:00 PM. Major events associated with the Cultural Arts Center or the King Street Art Center would be scheduled after hours (6:00 - 10:00 PM) and on weekends. The trip generation impacts of these uses on the morning and afternoon peak hours of the local area roadways would therefore be moderate. It is noted, however, that those developments would primarily provide services already available within the eastern section of the campus. This re-distribution of services would produce a minor to moderate shift of weekday peak hour and daily vehicular trips from the eastern section to the expanded campus.

The Facilities Master Plan indicates that the proposed land use improvements are based on projected changes in full-time equivalent (FTE) day students, faculty and staff. These changes would have the greatest impact on the future trip generation and parking demands. Forecasts developed recently by the College show the total FTE campus population increasing from 1,945 (2002) to 3,036 (2012), representing a growth of approximately 54 percent. The projected incremental campus population consists of 983 FTE daytime students and 108 FTE daytime faculty and staff members. Based on the Institute of Transportation Engineers (ITE) Trip Generation Manual (7<sup>th</sup> Edition, 2003), and utilizing a transit usage factor of 5 percent, the horizon year incremental campus population would generate vehicular peak hour trip totals of 280 and 255 during the morning and afternoon peak hours, respectively. Peak hour trip totals could be reduced with an increase in the transit usage factor. Transportation incentives offered to students is one means of achieving a higher transit usage factor.

The planned land use and population changes are quite comparable with those recommended in the 1998 Campus Facilities Master Plan, and included in the 2001 M-NCPPC Mandatory Referral Review Process. The only change is the addition of the King Street Art Center to the Campus's property. Traffic studies conducted in support of the M-NCPPC Mandatory Referral Review indicate that the Georgia Avenue/Burlington Avenue and Georgia Avenue/Blair Road intersections would be approaching full capacity conditions by year 2007. All other adjacent intersections would operate with significant reserve capacity.

Review of historical Average Daily Traffic (ADT) data obtained from the Maryland State Highway Administration indicates that traffic volumes along Georgia Avenue have increased at an average annual rate of 2.4 percent over the period 1995 - 2002. Considering this trend, the potential re-distribution of vehicular trips to the Georgia

Avenue Corridor, and the projected trip generation for the incremental campus population, it is projected that capacity improvements may be required at the Georgia Avenue at Burlington Avenue and at Blair Road intersections within the 2012 horizon period.

The Facilities Master Plan indicates that over 250 parking spaces would be provided within the western section of the campus to serve the adjacent Health Sciences, Cultural Arts, and King Street Art Centers. That parking would be accessed off Georgia Avenue via King Street and Jesup Blair Drive. Both access points are currently unsignalized. The King Street access point, which would be utilized by a greater proportion of the trips, provides access to commercial developments and public parking located along this roadway to the west of Georgia Avenue. Jesup Blair Drive also provides primary vehicular access to the adjacent Jesup Blair Park. Based on these considerations, signalization, geometric and pedestrian crossing improvements should be considered at these access points.

### **Pedestrian Circulation**

The dominant pedestrian access desire lines occur between the Fenton Street parking garage and the main campus core, as well as along the adjacent segments of New York Avenue and Chicago Avenue. These patterns would continue with the Facilities Master Plan implementation. In addition, significant pedestrian movements would occur between the eastern and western sections of the campus, as well as along the adjacent Georgia Avenue and Burlington Avenue roadway segments. The Facilities Master Plan proposes a pedestrian bridge across the railroad tracks, to connect the eastern and western sections. This bridge, currently under construction, will enhance pedestrian safety and reduce intra-campus vehicular circulation and related traffic impacts. However, pedestrian safety along Georgia Avenue and Burlington Avenue should be addressed, particularly due to the physical and functional characteristics of these roadways.

### **Parking**

The campus is currently provided with 663 ± garage parking spaces and 121 off-street parking spaces, totaling 784 parking spaces. The peak daytime occupancy is approximately 85 percent. Based on the Master Plan proposals, 36 spaces would be lost within the eastern section (to facilitate the development of the new Student Services Center). Approximately 450 new parking spaces (including 150 within the planned King Street Arts Center garage), would be provided within the western section of the campus. These changes would result in a total future on-campus parking supply of approximately 1,198 spaces.

The future parking demand for the campus was developed based on the year 2002 Full Time Equivalent (FTE) day campus population to peak parking demand ratio (0.30), and the application of this ratio to the projected 2012 FTE population. The parking generation rates recommended in "The Dimensions of Parking" (1993) published by the Urban Land Institute (ULI) were also considered for comparative purposes. Based on the projected 2012 FTE population of 3,036, and considering a practical parking capacity factor of 95 percent, a parking supply in the range of 1,065 spaces would be required to serve the horizon year daytime campus uses. The on-campus parking supply of 1,198

spaces exceeds this number. If an unexpected, short-term parking demand exceeded this number of spaces on campus, the deficit would be adequately accommodated by the current availability of 100 ± on-street parking spaces (adjacent to the eastern section) and 105 ± on and off-street public spaces (located immediately west of Georgia Avenue.)

The Facilities Master Plan presents considerable opportunities for shared parking usage. Daytime demand would be generated mainly by classroom activity and administrative functions. The evening and nighttime demand would be generated primarily by significantly lower class activity, as well as events associated with the planned Cultural Arts Center and King Street Arts Center. Parking usage surveys conducted annually by the College indicate that approximately 50 percent of the campus parking is available in the evening, compared with approximately 15 percent during the peak daytime period. Parking analyses conducted for the Cultural Arts Center indicate that this use would generate a peak nighttime parking demand of approximately 240 spaces. This demand would be accommodated adequately and conveniently by the adjacent public on- and off-street campus parking spaces. It is also envisaged that the future King Street garage would be used for major events at the Cultural Arts Center or the King Street Arts Center.

In summary, the proposed Master Plan could be accommodated without significant adverse impacts on the local area transportation system. The key issues identified relate to operational efficiency, capacity and safety along the adjacent Georgia Avenue segment. The adjacent upgrading of the intersections along that segment, as shown in Figure 9, should be considered. This could be done in collaboration with the State Highway Administration and the Montgomery County Department of Transportation.

#### **2.4.6 Implementation**

Based on the College's anticipated enrollment growth over the 2002 to 2012 period, and supported by the instructional and other needs identified during the master planning process, the College has identified a number of capital projects for the Takoma Park Campus. Implementation of these projects will allow the College to provide for the physical space needs of the Campus over the ensuing 10-year period. Detailed facility programs will be prepared for each project as the College's capital funding requests are developed for submission to the State of Maryland and Montgomery County.

Throughout this section the term "new construction" is used to describe a completely new facility, while the term "renovation" is used to describe a complete interior and exterior reconstruction of an existing facility. An "alteration" is used to describe a lesser level of effort than a renovation that does not anticipate extensive program modifications to a facility and the term "addition" is used to describe "new construction" that provides for a major enlargement of an existing facility.

The following table lists the Takoma Park Campus projects included in this 10-Year Facilities Master Plan, as well as project budget estimates. A brief description for each project is provided to explain the major components of the scope of work used as the basis for the budget estimate. With regard to scheduling, the Campus projects are separated into a near-term need (2002 to 2007) and a long-term need (2008-2012). Based on current

plans, the projects are presented in the recommended sequence for implementation; however, changes in program priorities may lead to changes in the implementation plan.

**Table 2.4.6-1  
Capital Projects for the Takoma Park Campus**

<b>Project</b>	<b>Budget Estimate in Dollars (1/04)</b>
<b>Near-Term Capital Projects (FY 2004 - FY 2007)</b>	
Pedestrian Bridge	3,290,000
Student Services Center including Central Plant and demolition of Social Sciences Pavilion	29,806,000
Central Plant Utility Distribution	2,080,000
Commons Renovation	6,040,000
Information Systems and Student Services Pavilions Renovation	4,420,000
King Street Art Center Renovation including interior parking	28,500,000
Pavilion of Fine Arts Renovation	4,031,000
Cultural Arts Center	24,270,000
Parking Structure #2 (existing parking structure is Parking Structure #1)	6,300,000
<b>Subtotal</b>	<b>108,741,011</b>
<b>Long-Term Capital Projects (FY 2007 - FY 2012)</b>	
Communication Arts Center Renovation	5,790,000
Science and Math Center in two phases including demolition of Science North and South	45,126,000
Resource Center in two phases including demolition of existing Resource Center, North Pavilion and Mathematics Pavilion.	31,332,000
Falcon Hall Addition and Renovation	5,762,000
<b>Subtotal</b>	<b>88,014,019</b>

**Pedestrian Bridge (New Construction):**

The first phase (span) of the bridge over the WMATA/CSX railroad tracks is currently under construction (2/04). The second phase (span) of the bridge will be constructed concurrently with the Student Services Center to which it is connected.

**Student Services Center (New Construction):**

The Student Services Center is currently under design and is anticipated to begin construction in August 2004. Construction of the Center requires the prior demolition of the Social Sciences Pavilion which will occur in mid-2004. This demolition work is

included in the overall project. Also a part of the Center's construction is the Campus' central heating and cooling plant which will be housed in the basement of the building.

**Central Plant Utility Distribution (New Construction):**

This project requires the completion of the Central Plant in the Student Services Center. The distribution system project will extend heating and cooling piping to all existing Campus buildings east of the railroad tracks (except the Child Care Center). Future building renovation projects will include the individual building tie-in work and replacement of existing stand-alone mechanical equipment.

**Commons Renovation:**

This building currently houses many functions that will be relocated to the new Student Services Center when it is completed in mid-2006. Once vacated, the building will be renovated to other Campus requirements identified in the Master Plan.

**Information Sciences Pavilion & Student Services Pavilion Renovations:**

These buildings currently house many functions that will be relocated to the new Student Services Center when it is completed in mid-2006. Once vacated, the buildings will be renovated to other Campus requirements identified in the Master Plan.

**King Street Art Center Renovation:**

This project provides for the renovation of the former Giant Food bakery building purchased by the College in 2001. The renovated facility will house the Campus' Art Department (relocated from the Pavilion of Fine Arts) and the Maryland College of Arts and Design following the merger with the College.

**Pavilion of Fine Arts Renovation:**

This building currently houses the campus' Art Department that will be relocated to the renovated King Street Art Center when it is completed in late 2006. Once vacated, the building will be renovated to other Campus requirements identified in the Master Plan.

**Cultural Arts Center (New Construction):**

The Cultural Arts Center is the third building included in the original Takoma Park Campus expansion plan. In addition to the College's program requirements, it is anticipated that the County may provide support for inclusion of a cable television training studio in the facility and Discovery Communications may also support the project with the inclusion of a sound studio in the building. Plans for both of these two possibilities will be finalized as part of a facility program update currently being prepared by the College.

**Parking Garage No. 2 (New Construction):**

Parking Garage No. 2 is anticipated to be located east of the former Giant Food bakery building alongside the WMATA/CSX tracks. This approximately 300-space garage will serve the new Cultural Arts Center and the other facilities on the west side of the railroad tracks.

**Communication Arts Center Renovation:**

This building currently houses a number of functions that will be relocated to the new Cultural Arts Center when it is anticipated to be completed in 2008. Once vacated, the buildings will be renovated to other Campus requirements identified in the Master Plan. The project includes the enclosure of the existing center courtyard of the building up to the third floor.

**Science and Math Center (New Construction):**

This project will be constructed in two major phases on the site of the existing Science South and Science North buildings. Science South currently house two science labs (after the relocation of all other health science labs to the new Health Sciences Center in January 2004), as well as general purpose instructional spaces, faculty offices, and Campus physical plant shops and offices. The demolition of Science South will make way for the construction of the first phase of the new Science and Math Center. Once Phase 1 is completed and existing instructional programs are relocated from Science North into the new facility, Science North will be demolished to make way for Phase 2 of the new Science and Math Center.

**Resource Center (New Construction):**

This project will be constructed in two major phases on the site of the existing North and Math Pavilions, and the existing Resource Center. The two pavilions currently house general purpose instructional spaces and faculty offices, and the existing Resource Center currently houses the Campus library, general purpose instructional spaces, assessment labs, and various Campus instructional support facilities. The demolition of the North and Math Pavilions will make way for the construction of the first phase of the new Resource Center in two parts to the north and south of the existing Resource Center. Once Phase 1 is completed and existing programs are relocated from the old Resource Center into the new facility, the old Resource Center will be demolished to make way for Phase 2 of the new Resource Center. This project will also include site improvements that are part of the new Campus open space between the Science and Math Center and the new Resource Center.

**Falcon Hall Addition/Renovation:**

This building houses the Campus' physical education programs. It is anticipated that this facility will be expanded and renovated to meet the Campus requirements identified in the Master Plan.

**TP-A1      Zoning Analysis**

**ZONING ANALYSIS – STANDARD METHOD**

**Applicable Code:** Montgomery County Zoning Ordinance, 1994 (with updates through January 2001)

East Silver Spring Master Plan Planning Board Draft – December 2000

Takoma Park Master Plan Planning Board Draft – December 2000

Property Address	Area bounded by Fenton Street to the north and west, New York Avenue to the north and east, and Takoma Ave to the south.	
Zone	R-60 Single Family Residential  All requirements indicated are for R-60 unless noted otherwise	East Silver Spring Master Plan (page B-15), and Takoma Park Master Plan (page B-6).
Proposed Use(s)	Publicly Owned or Publicly Operated Use  Other similar uses permitted include Private Educational Institutions and Professional Offices	Permitted – Zoning Ordinance Section 59-C-1.31  Permitted by Special Exception – Zoning Ordinance Section 59-C-1.3.1
Minimum Net Lot Area	6,000 SF (Required for single-family detached dwelling. Minimum lot area for other uses not identified.)  334,849 SF Gross Lot Area 287,506 SF Net Lot Area after Dedication for Public Use for R.O.W	Section 59-C-1.322. Applies to one-family detached dwelling. Lot areas for other uses are not addressed.
Max. Building Coverage	35% = 117,197 GSF  Proposed: 129,213 GSF (45%)	Section 59-C-1.328
Min. Public Space	Not Applicable	
Max. Density of Development (FAR)	Not Applicable	
Max. Building Height	35 feet  40 feet or 3 stories (whichever is	Section 59-C-6.1.327. Measured from the street grade opposite the middle of

	<p>less) if approved by the Planning Board through the site plan approval procedures of division 59-D-3.</p> <p>120 feet in any zone wherein public and quasi-public buildings are permitted; but the minimum front, rear, and side yards shall be increased one foot for each one foot by which such building exceeds the height limit herein established for the zone in which such building is erected.</p> <p>Proposed: Roofs near the residential New York Avenue is at 30'-0" (One floor is below street level grade or third floor building mass has been set back 12'-0" at New York Avenue). Roofs of the new buildings along Fenton Street are 60'-0" or 45'-0" if one level is below grade.</p>	<p>the front of a building to the highest point of roof surface of a flat roof.</p> <p>Section 59-A-5.42</p>
Setbacks	<p>1. Fenton Street</p> <p>Greater of 25 feet or distance to an established building line from ROW</p> <p>Proposed: The Student Services center has established a 25 feet setback from ROW. (Building mass has been shifted towards Fenton Street to allow greater building and 3<sup>rd</sup> floor setbacks at New York Avenue). An additional 5' setback is necessary if building height is 45'-0", an addition 20' is necessary if the height is 60'-0"</p> <p>2. New York Avenue</p> <p>Greater of 25 feet or distance to an established building line from ROW.</p> <p>25 feet governs.</p> <p>Proposed: 25 feet</p> <p>3. Side Yard</p>	<p>Section 59-C-1.323 (a)</p> <p>Established Building Line – Section 59-A-5.33</p> <p>ROW is 72 feet at Fenton Street. Existing Building line at Fenton Street for Science North and South is currently 63 feet from ROW. Building Line established by Student Service Center is 25 feet from ROW.</p> <p>Section 59-C-1.323 (a)</p> <p>Established Building Line – Section 59-A-5.33</p> <p>Based on existing 40 foot ROW.</p> <p>Section 59-C-1.323 (b)</p>

	<p>8 feet from adjoining lot (minimum side yard, 18 feet total side yard)</p> <p>Proposed: 12 feet to imaginary property line half-way between proposed Student Services Center and proposed Math and Science Center (site of existing Science North building)</p> <p>Proposed: 15 feet to imaginary property line half-way between proposed Student Services Center and proposed Resource Center (site of existing Montgomery College North Pavilion)</p>	
<p>Parking</p>	<p>There are no set parking requirements for the above use given in the Zoning Code. The parking study analysis establishes the requirements.</p> <p>Proposed: Reference section 2.4.5 of this Facilities Master Plan for an analysis of parking needs and provisions.</p>	<p>The Traffic Impact Analysis shows that the overall parking needs of the campus are met.</p>

**ZONING ANALYSIS**

**Applicable Code:** Montgomery County Zoning Ordinance, 1994

Property Address	Property on the east side of Georgia Avenue between King Street and Burlington Ave. consisting of Lots 8, 9, 10, 21, 22 and 23.	
Zone	CBD-1	As adopted by Montgomery County from M-NCPPC Silver Spring Central Business District Sector Plan
Proposed Use(s)	Educational Institutions, Private;	Permitted - Section 59-C-6.22
Min. Lot Area	(None Required with Standard Method)  95,128 SF (Gross Lot Area) 86,175 SF (Net Lot Area after Dedication for Public Use for Revised R.O.W)	Section 59-C-6.231  Per CBD Rights of Way, Map 21, pg. 66 (see below)
Max. Building Coverage	75 % = 71,346 SF  Proposed: 27,719 SF	Section 59-C-6.232
Min. Public Space	10 % = 9,513 SF  Proposed: 11,042 SF	Section 59-C-6.233
Max. Density of Development (FAR)	1.0 (95,128 GSF Allowable)  Proposed: approx. 42,000 GSF	Section 59-C-6.234
Max. Building Height	60 feet	Section 59-C-6.235

Revisions to ROW	<ol style="list-style-type: none"> <li>1. 40 feet (North) from present CL of King Street</li> <li>2. 40 feet (South) from present CL of Burlington Avenue</li> </ol>	<p>Per CBD Rights-Of –Way, Map 21, pg 66 of M-NCPPC Silver Spring Central Business District Sector Plan Required revision to 60 FT will occur on north side of King Street.</p>
Setbacks	<ol style="list-style-type: none"> <li>1. 0 feet from all Rights of Way (to 30 feet height), plus 1 foot for every 6 feet by which the building or structure exceeds 30 feet)</li> <li>2. 15 feet from adjoining lot occupied by a non-residential building</li> </ol>	<p>Per CBD Rights-Of –Way, Fig. 6, pg 108 of M-NCPPC Silver Spring Central Business District Sector Plan</p> <p>Section 59-C-6.236.(b).(2)</p>
Parking	<ol style="list-style-type: none"> <li>1. <u>Quantity of Spaces:</u> For private educational institution, provide one parking space for each employee, including teachers and administrators, plus sufficient off-street parking space for the safe and convenient loading and unloading of students, plus additional facilities for all student parking.</li> <li>2. <u>Setbacks:</u> Provide minimum 10 feet wide landscaped area between parking and adjacent public ROW</li> </ol>	<p>Section 59-E-3.7</p> <p>Section 59-E-2.71</p>

**TP-A2      Computation of  
Space Needs**

**FACILITIES INVENTORY BY BUILDING**

COLLEGE: Montgomery College-Takoma Park

FMP: October 20, 2003

		Year Built:						
		1978	1980	1978	1975	1978	1978	1975
HEGIS CODE	HEGIS CATEGORY	1 Commons	2 CAC	3 Falcon Hall	4 Math Pavilion	5 Resource Center	6 Science North	7 Social Sci. Pavilion
<b>100</b>	<b>CLASSROOM</b>		<b>5,208</b>	<b>459</b>	<b>2,430</b>	<b>2,692</b>	<b>5,263</b>	<b>2,758</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>2,888</b>	<b>1,440</b>	<b>484</b>	<b>4,412</b>	<b>17,537</b>	<b>0</b>
210	Class Laboratory		2,888	1,440			15,850	
220	Open Laboratory				484	4,412	1,687	
250	Research Lab.							
<b>300</b>	<b>OFFICE</b>	<b>7,010</b>	<b>834</b>	<b>1,137</b>	<b>1,160</b>	<b>6,716</b>	<b>2,141</b>	<b>1,604</b>
310	Office/ Conf. Room	7,010	834	1,137	1,160	4,048	2,141	1,604
320	Testing/Tutoring					2,668		
350	Included w/ 310							
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16,256</b>	<b>0</b>	<b>0</b>
410	Study					416		
420-30	Stack/ Study					14,713		
440-55	Processing/ Service					1,127		
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>66</b>	<b>25,597</b>	<b>0</b>	<b>2,221</b>	<b>0</b>	<b>0</b>
520-23	Athletic			25,597				
530	Media Production		66			2,221		
580	Greenhouse							
<b>600</b>	<b>GENERAL USE</b>	<b>9,314</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>497</b>	<b>0</b>	<b>0</b>
610	Assembly							
620	Exhibition							
630	Food Facility	6,087						
640	Day Care							
650	Lounge	1,501				497		
660	Merchandising	1,726						
670	Recreation							
680	Meeting Room							
<b>700</b>	<b>SUPPORT</b>	<b>170</b>	<b>0</b>	<b>0</b>	<b>258</b>	<b>300</b>	<b>1,869</b>	<b>0</b>
710	Data Processing					300		
720	Shop						1,192	
730	Central Storage	94					384	
740	Vehicle Storage							
750	Central Service	76			258			
760	Hazmat Storage						293	
<b>800</b>	<b>HEALTH CARE</b>	<b>86</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>550</b>	<b>DEMONSTRATION</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>Other (Planetarium)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>Other Organization</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>16,580</b>	<b>8,996</b>	<b>28,633</b>	<b>4,332</b>	<b>33,094</b>	<b>26,810</b>	<b>4,362</b>
	<b>Total GSF:</b>	<b>25,070</b>	<b>15,873</b>	<b>39,063</b>	<b>6,942</b>	<b>44,906</b>	<b>39,950</b>	<b>6,942</b>
	<b>Efficiency (%):</b>	<b>0.66</b>	<b>0.57</b>	<b>0.73</b>	<b>0.62</b>	<b>0.74</b>	<b>0.67</b>	<b>0.63</b>

**FACILITIES INVENTORY BY BUILD**

COLLEGE: Montgomery College-Tak

FMP: October 20, 2003

		Year Built:						
		1975	1978	1975	1975	1980	1924	1975
HEGIS CODE	HEGIS CATEGORY	8	9	10	11	12	13	14
		Fine Arts Pavilion	Science South	Info. Sci. Pavilion	Nursing Pavilion	Parking Garage	Child Care	Student Serv. Pavilion
<b>100</b>	<b>CLASSROOM</b>	<b>1,449</b>	<b>3,390</b>		<b>841</b>			
<b>200</b>	<b>LABORATORY</b>	<b>5,371</b>	<b>4,878</b>	<b>3,424</b>	<b>1,741</b>	<b>0</b>	<b>0</b>	<b>0</b>
210	Class Laboratory	5,371	4,878	3,257	1,741			
220	Open Laboratory			167				
250	Research Lab.							
<b>300</b>	<b>OFFICE</b>	<b>3,392</b>	<b>2,782</b>	<b>910</b>	<b>1,585</b>	<b>0</b>	<b>239</b>	<b>4,254</b>
310	Office/ Conf. Room	3,392	2,782	910	1,585		239	4,254
320	Testing/Tutoring							
350	Included w/ 310							
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>400</b>
410	Study							400
420-30	Stack/ Study							
440-55	Processing/ Service							
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>717</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
520-23	Athletic							
530	Media Production							
580	Greenhouse		717					
<b>600</b>	<b>GENERAL USE</b>	<b>384</b>	<b>559</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,191</b>	<b>0</b>
610	Assembly		559					
620	Exhibition	384						
630	Food Facility							
640	Day Care						1,191	
650	Lounge							
660	Merchandising							
670	Recreation							
680	Meeting Room							
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>2,625</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>161</b>	<b>0</b>
710	Data Processing		88					
720	Shop		2,406				161	
730	Central Storage							
740	Vehicle Storage							
750	Central Service							
760	Hazmat Storage		131					
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>550</b>	<b>DEMONSTRATION</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>Other (Planetarium)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>Other Organization</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>10,596</b>	<b>14,951</b>	<b>4,334</b>	<b>4,167</b>	<b>0</b>	<b>1,591</b>	<b>4,654</b>
	<b>Total GSF:</b>	<b>15,013</b>	<b>23,757</b>	<b>7,386</b>	<b>6,942</b>	<b>224,310</b>	<b>3,310</b>	<b>7,385</b>
	<b>Efficiency (%):</b>	<b>0.71</b>	<b>0.63</b>	<b>0.59</b>	<b>0.60</b>	<b>0.00</b>	<b>0.48</b>	<b>0.63</b>

**FACILITIES INVENTORY BY BUILD**

COLLEGE: Montgomery College-Tak

FMP: October 20, 2003

Year Built:

HEGIS CODE	HEGIS CATEGORY	15	Total Permanent On Campus	1 WDCE	2 Central Admin	Total Temporary On Campus	Total All Space On Campus	1 LC STC Fenton
<b>100</b>	<b>CLASSROOM</b>		<b>24,490</b>			<b>0</b>	<b>24,490</b>	
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>42,175</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42,175</b>	<b>5,463</b>
210	Class Laboratory		35,425			0	35,425	
220	Open Laboratory		6,750			0	6,750	5,463
250	Research Lab.		0			0	0	
<b>300</b>	<b>OFFICE</b>	<b>0</b>	<b>33,764</b>	<b>423</b>	<b>0</b>	<b>423</b>	<b>33,341</b>	<b>1,187</b>
310	Office/ Conf. Room		31,096	346		346	30,750	1,027
320	Testing/Tutoring		2,668	77		77	2,591	160
350	Included w/ 310		0			0	0	
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>16,656</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16,656</b>	<b>0</b>
410	Study		816			0	816	
420-30	Stack/ Study		14,713			0	14,713	
440-55	Processing/ Service		1,127			0	1,127	
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>28,601</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28,601</b>	<b>0</b>
520-23	Athletic		25,597			0	25,597	
530	Media Production		2,287			0	2,287	
580	Greenhouse		717				717	
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>11,945</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,945</b>	<b>463</b>
610	Assembly		559			0	559	
620	Exhibition		384			0	384	
630	Food Facility		6,087			0	6,087	
640	Day Care		1,191			0	1,191	
650	Lounge		1,998			0	1,998	463
660	Merchandising		1,726			0	1,726	
670	Recreation		0			0	0	
680	Meeting Room		0			0	0	
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>5,383</b>	<b>0</b>		<b>0</b>	<b>5,383</b>	<b>0</b>
710	Data Processing		388			0	388	
720	Shop		3,759			0	3,759	
730	Central Storage		478			0	478	
740	Vehicle Storage		0			0	0	
750	Central Service		334			0	334	
760	Hazmat Storage		424			0	424	
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>86</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>86</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>550</b>	<b>DEMONSTRATION</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>Other (Planetarium)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>Other Organization</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>0</b>	<b>163,100</b>	<b>423</b>	<b>0</b>	<b>423</b>	<b>162,677</b>	<b>7,113</b>
	<b>Total GSF:</b>		<b>466,849</b>	<b>423</b>		<b>423</b>	<b>467,272</b>	<b>7,113</b>
	<b>Efficiency (%):</b>	<b>#DIV/0!</b>	<b>0.35</b>	<b>1.00</b>	<b>#DIV/0!</b>	<b>1.00</b>	<b>0.35</b>	<b>1.00</b>

**FACILITIES INVENTORY BY BUILD**

COLLEGE: Montgomery College-Tak

FMP: October 20, 2003

Year Built:

HEGIS CODE	HEGIS CATEGORY	2	Total Leased & Off Campus	Total All Space On & Off
<b>100</b>	<b>CLASSROOM</b>		<b>0</b>	<b>24,490</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>5,463</b>	<b>47,638</b>
210	Class Laboratory		0	35,425
220	Open Laboratory		5,463	12,213
250	Research Lab.		0	0
<b>300</b>	<b>OFFICE</b>	<b>0</b>	<b>1,187</b>	<b>34,528</b>
310	Office/ Conf. Room		1,027	31,777
320	Testing/Tutoring		160	2,751
350	<i>Included w/ 310</i>		0	0
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>16,656</b>
410	Study		0	816
420-30	Stack/ Study		0	14,713
440-55	Processing/ Service		0	1,127
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>28,601</b>
520-23	Athletic		0	25,597
530	Media Production		0	2,287
580	Greenhouse			717
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>463</b>	<b>12,408</b>
610	Assembly		0	559
620	Exhibition		0	384
630	Food Facility		0	6,087
640	Day Care		0	1,191
650	Lounge		463	2,461
660	Merchandising		0	1,726
670	Recreation		0	0
680	Meeting Room		0	0
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>0</b>	<b>5,383</b>
710	Data Processing		0	388
720	Shop		0	3,759
730	Central Storage		0	478
740	Vehicle Storage		0	0
750	Central Service		0	334
760	Hazmat Storage		0	424
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>86</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>550</b>	<b>DEMONSTRATION</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>Other (Planetarium)</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>Other Organization</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>0</b>	<b>7,113</b>	<b>169,790</b>
	<b>Total GSF:</b>		<b>7,113</b>	<b>474,385</b>
	<b>Efficiency (%):</b>	<b>#DIV/0!</b>	<b>1.00</b>	<b>0.36</b>

**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-Takoma Park

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Fall 2001 Before Gains/ (Losses)			Fall 2002 After Gains/ (Losses)			Fall 2003 After Gains/ (Losses)
<b>100</b>	<b>CLASSROOM</b>	<b>24,490</b>	<b>0</b>	<b>0</b>	<b>24,490</b>	<b>0</b>	<b>0</b>	<b>24,490</b>
<b>200</b>	<b>LABORATORY</b>	<b>47,638</b>	<b>0</b>	<b>0</b>	<b>47,638</b>	<b>0</b>	<b>0</b>	<b>47,638</b>
210	Class Laboratory	35,425			35,425			35,425
220	Open Laboratory	12,213			12,213			12,213
250	Research Lab.	0			0			0
<b>300</b>	<b>OFFICE</b>	<b>34,528</b>	<b>0</b>	<b>0</b>	<b>34,528</b>	<b>0</b>	<b>0</b>	<b>34,528</b>
310	Office/ Conf. Room	31,777			31,777			31,777
320	Testing/Tutoring	2,751			2,751			2,751
350	Included w/ 310	0			0			0
<b>400</b>	<b>STUDY</b>	<b>16,656</b>	<b>0</b>	<b>0</b>	<b>16,656</b>	<b>0</b>	<b>0</b>	<b>16,656</b>
410	Study	816			816			816
420-30	Stack/Study	14,713			14,713			14,713
440-55	Processing/Service	1,127			1,127			1,127
<b>500</b>	<b>SPECIAL USE</b>	<b>28,601</b>	<b>0</b>	<b>0</b>	<b>28,601</b>	<b>0</b>	<b>0</b>	<b>28,601</b>
520-23	Athletic	25,597			25,597			25,597
530	Media Production	2,287			2,287			2,287
580	Greenhouse	717			717			717
<b>600</b>	<b>GENERAL USE</b>	<b>12,408</b>	<b>0</b>	<b>0</b>	<b>12,408</b>	<b>0</b>	<b>0</b>	<b>12,408</b>
610	Assembly	559			559			559
620	Exhibition	384			384			384
630	Food Facility	6,087			6,087			6,087
640	Day Care	1,191			1,191			1,191
650	Lounge	2,461			2,461			2,461
660	Merchandising	1,726			1,726			1,726
670	Recreation	0			0			0
680	Meeting Room	0			0			0
<b>700</b>	<b>SUPPORT</b>	<b>5,383</b>	<b>0</b>	<b>0</b>	<b>5,383</b>	<b>0</b>	<b>0</b>	<b>5,383</b>
710	Data Processing	388			388			388
720	Shop	3,759			3,759			3,759
730	Central Storage	478			478			478
740	Vehicle Storage	0			0			0
750	Central Service	334			334			334
760	Hazmat Storage	424			424			424
<b>800</b>	<b>HEALTH CARE</b>	<b>86</b>	<b>0</b>	<b>0</b>	<b>86</b>	<b>0</b>	<b>0</b>	<b>86</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>550</b>	<b>DEMONSTRATION</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>(Planetarium) other</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>169,790</b>	<b>0</b>	<b>0</b>	<b>169,790</b>	<b>0</b>	<b>0</b>	<b>169,790</b>

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SPECIFIC PROGRAMS

**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-Tak

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Fall 2004	Fall 2004	Fall 2004	Fall 2006	Fall 2006	Fall 2007	Fall 2008
		NP/SN/SS Changes	Health Sciences Building	After Gains/ (Losses)	Student Services Center	Commons et al Changes	Soc.Sci.Pav Demolition	Cultural Arts Center
<b>100</b>	<b>CLASSROOM</b>	<b>0</b>	<b>11,687</b>	<b>36,177</b>	<b>0</b>	<b>0</b>	<b>(2,758)</b>	<b>1,680</b>
<b>200</b>	<b>LABORATORY</b>	<b>(6,399)</b>	<b>20,396</b>	<b>61,635</b>	<b>10,350</b>	<b>(3,609)</b>	<b>0</b>	<b>5,000</b>
210	Class Laboratory	(6,399)	18,165	47,191	6,650	(2,417)		5,000
220	Open Laboratory		2,231	14,444	3,700	(1,192)		
250	Research Lab.			0				
<b>300</b>	<b>OFFICE</b>	<b>(4,102)</b>	<b>6,849</b>	<b>37,275</b>	<b>19,720</b>	<b>(10,644)</b>	<b>(1,604)</b>	<b>1,100</b>
310	Office/ Conf. Room	(4,102)	6,849	34,524	17,060	(9,663)	(1,604)	1,100
320	Testing/Tutoring			2,751	2,660	(981)		
350	Included w/ 310			0				
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>1,531</b>	<b>18,187</b>	<b>1,800</b>	<b>(400)</b>	<b>0</b>	<b>0</b>
410	Study		1,531	2,347	1,100	(400)		
420-30	Stack/Study			14,713				
440-55	Processing/Service			1,127	700			
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>28,601</b>	<b>470</b>	<b>0</b>	<b>0</b>	<b>300</b>
520-23	Athletic			25,597				300
530	Media Production			2,287	470			
580	Greenhouse			717				
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>2,390</b>	<b>14,798</b>	<b>17,490</b>	<b>(9,314)</b>	<b>0</b>	<b>14,560</b>
610	Assembly			559				10,860
620	Exhibition			384				1,250
630	Food Facility			6,087	11,750	(6,087)		450
640	Day Care			1,191				
650	Lounge		2,390	4,851	2,100	(1,501)		
660	Merchandising			1,726	2,690	(1,726)		500
670	Recreation			0				
680	Meeting Room			0	950			1,500
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>1,283</b>	<b>6,666</b>	<b>3,240</b>	<b>0</b>	<b>0</b>	<b>760</b>
710	Data Processing		817	1,205	1,140			260
720	Shop			3,759				
730	Central Storage		466	944	700			500
740	Vehicle Storage			0				
750	Central Service			334	1,400			
760	Hazmat Storage			424				
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>86</b>	<b>180</b>	<b>(86)</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>550</b>	<b>DEMONSTRATION</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>10,924</b>	<b>0</b>	<b>10,924</b>	<b>0</b>	<b>24,053</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>(Planetarium) other</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>4,974</b>	<b>4,974</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>423</b>	<b>49,110</b>	<b>219,323</b>	<b>53,250</b>	<b>0</b>	<b>(4,362)</b>	<b>23,400</b>

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**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-Takc

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Fall 2012			Fall 2012
		King St Art Center	VPCA Changes	Remove Fenton	After Gains/ (Losses)
<b>100</b>	<b>CLASSROOM</b>	<b>1,690</b>	<b>(132)</b>	<b>0</b>	<b>36,657</b>
<b>200</b>	<b>LABORATORY</b>	<b>19,450</b>	<b>(8,259)</b>	<b>(5,463)</b>	<b>79,104</b>
210	Class Laboratory	19,450	(8,259)		67,615
220	Open Laboratory			(5,463)	11,489
250	Research Lab.				0
<b>300</b>	<b>OFFICE</b>	<b>6,175</b>	<b>(1,831)</b>	<b>(1,187)</b>	<b>49,004</b>
310	Office/ Conf. Room	6,175	(1,831)	(1,027)	44,734
320	Testing/Tutoring			(160)	4,270
350	Included w/ 310				0
<b>400</b>	<b>STUDY</b>	<b>1,200</b>	<b>0</b>	<b>0</b>	<b>20,787</b>
410	Study				3,047
420-30	Stack/Study	1,200			15,913
440-55	Processing/Service				1,827
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>29,371</b>
520-23	Athletic				25,897
530	Media Production				2,757
580	Greenhouse				717
<b>600</b>	<b>GENERAL USE</b>	<b>4,300</b>	<b>(384)</b>	<b>(463)</b>	<b>40,987</b>
610	Assembly				11,419
620	Exhibition	2,200	(384)		3,450
630	Food Facility	800			13,000
640	Day Care				1,191
650	Lounge	500		(463)	5,487
660	Merchandising	800			3,990
670	Recreation				0
680	Meeting Room				2,450
<b>700</b>	<b>SUPPORT</b>	<b>7,700</b>	<b>0</b>	<b>0</b>	<b>18,366</b>
710	Data Processing	3,500			6,105
720	Shop	400			4,159
730	Central Storage	3,300			5,444
740	Vehicle Storage				0
750	Central Service	500			2,234
760	Hazmat Storage				424
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>180</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>550</b>	<b>DEMONSTRATION</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>10,606</b>	<b>0</b>	<b>45,583</b>
<b>070</b>	<b>(Planetarium) other</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>11,900</b>	<b>0</b>	<b>0</b>	<b>16,874</b>
	<b>Total NASF:</b>	<b>52,415</b>	<b>0</b>	<b>(7,113)</b>	<b>336,913</b>

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**COMPUTATION OF SPACE NEEDS**  
 COLLEGE: Montgomery College-Takoma Park  
 FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
<b>100</b>	<b>CLASSROOM</b>	<b>34,163</b>	<b>24,490</b>	<b>(9,673)</b>	<b>50,616</b>	<b>36,657</b>	<b>(13,959)</b>
<b>200</b>	<b>LABORATORY</b>	<b>64,088</b>	<b>47,638</b>	<b>(16,450)</b>	<b>132,710</b>	<b>79,104</b>	<b>(53,606)</b>
210	Class Laboratory	57,120	35,425	(21,695)	121,639	67,615	(54,024)
220	Open Laboratory	6,968	12,213	5,245	11,071	11,489	418
250	No Allowance						
<b>300</b>	<b>OFFICE</b>	<b>51,172</b>	<b>34,528</b>	<b>(16,644)</b>	<b>69,588</b>	<b>49,004</b>	<b>(20,584)</b>
310	Office/ Conf. Room	49,592	31,777	(17,815)	67,520	44,734	(22,786)
320	Testing/Tutoring	1,580	2,751	1,172	2,068	4,270	2,202
350	Included w/ 310						
<b>400</b>	<b>STUDY</b>	<b>22,732</b>	<b>16,656</b>	<b>(6,076)</b>	<b>30,650</b>	<b>20,787</b>	<b>(9,863)</b>
410	Study	10,369	816	(9,553)	16,475	3,047	(13,428)
420-30	Stack/Study	8,831	14,713	5,882	10,125	15,913	5,788
440-55	Processing/Service	3,532	1,127	(2,405)	4,050	1,827	(2,223)
<b>500</b>	<b>SPECIAL USE</b>	<b>38,317</b>	<b>28,601</b>	<b>(9,716)</b>	<b>48,869</b>	<b>29,371</b>	<b>(19,498)</b>
520-23	Athletic	35,590	25,597	(9,993)	45,360	25,897	(19,463)
530	Media Production	1,727	2,287	560	2,509	2,757	248
580	Greenhouse	1,000	717	(283)	1,000	717	(283)
<b>600</b>	<b>GENERAL USE</b>	<b>35,645</b>	<b>12,408</b>	<b>(23,237)</b>	<b>45,737</b>	<b>40,987</b>	<b>(4,750)</b>
610	Assembly	12,318	559	(11,759)	14,272	11,419	(2,853)
620	Exhibition	1,580	384	(1,196)	2,068	3,450	1,382
630	Food Facility	9,950	6,087	(3,863)	15,484	13,000	(2,484)
640	Child Care N/A	1,191	1,191	0	1,191	1,191	0
650	Lounge	2,927	2,461	(466)	4,554	5,487	933
660	Merchandising	1,680	1,726	47	2,168	3,990	1,822
670	Recreation N/A	0	0	0	0	0	0
680	Meeting Room	6,000	0	(6,000)	6,000	2,450	(3,550)
<b>700</b>	<b>SUPPORT</b>	<b>16,828</b>	<b>5,383</b>	<b>(11,445)</b>	<b>22,224</b>	<b>18,366</b>	<b>(3,858)</b>
710	Data Processing	2,500	388	(2,112)	2,500	6,105	3,605
720	Shop/ Storage	10,126	4,237	(5,889)	15,416	9,603	(5,813)
730	Included w/ 720						
740	Included w/ 720						
750	Central Service	4,000	334	(3,666)	4,000	2,234	(1,766)
760	Hazmat Storage	203	424	221	308	424	116
<b>800</b>	<b>HEALTH CARE</b>	<b>532</b>	<b>86</b>	<b>(446)</b>	<b>727</b>	<b>180</b>	<b>(547)</b>
<b>900</b>	<b>No Allowance</b>						
<b>550</b>	<b>Demonstation N/A</b>						
<b>060</b>	<b>Conversion N/A</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>45,583</b>	<b>45,583</b>
<b>070</b>	<b>Planetarium N/A</b>						
<b>090</b>	<b>No Allowance</b>						
	<b>Total NASF:</b>	<b>263,476</b>	<b>169,790</b>	<b>(93,686)</b>	<b>401,121</b>	<b>274,456</b>	<b>(126,665)</b>

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USE HARD DATA RATHER  
 THAN FORMULAS FOR THE  
 10-YEAR PROJECTIONS WHEN  
 AVAILABLE; WHEN NOT  
 AVAILABLE, THE FORMULAS  
 WILL PROVIDE REASONABLE  
 ESTIMATES

SEE "SPACE ALLOCATION  
 GUIDELINES" SHEET FOR  
 FORMULAS AND DEFINITIONS

ENROLLMENT STATISTICS		Fall 2002	Fall 2012
	FTDE-C	1,659	2,636
	FTDE-N		0
	FTDE-J	1,659	2,636
	WSCH-Lec-C	22,775	33,744
	WSCH-Lec-N		0
	WSCH-Lec-J	22,775	33,744
	WSCH-Lab-C	8,160	17,377
	WSCH-Lab-N		0
	WSCH-Lab-J	8,160	17,377
	FTE	2,346	3,635
	BVE	88,309	101,248
	FTEF	142	202
Hard Data =	FT-Fac	97	146
	FT-Staff	150	198
Formulas =	PHC	976	1,518
	Headcount	4,821	7,224

**COMPUTATION OF PARKING NEEDS**  
 COLLEGE: Montgomery College-Takoma Park  
 FMP: October 20, 2003

PARKING CATEGORY	FACTOR	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
FTDE-J	0.75	1,244			1,977		
FT-Faculty & FT-Staff	0.75	185			258		
<b>SUBTOTAL</b>		<b>1,430</b>	<b>0</b>	<b>0</b>	<b>2,235</b>	<b>0</b>	<b>0</b>
Visitors	0.02	29			45		
<b>REGULAR SPACES</b>		<b>1,458</b>	<b>765</b>	<b>(693)</b>	<b>2,280</b>	<b>910</b>	<b>(1,370)</b>
Reserved Accessible*		15	20	5	18	30	12
<b>ALL SPACES</b>		<b>1,473</b>	<b>785</b>	<b>(688)</b>	<b>2,298</b>	<b>940</b>	<b>(1,358)</b>

\* In addition to the regular parking spaces, the Americans with Disabilities Act requires reserved spaces for disabled individuals. Reserved accessible spaces shall conform to the requirements in the space allocation guidelines:

TOTAL SPACES	REQUIRED ADA	TOTAL SPACES	REQUIRED ADA
<= 25	1	201 - 300	7
26 - 50	2	310 - 400	8
51 - 75	3	410 - 500	9
76 - 100	4	501 - 1,000	2% of total
101 - 150	5	> 1,000	20 plus 1 for each 100 beyond 1,000
151 - 200	6		

Note: Calculation of need for reserved accessible spaces (15 & 18) is based on the current and 10-year inventory of regular spaces for MC-TP (765 & 910).

ONLY PARKING FOR  
 ON CAMPUS SPACE IS  
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**SPACE ALLOCATION GUIDELINES**

COLLEGE: Montgomery College-Takoma Park

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	FTDE-C FACTOR		FORMULA
		<= 3,000	> 3,000	
<b>100</b>	<b>CLASSROOM</b>	1.50	1.11	Factor x WSCH-Lec-J
<b>200</b>	<b>LABORATORY</b>			<b>Total</b>
210	Class Laboratory	7.00	5.83	Factor x WSCH-Lab-J
220	Open Laboratory			4.2 x FTDE-C
250	No Allowance			
<b>300</b>	<b>OFFICE</b>			<b>Total</b>
310	Office/ Conf. Room			Core of 1,120 + (166 x (FTEF + FT-Staff))
320	Testing/Tutoring			Core of 1,500 + (0.5 x (FTDE-C beyond 1,500))
350	Included w/ 310			
<b>400</b>	<b>STUDY</b>			<b>Total</b>
410	Study			6.25 x FTDE-C
420-30	Stack/Study			0.1 x BVE
440-55	Processing/Service			Core of 1,200 + (0.4 x (Category-420-30 beyond 1,200))
<b>500</b>	<b>SPECIAL USE</b>			<b>Total</b>
520-23	Athletic			Core of 34,000 + (10 x ( FTDE-C beyond 1,500))
530	Media Production	0.80	2.00	Core of 1,600 + ( Factor x ( FTDE-C beyond 1,500 ))
580	Greenhouse			Core of 1,000
<b>600</b>	<b>GENERAL USE</b>			<b>Total</b>
610	Assembly			Core of 12,000 + (2.0 x (FTDE-C beyond 1,500))
620	Exhibition			Core of 1,500 + (0.5 x (FTDE-C beyond 1,500))
630	Food Facility	10.20	8.40	Factor x PHC
640	No Allowance			
650	Lounge			3.0 x PHC
660	Merchandising			Core of 1,600 + (0.5 x (FTDE-C beyond 1,500))
670	No Allowance			
680	Meeting Room	6,000	8,000	Factor x 1
<b>700</b>	<b>SUPPORT</b>			<b>Total</b>
710	Data Processing			Core of 2,500 + (0.75 x ( FTDE-J beyond 4,000))
720	Shop/ Storage			0.04 x (All categories less 720-40 and 760)
730	Included w/ 720			
740	Included w/ 720			
750	Central Service			Core of 4,000 + (FTDE-C beyond 4,000)
760	Hazmat Storage			0.02 x Categories-720-40
<b>800</b>	<b>HEALTH CARE</b>			Core of 500 + (0.2 x (FTDE-C beyond 1,500))
<b>900</b>	<b>No Allowance</b>			
<b>050</b>	<b>No Allowance</b>			
<b>060</b>	<b>No Allowance</b>			
<b>070</b>	<b>No Allowance</b>			
<b>090</b>	<b>No Allowance</b>			
<b>Total NASF:</b>				

FTDE: Full-time day equivalent students. Fall credit and/or eligible non-credit hours taught between 8 am and 5 pm divided by 15.

-C = credit only; -N = non-credit only; -J = joint credit and non-credit.

WSCH-Lec: Weekly student contact hours for on-campus day students in credit and/or eligible non-credit courses where instruction is primarily lecture. -C = credit only;

-C = credit only; -N = non-credit only; -J = joint credit and non-credit.

WSCH-Lab: Weekly student contact hours for on-campus day students in credit and/or eligible non-credit course where instruction is primarily lab.

-C = credit only; -N = non-credit only; -J = joint credit and non-credit.

FTE: Full-time equivalent students. Fall credit hours divided by 15.

BVE: Bound volume equivalent. 20,000 BVE for the first 1,000 FTE and 1,000 BVE for every 100 FTE above 1,000.

FTEF: Full-time equivalent faculty. Full-time faculty, including librarians, plus 25% of part-time faculty.

FT-Staff: Full-time staff.

PHC: Planning head count. 50% of the sum of FTDE for on-campus credit and eligible non-credit courses and FTEF and FT-Staff, and includes space for seating, preparation, and storage.

**TP-A3      Environmental Report**

**TP-A3 ENVIRONMENTAL REPORT****Overview**

The Environmental Review for the Facilities Master Plan of Montgomery College was conducted by Froehling and Robertson, Inc. of Baltimore, Maryland and on-site inspections took place on February 1 and April 25, 2002.

This review considered various aspects of environmental issues, including asbestos-containing materials (ACM), lead based paint (LBP), mold, and chemical usage and storage. Also included in this review was the storage and disposal of hazardous waste and hazard communication.

**ASBESTOS-CONTAINING MATERIALS**

Montgomery College, overall, has a good asbestos-containing material program. The College has Management Plans for the majority of the buildings, has numerous trained and licensed workers, state-of-the-art removal equipment, and a good hazard communication program regarding asbestos for both the College employees and the students.

The College has a written Respiratory Protection Program, a copy of the OSHA Asbestos regulations, work procedures for the removal of the various types of materials encountered on campus, and even a HEPA Vacuum Instruction Guidebook. According to Mr. John Softy, all asbestos-trained personnel have access to this information.

Each campus has an asbestos waste storage area. These areas have extremely limited access and are emptied by an approved waste hauler shortly after receiving asbestos waste. All observed waste observed on the campuses were properly bagged and stored.

In the late 1980s and early 1990s, the College set upon the task to have comprehensive ACM inspections conducted on all of the College's facilities. These reports were made available to the Consultant for review and comment.

Asbestos inspection documents were provided for the following buildings:

- Child Care Center
- The Commons Building
- Communication Arts Center
- Falcon Hall
- Information Sciences Pavilion
- Mathematics Pavilion
- Nursing Pavilion
- Pavilion of Fine Arts
- Resource Center
- Science North Building
- Science South Building
- Social Sciences Pavilion
- Student Services Pavilion

The Child Care Center Inspection Report was conducted by Apex Environmental, Inc. of Rockville, Maryland and is dated December, 1990. The report calls out resilient sheet flooring and roofing tar as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include textured plaster, drywall and joint compound, several

types of ceiling tiles, attic insulation, and roofing paper. Furthermore, the wiring insulation was not sampled at all. It is recommended that further sampling be conducted of these materials to confirm the materials positive or negative.

The Commons Building Asbestos Inspection Report was conducted by Dynamac Corporation of Rockville, Maryland and is dated June 1991. The report calls out various types of floor tiles and pipe fitting insulation as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include numerous types of ceiling tiles, plaster, and drywall. Furthermore, the floor tile mastic was assumed to be positive and the joint compound was not sampled at all. It is recommended that further sampling be conducted of these materials, including the floor tile mastic, to confirm the materials positive or negative.

The Communication Arts Center Inspection Report was prepared by Briggs Associates, Inc. of Columbia, Maryland and is dated June 1991. The report calls out several types of floor tile and the associated mastic, electric cord insulation, and the transite sheeting on the exterior of the building as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include drywall and ceiling tiles, and the joint compound was not sampled at all. It is recommended that further sampling be conducted of these materials to confirm the materials positive or negative.

The Falcon Hall Inspection Report was prepared by Briggs Associates, Inc. of Columbia, Maryland and is dated June 1991. The report calls out several types of floor tile and the associated mastic as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include numerous types of ceiling tiles, plaster, and drywall. Furthermore, the transite sheeting on the exterior of the building was assumed to be positive and the joint compound was not sampled at all. It is recommended that further sampling be conducted of these materials, including the exterior transite sheeting, to confirm the materials positive or negative.

The Information Sciences Pavilion Asbestos Inspection Report was conducted by Dynamac Corporation of Rockville, Maryland and is dated June 1991. The report calls out two types of floor tiles as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include drywall and pipe fitting insulation. Furthermore, the transite sheeting on the exterior of the building and the floor tile mastic was assumed to be positive and the joint compound was not sampled at all. It is recommended that further sampling be conducted of these materials, including the exterior transite sheeting and the floor tile mastic, to confirm the materials positive or negative.

The Mathematics Pavilion Asbestos Inspection Report was conducted by Dynamac Corporation of Rockville, Maryland and is dated June 1991. The report calls out various types of floor tiles as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include other types of floor tiles, drywall, pipe fitting insulation, and blown-in insulation. Furthermore, the transite sheeting on the exterior of the building and the floor tile mastic was assumed to be positive and the joint compound was not sampled at all. It is recommended that further sampling be conducted of these materials, including the exterior transite sheeting and the floor tile mastic, to confirm the materials positive or negative.

The Nursing Pavilion Asbestos Inspection Report was conducted by Dynamac Corporation of Rockville, Maryland and is dated June 1991. The report calls out several types of floor tiles as being positive; however, not enough samples were obtained to confirm certain materials negative. These

materials include drywall and pipe fitting insulation. Furthermore, the transite sheeting on the exterior of the building and the floor tile mastic was assumed to be positive and the joint compound was not sampled at all. It is recommended that further sampling be conducted of these materials, including the exterior transite sheeting and the floor tile mastic, to confirm the materials positive or negative.

The Pavilion of Fine Arts Inspection Report was prepared by Briggs Associates, Inc. of Columbia, Maryland and is dated June 1991. The report calls out several types of floor tiles as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include drywall, joint compound, ceiling tiles and one type of floor tile. Furthermore, the transite sheeting on the exterior of the building and the floor tile mastic was assumed to be positive. It is recommended that further sampling be conducted of these materials, including the exterior transite sheeting and the floor tile mastic, to confirm the materials positive or negative.

The Resource Center Asbestos Inspection Report was conducted by Dynamac Corporation of Rockville, Maryland and is dated June 1991. The report calls out the ceiling penetration covers, a type of floor tile, pipe fitting insulation, and the transite sheeting on the exterior of the building as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include drywall, plaster, ceiling tiles and pipe insulation mastic. Furthermore, the floor tile mastic was assumed to be positive and the joint compound was not sampled at all. It is recommended that further sampling be conducted of these materials, including the floor tile mastic, to confirm the materials positive or negative.

The Science North Building Asbestos Inspection Report was conducted by Dynamac Corporation of Rockville, Maryland and is dated June 1991. The report calls out the transite fume hoods and cabinets, a type of floor tile, and pipe fitting insulation as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include a second type of floor tile, ceiling tiles, plaster and drywall. Furthermore, the transite sheeting on the exterior of the building and the floor tile mastic was assumed to be positive and the joint compound was not sampled at all. It is recommended that further sampling be conducted of these materials, including the exterior transite sheeting and the floor tile mastic, to confirm the materials positive or negative.

The Science South Building Asbestos Inspection Report was conducted by Dynamac Corporation of Rockville, Maryland and is dated June 1991. The report calls out four types of floor tiles, the flexible duct connectors, and the transite fume hoods and planter stands as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include several types of floor tiles, drywall, plaster, pipe fitting insulation and pipe insulation mastic. Furthermore, the floor tile mastic was assumed to be positive and the joint compound was not sampled at all. It is recommended that further sampling be conducted of these materials, including the floor tile mastic, to confirm the materials positive or negative.

The Social Sciences Pavilion Asbestos Inspection Report was conducted by Dynamac Corporation of Rockville, Maryland and is dated June 1991. The report calls out two types of floor tiles as being positive; however, not enough samples were obtained to confirm drywall materials negative. Furthermore, the transite sheeting on the exterior of the building and the floor tile mastic was assumed to be positive and the joint compound was not sampled at all. It is recommended that further sampling be conducted of these materials, including the exterior transite sheeting and the floor tile mastic, to confirm the materials positive or negative.

The Student Services Pavilion Asbestos Inspection Report was conducted by Dynamac Corporation of Rockville, Maryland and is dated June 1991. The report calls out three types of floor tiles as being positive; however, not enough samples were obtained to confirm drywall materials negative. Furthermore, the transite sheeting on the exterior of the building and the floor tile mastic was assumed to be positive and the joint compound was not sampled at all. It is recommended that further sampling be conducted of these materials, including the exterior transite sheeting and the floor tile mastic, to confirm the materials positive or negative.

#### **LEAD BASED PAINT**

Montgomery College does not contain a specific lead based paint program, nor is the College required to due to the fact that there are no residential structures on the three campuses. However, lead based paint is a worker issue under OSHA due to the ages of the College facilities. It is recommended that before the commencement of renovation activities that impacted painted surfaces testing be conducted to determine if the painted surfaces are lead containing. If the painted surfaces are or are suspected to be lead containing, respiratory protection should be worn during all activities during which dust or fumes are generated.

#### **MOLD**

Montgomery College has taken a proactive approach to mold contamination inspection and remediation. According to Mr. John Softy, CHMM, the Environmental Safety Coordinator for the College, whenever mold growth is located, the infected area is restricted from public access and remediation efforts are undertaken. Furthermore, during the remediation, ceiling and wall cavity areas are explored to determine the extent of the mold growth. The areas are kept under containment until “clean air” is restored to the affected area. It is recommended that the College continue with its mold surveillance policy.

#### **HAZARDOUS MATERIALS**

The hazardous materials review will cover a variety of subjects - chemical usage and storage, the storage and disposal of hazardous waste and hazard communication. These topics will be discussed in general for the College and for each applicable campus, where applicable.

#### **CHEMICAL USAGE AND STORAGE**

Chemical usage and storage covers two distinct groups of people – the maintenance staff and the College students and instructors. Each group uses a different set of materials for varying reasons. Each group will be discussed separately.

The maintenance staff stores the majority of their materials in the Physical Plant sections of the buildings and in the Vehicle Maintenance Shop. These areas were observed to be kept in an orderly fashion with no obvious signs of improper chemical storage. Material Safety Data Sheets (MSDS) were available in these areas and the staff was aware of the MSDS location in the event of emergency. There was also a Personal Protection Equipment (PPE) station in the Physical Plant office.

The College students and instructors use the majority of their chemicals in the Chemistry Labs. All chemicals were observed to be stored in a locked storage area with only instructors having access to this area. MSDS sheets were available to all individuals working in the laboratory areas, and emergency eyewash and shower stations are located throughout the lab rooms. Lab instructors indicated that all lab students are required to sign a safety contract. However, no formal

instruction is given in the usage of MSDS sheets in the event of an emergency. It is recommended that all students be given formal instruction in the usage and interpretation of MSDS sheets.

#### **STORAGE AND DISPOSAL OF HAZARDOUS WASTE**

The storage and disposal of hazardous waste will cover both the waste created by the teaching activities as well as the waste of the Physical Plant.

The Physical Plant staff creates a minimum amount of hazardous waste. This waste includes automotive fluids and batteries, asbestos removal waste, and residual waste created by daily maintenance activities, including the disposal of mercury-containing lighting fixtures and potential PCB-containing ballasts. The asbestos waste is stored in a separate room outside the Science South building and is accessible by only properly trained personnel. As well as can be determined, these materials are properly disposed of, and meticulously documented. All reviewed waste manifests appear to be in compliance.

The Laboratory chemical wastes were observed to be stored in a locked, limited access storage area that is explosion-proof and diked with only properly trained personnel having access to this area. All generated waste is moved to the waste storage room on an as-needed basis. While the chemical wastes are waiting to be moved to the Chemical Waste Room, the wastes are stored in the Chemical Storage Rooms on carts and segregated shelves. It is recommended that all chemical waste products be moved to the Chemical Waste Room on a weekly basis at a minimum. As well as can be determined, these materials are properly disposed of, and meticulously documented. All reviewed waste manifests appear to be in compliance.

#### **HAZARD COMMUNICATION**

Hazard Communication covers not only the posting of MSDS sheets, but also safety in general. The College has a website, <http://www.montgomerycollege.edu/Departments/envsafe/>. This site is an excellent resource for safety policies, and is available for review for both College employees and students alike at all three campuses. Some of the subjects covered include Work Related Injury and Illness, Backcare, Ergonomics, Bloodborne Pathogens, Cutting and Welding, Lockout/Tagout, and Asbestos Program information. Some of these links will include the College policy for the subject and links to resource and regulatory information.

This website is an excellent way to distribute environmental safety information, but the site does have some weak points. Not all of the subjects, such as Fall Protection, Noise and Hearing Conservation, and Chemical Spill Cleanup, have the policies available online for review. Users are instructed to contact the Environmental Safety Office for information. It is recommended that links be created for all subjects so that the policy information is available at all times. Furthermore, while this site is accessible to anyone with access to a computer, computers are not always available to everyone. It is recommended that hard copies of all relevant policies be available in affected areas for the College employees and students.

The original copies of all MSDS sheets are kept in the Environmental Safety office. This compilation is maintained in an orderly and easy-to-locate format and is an exhaustive list, easily containing several thousand MSDS sheets. However, no evidence was produced to document a tracking system that details that copies of all relevant MSDS sheets are forwarded to all of the chemical locations. It is recommended that a tracking system be developed to ensure that all

MSDS sheets are distributed to the affected locations and that all updated MSDS sheets are also forwarded to the areas.

## **3.0 GERMANTOWN CAMPUS**

### **3.1 BACKGROUND INFORMATION**

#### **3.1.1 Facilities Master Plan**

Montgomery College began this Collegewide Facilities Master Plan effort in 2001. The major components of the Master Plan are the Rockville, Germantown and Takoma Park Campuses, Workforce Development/Continuing Education, and Central Administration. The time frame for the Facilities Master Plan is ten years, 2002 to 2012, and the time frame for twenty-year Land Use Plan extends out to 2022. The overarching goal of the Facilities Master Plan is to establish a framework for the development of capital projects to support the role, mission, and academic vision of Montgomery College.

The Germantown campus of Montgomery College was founded in 1978 and is the College's newest campus. The main campus is situated on approximately 230 acres with 4 main academic and administrative buildings.

The 1991 Master Plan for the Germantown campus outlined a strategy for the campus that sought cohesion and consolidation in its physical development. In addition to conserving existing natural resources, the previous Master Plan also encouraged retaining a pedestrian campus with parking structures located on the interior of a campus loop road.

One of the major challenges for the College in the next ten-year planning period will be to retain Germantown's strong academic identity and unique features. The campus is in a bucolic setting with large amounts of open space and several scenic vistas. One of the goals of the Facilities Master Plan has been to develop a Plan that preserves and improves the campus community's experience of this valuable resource.

Another challenge will be in the development of the Germantown Biotechnology Business Park being explored with the Montgomery County Office of Economic Development Department and the College. This partnership adds the 20-acre former Kay property to an additional twenty acres of College property with the understanding that a total of forty acres will be developed as a biosciences and technology business park. The prospect of this venture is extremely exciting for both the County and the College and will begin to form a synergy that benefits students, faculty, the County, and the businesses that locate at the Business Park.

To address these and other challenges, and to establish a coherent, logical framework for development of capital projects, the Facilities Master Plan has established goals and priorities. This Facilities Master Plan for Germantown focuses on:

- supporting the College's goal of establishing and nurturing a unique role for the Germantown campus in meeting the multi-leveled biotechnology educational, economic, and work force development needs of Montgomery County;

- providing sufficient and adequate space—classrooms, labs, offices, study, meeting rooms, and support facilities—based on existing and projected needs, so that each and every area can contribute creatively and productively every day to helping students change their lives;
- co-locating departments and functions rationally so that students, visitors, and the College community benefit from the ease, energy, and excitement generated by the synergy of proximity;
- presenting students the needed range of opportunities to study and learn collaboratively in supportive environments with the special assistance of faculty, librarians, counselors, and staff;
- affording students opportunities to meet and develop socially through formal programs of leadership, recreation, and athletics, and informally in inviting indoor and outdoor spaces;
- maximizing the land resources available on the campus while retaining its unique character, quality, and setting, and yet meeting the needs of the large numbers of students, faculty, staff, community members, and visitors who come to the campus every day;
- inviting students, faculty, staff, community members, and visitors to participate in the varied campus and College activities by organizing the campus—including buildings, parking, outdoor athletic facilities, and circulation for pedestrians, the disabled and elderly, cars, and trucks—to make their experience pleasant and successful; and
- anticipating the campus' future development beyond the ten-year planning horizon.

### **3.1.2 Institutional Characteristics**

The Germantown campus began offering classes in September 1975, initially holding them in high school classrooms. The campus opened its own facilities just east of Interstate 270 in September 1978. The educational offerings of the Germantown campus are organized into two instructional divisions. They are:

- Humanities, Social Sciences, and Education (“HSSE”), comprised of the departments of Art, Communications, English, Health and Physical Education, Psychology, and Social Science
- Business, Science, Mathematics, and Technology (“BSMT”), comprised of the departments of Accounting, Business Administration, Paralegal, Management, Computer Applications, Computer Sciences, Microcomputer Repair Technology, Natural Sciences, Mathematics, and Engineering Technology

These two divisions are extended and supported by the Student Development Division with the Office of the Vice President and Provost providing campus leadership and management. College-wide management of distance learning and the Center for Teaching and Learning is also located on the Germantown campus, as is the College's student employment program. The campus' intercollegiate athletic program sponsors teams in men's basketball, baseball, and men's and women's tennis. Campus-based central administration services include the library, information technology support, admissions and registration, financial aid, cashier's office, physical plant, and auxiliary services, including child care, bookstore, and food services.

The Germantown campus has always made a special commitment to community use of its library, swimming pool, and other College facilities for club, association, or civic activities. This commitment is taking on a new and dynamic perspective as the campus envisions having a “world class” biotechnology program attracting students, faculty, sponsors, and corporate partners from around the world and serving the needs of the biotechnology industry in Montgomery County. Part of this vision entails a Biotechnology Institute, as a unit of Workforce Development/Continuing Education, providing a “one-stop” shop for industry looking for employee training and for students seeking an excellent education or training in specific biotechnology skills. Both non-credit and credit programs through the baccalaureate degree and beyond are expected to be offered by the Biotechnology Institute. The Biotechnology Institute and the Department of Natural Sciences, except for the physical sciences, are to be housed in a new Bioscience Education Center, to be located conveniently to the proposed Biotechnology Business Park along Interstate 270. This Center will support not only the College’s instructional and workforce development programs but also the College’s upper-level academic partners, including the University of Maryland College Park, and occupants of the Biotechnology Business Park.

### **3.1.3 Academic Programs**

Montgomery College is authorized by the Maryland Higher Education Commission to offer four degrees: the Associate of Arts (A.A.), the Associate of Science (A.S.), the Associate of Arts in Teaching (A.A.T.) for students wanting to transfer to baccalaureate programs, and the Associate of Applied Science (A.A.S.) for those seeking immediate employment. The College also awards certificates (“Cert”) that focus on the development of technical skills, as well as letters of recognition (“L of R”) for non-degree seeking students who satisfactorily complete certain courses.

In addition to General Education, Student Development, and Honors courses, the Germantown campus offers 37 different degree programs, 18 certificate programs, and 5 letter of recognition programs. Academic programs uniquely offered at Germantown include the A.A.S. degree and certificate in Biotechnology, the certificate in Technical Writing, the A.A.S. degree and certificate in Landscape Technology, the A.A.S. degree, certificate, and letter of recognition in Microcomputer Technician, and the A.A.S. degree and two certificates in Networking. In addition, the A.A.S. degree program in Biotechnology and the certificate program in Technical Writing are approved as statewide programs. These statewide programs are available to students from other geographic areas where the local community college does not offer the same program. Not included here are the programs offered by Workforce Development and Continuing Education.

**Table 3.1.3-1  
2002 Academic Programs Offered at the Germantown Campus**

Program Area	AA	AS	AAT	AAS	Cert	L of R
Accounting				1 GR	1 GR	
Art	1 GT; 3 R				2 GRT	
Business Administration	2 GRT					
Biological/Life Sciences		1 GRT				
Biological Technologies				1 G	1 G	
Computer Application				1 GRT	3 GRT; 1 R	1 R; 1 GRT
Chemistry/Life Sciences		inc				
Computer Science/Technologies	1 R; 1 GRT				1 GRT	1 GRT
Education			1 GRT	1 R	1 R	
Electrical Engineering				1 GRT		
English/Technical Writing					1 G	
Engineering Science				9 GRT		
Engineering Technology				1 G		
Paralegal Studies				1 GT	1 GT	1 GT
Landscape Technology				1 G	1 G	
Mathematics		1 GRT				
Management				1 GRT; 2 R; 1GR	1 GRT; 2 GR; 1R	2 GRT
Microcomputer Technician				1 G	1 G	1 G
Networking				1 G	2 G	
Physics		1 GRT				
American Sign Language				1 GRT	1 GRT	
General Studies	1 GRT					
Liberal Arts	3 GRT					
Pre-Professional	5 GRT					

GRT: Germantown, Rockville, Takoma Park  
 G: Germantown only  
 R: Rockville only  
 T: Takoma Park only  
 Inc: included

Delivery of all these programs is expected to change substantially over the coming decade. The College has made significant and substantial investments in its classroom environments to incorporate smart instructional technology and to provide and support technology-based learning centers that help students learn effectively and efficiently. Distance learning alternatives will become more available as options, including both entire and partial course and service delivery. Apart from technology, the College must also prepare to address other changes in pedagogy, including increased and earlier instructional

use of specialized learning environments and a continued emphasis on collaborative learning.

These instructional delivery changes, together with the increases projected for enrollment, can be expected to have impact on Germantown’s contact hour productions. The ratio of contact hours (WSCH) to credit hours (SCH), which shows the extent to which time scheduled in class is greater than the credit hours earned, is expected to increase at Germantown from 1.11 to 1.19 in 2012, primarily because of increased availability of labs and lab courses. The majority, 64%, of Germantown’s contact hours are expected to be generated during the day (from 8:00 a.m. to 5:00 p.m., Monday through Friday), slightly lower than in 2002 (67%). Finally, the relative percentage of contact hours in lab environments is projected to increase from 26% in 2002 to 39% in 2012, reflecting increased availability of lab environments and changes in pedagogy in disciplines such as Mathematics.

**Table 3.1.3-2  
2002 and 2012 Credit and Contact Hours at the Germantown Campus**

Contact Hour (WSCH) to Credit Hour (SCH) Ratio

	2002 WSCH	2002 SCH	2002 WSCH/ SCH	2012 WSCH	10 yr % Chg	2012 SCH	10 yr % Chg	2012 WSCH/ SCH	10 yr % Chg
Germantown	36,929	33,356	1.11	53,355	44%	45,144	35%	1.19	6%
College	222,719	189,471	1.18	280,110	26%	228,662	21%	1.23	7%

Day and Evening Contact Hour

	2002 Day WSCH	2002 Evening WSCH	2002 Total WSCH	2002 % Day WSCH	2012 Day WSCH	10 yr % Chg	2012 Evening WSCH	10 yr % Chg	2012 Total WSCH	10 yr % Chg	2012 % Day WSCH
Germantown	24,785	12,144	36,929	67%	34,132	38%	19,223	58%	53,355	44%	64%
College	161,681	61,038	222,719	73%	198,428	23%	81,682	34%	280,110	26%	71%

Day Lecture and Lab Contact Hour

	2002 Day Lecture WSCH	2002 Day Lab WSCH	2002 Total WSCH	2002 % Lab WSCH	2012 Day Lecture WSCH	10 yr % Chg	2012 Day Lab WSCH	10 yr % Chg	2012 Total WSCH	10 yr % Chg	2012 % Lab WSCH
Germantown	18,442	6,343	24,785	26%	20,688	12%	13,444	112 %	34,132	38%	39%
College	118,046	43,635	161,681	27%	123,128	4%	75,300	73%	198,428	23%	38%

To support academic programs and the outreach to the Biotechnology industry, changes in the Germantown library collection are also planned. Overall, in terms of Physically Bound Volume Equivalents (“PBVE”), the library’s collection is expected to grow by 19%, which is slightly higher than on the other two campuses because of the planned upper division program offerings and the anticipated needs of the Biotechnology Institute and occupants of the Biotechnology Research Park. This rate, however, is still below that usually expected for higher education institutions, where rates of increase for collections are typically planned at 2% to 3% per year.

**Table 3.1.3-3  
2002 and 2012 Germantown Library Collection and PBVE\***

Category	Collection		PBVE	
	2002	2012	2002	2012
Books	47,010	56,412	47,010	56,412
Folios	2,132	2,452	4,264	4,904
Bound Periodicals	237	273	286	328
Documents/Pamphlets	0	0	0	0
Microfilm reels	6,783	7,800	2,261	2,600
Records	256	256	51	51
Maps	0	0	0	0
Maps in Cases	0	0	0	0
Microform (non-reel)	15,000	15,000	188	188
Newspapers Unbound	16	16	286	286
Newspapers Bound	0	0	0	0
Reference Books	6,397	7,676	18,815	22,578
Slides	0	0	0	0
Periodicals Unbound	400	460	1,600	1,840
Video Disks	0	0	0	0
Audio Tapes	504	580	126	145
Computer Diskettes	208	239	42	48
Compact Disks	950	1,140	190	228
Videotapes	2,433	2,798	2,028	2,332
Films (Reel-to-Reel)	0	0	0	0
			Total PBVE	77,145
				91,939
			% change	19%

\* Physically Bound Volume Equivalent

**3.1.4 Enrollment**

Over the past three-year period, headcount enrollment has increased 18%, from 4,209 students in 1999 to 4,948 in 2002. Over this same period, however, the average student credit hour load has decreased slightly from 6.9 credits to 6.7 credits, with the result that FTE student enrollments have increased only by 15%. The College 2002 average credit hour load is 8.7 credits, and the expectation is that the average credit hour load at Germantown will increase by 2012 to 7.0 credits, still below the projected College average credit load of 9.0 credits, but above the 2002 level. As a result, the projected 6,432 headcount students are expected to equate to 3,010 FTE students, an increase of 35% over 2002 FTE enrollments.

**Table 3.1.4-1  
Fall Term Germantown Campus Enrollment Statistics**

	1999	2000	2001	2002	3 yr % Chg	2012	10 yr % Chg
Headcount	4,209	4,293	4,871	4,948	18%	6,432	30%
Credit Load	6.9	6.9	6.7	6.7	-3%	7.0	4%
FTE Students	1,942	1,980	2,168	2,224	15%	3,010	35%

While credit hours in Student Development and Honors will increase at high rates of growth (84% and 1,500%, respectively), these areas are not where the majority of credit hours (SCH) will be generated. Credit hours in the HSSE Division are anticipated to grow by 37% to 23,366 SCH, while those in the BSMT Division are expected to increase by 33% to 21,096 SCH.

**Table 3.1.4-2  
Fall Term Credit Hours by Division at the Germantown Campus**

	1999	2000	2001	2002	3 yr Chg	2012	10 yr Chg
Student Dev	208	136	211	353	70%	650	84%
Honors	--	--	--	2	n/a	32	1,500%
BSMT	15,270	15,662	16,412	15,911	4%	21,096	33%
HSSE	13,650	13,903	15,890	17,090	25%	23,366	37%
Germantown (Total)	29,128	29,701	32,513	33,356	15%	45,144	35%

**3.1.5 Faculty and Staff**

The College projects that its overall number of FTE faculty will increase at a rate comparable to its overall increase in enrollment, from 672.50 to 807.75, an increase of 135.25 FTE faculty, or 20%. Faculty supporting the Germantown campus will increase more, by 38%, from 111.75 FTE faculty to 153.75 FTE faculty. The number of full-time faculty will increase by 32 positions, from 69 to 101, or 46%, while the number of part-time faculty will increase by 40 positions from 171 to 211, or 23%. Campus and division projections of faculty seek to reduce and/or equalize the credit hours loads of faculty and therefore do not necessarily parallel enrollment growth rates. Thus, the growth rate for faculty at Germantown exceeds slightly the 35% growth rate in FTE students.

**Table 3.1.5-1  
2002 and 2012 Germantown Faculty Positions by Division**

	2002 FT	2002 PT	2002 FTE	2012 FT	10 yr # (%) Chg	2012 PT	10 yr # (%) Chg	2012 FTE	10 yr # (%) Chg
Student Dev	0	10	2.50	0	0 (0%)	15	5 (50%)	3.75	1.25 (50%)
BSMT	36	79	55.75	51	15 (42%)	91	12 (15%)	73.75	18.00 (32%)
HSSE	33	82	53.50	50	17 (52%)	105	23 (28%)	76.25	22.75 (43%)
Germantown	69	171	111.75	101	32	211	40	153.75	42.00

(Total)				(46%)		(23%)		(38%)
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While the College expects its overall numbers of full-time, part-time, and FTE staff to increase 21% from fall 2002 to fall 2012, consistent with its overall projected increase in fall term FTE enrollment, the Germantown campus is anticipating a 32% increase in staff, reflecting the projected enrollment growth and expanded outreach, particularly in biotechnology and the sciences at Germantown. Overall, the number of Germantown staff is expected to increase by 48.00 FTE positions, with 47 additional full-time staff and 24 additional part-time staff.

The largest growth in positions, not unexpectedly, is planned for the instructional and student development divisions, with increases ranging from 69% to 73%. The increase in staff within the Office of the Vice President and Provost align office staffing with staffing on the other campuses. Finally, growth in campus-based Central Administration is based on College-wide ratios of students to staff and faculty to staff to ensure reasonable comparability across campuses, as well as the overall goal of the College to build on economies of scale in projecting the needs for such functional support.

**Table 3.1.5-2  
2002 and 2012 Germantown Staff Positions by Division**

	2002 FT	2002 PT	2002 FTE	2012 FT	10 yr # (%) Chg	2012 PT	10 yr # (%) Chg	2012 FTE	10 yr # (%) Chg
VP/Provost	4	0	4.00	6	2 (50%)	1	1 (n/a)	6.25	2.25 (56%)
Student Dev	21	5	22.25	37	16 (71%)	6	1 (20%)	38.50	16.25 (73%)
BSMT	19	7	20.75	33	14 (74%)	8	1 (14%)	35.00	14.25 (69%)
HSSE	9	4	10.00	16	7 (78%)	5	1 (25%)	17.25	7.25 (73%)
Distance Learn	7	0	7.00	9	2 (29%)	0	0 (0%)	9.00	2.00 (29%)
Central Adm	85	4	86.00	91	6 (7%)	4	0 (0%)	92.00	6.00 (7%)
Germantown (Total)	145	20	150.00	192	47 (32%)	24	4 (20%)	198.00	48.00 (32%)

**3.2 EXISTING CONDITIONS**

**3.2.1 Location**

The Germantown campus of Montgomery College is located approximately 22 miles northwest of the District of Columbia and is well within commuting distance from the Metropolitan Washington area.

**3.2.2 Campus Character and Image**

The Germantown campus of Montgomery College is situated in a rural/suburban area of Montgomery County. The campus is characterized by the combination of a relatively

compact composition of buildings organized around a quadrangle, the rolling, wooded topography, and distant views to the landscape beyond.

A wooded stream valley runs from the northeast corner of the property at Route 118 in a southeasterly direction. A major ridge line runs from the high point of the site south through a wooded area towards I-270. The topography of the campus is generally in the range of slopes of 10% or greater although it is the length of these slopes – the total amount of topographic change – from a high point elevation 585 to a low point of 380, that helps define the campus character and challenges campus expansion to maintain the strong connectivity of the current campus.

The existing developed portion of campus is situated in a cleared area on a northeast-facing slope. At its core are four main buildings organized around a quadrangle. The quadrangle, one of the campus's distinguishing features, consists of a series of lawn panels divided by walkways. It is marked in a few places by stands of immature trees with additional landscaping and sculptures at key junctures.

### **3.2.3 Adjacent Land Use**

The Germantown campus is located in an area bounded on the northwest by MD 118 (Germantown Road), on the southwest by Interstate 270, on the southeast by Middlebrook Road, and on the northeast by MD 355 (Frederick Road).

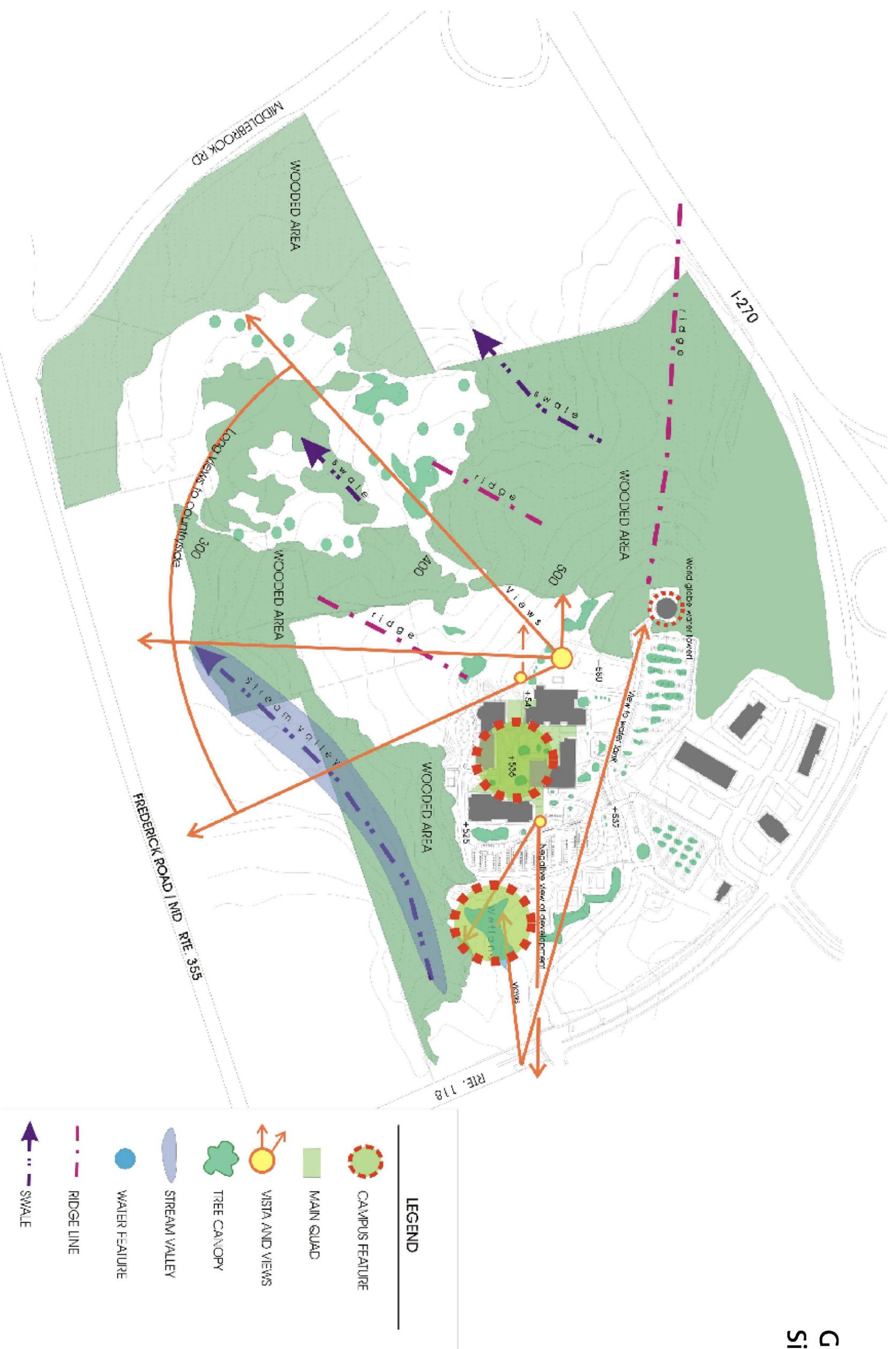
To the south is a commercial parcel that is separated from the college campus by a chain-link fence and a wooded buffer. This commercial parcel, also fronting on I-270 with access via Middlebrook Road, is the Hughes Network headquarters. A portion of the land along the I-270 off-ramp at MD 118 known as the former Kay property was recently acquired by the College. An easement on this property, up to 3.8 acres of Montgomery College property north of Middlebrook Rd., may be required by MSHA and MTA for transit use.

To the east, land along MD 355 is zoned residential and developed with a trailer park and multi-family residential units. On the southern end is a parcel owned by Montgomery County and designated for parkland and currently leased by the Girls and Boys Club.

### **3.2.4 Campus Entrance Experience**

The primary gateway and only existing entrance to the campus is located on MD 118. Maryland Route 118 is a major roadway that also supports access to nearby office, retail and residential uses. Very little of the approach to the campus, and the entrance to the campus itself, create a sense of arrival or “place” unique to Montgomery College. Signage, fencing and land uses adjacent to the entrance do little to reinforce the identity of the campus. However, the entrance experience, once on the campus proper, provides views of the woods, stream valley, pond, mature specimen trees and recreational facilities, all providing the basis for strengthening or reinforcing a sense of place unique to the Germantown campus. The entry road, Observation Drive, passes between a steep slope up to recreation fields on the west side and land that falls away towards a pond on the east. There are no sidewalks or bike pathways along Observation Drive.

# Germantown Campus Site Character Analysis



**LEGEND**

-  CAMPUS FEATURE
-  MAIN QUAD
-  VISTA AND VIEWS
-  TREE CANOPY
-  STREAM VALLEY
-  WATER FEATURE
-  RIDGE LINE
-  SWALE

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MONTGOMERY COLLEGE  
 FACILITIES MASTER PLAN 2002-2012  
 GERMANTOWN CAMPUS

JANUARY 2004  
 GT-F1 FIGURE 1



# Germanstown Campus Existing Site Plan



- Existing campus building
- Existing non-College building
- Existing pond or stream bed

- CG- Child Care
- CP- Central Plant
- GN- Greenhouse
- GS- Grounds Storage Building
- HS- Humanities and Social Sciences
- HT- High Technology and Science Center
- PG- Physical Education
- SA- Sciences and Applied Studies
- WT- Water Tower



Within the campus, Observation Drive ascends to provide access to two parking areas on the west side of the road, terminating in a gravel parking area at nearly the highest point of campus. As the Drive ascends, the view of the spherical water tower with its planet earth graphics and the telecommunications tower beyond is prominent. Near the northern end of Observation Drive, as the roadway turns from east-west to north-south, a very large oak tree dominates the view and provides shade and orientation for the campus bus stop. The campus is served by several Montgomery County “Ride On” bus routes.

Observation Drive separates most of the campus parking from the main campus buildings, creating four points of conflict where pedestrians cross the Drive on their way to campus.

A secondary access road wraps around the campus to the east side of the quad terminating in a turn-around and providing a lower level access point to the High Technology and Science Center building and potentially to future campus expansion. There are four main service courts for the campus, three off of Observation Drive and the fourth from the lower campus drive.

The College has expressed an interest in providing a second means of vehicular access onto campus to improve connections and to be better prepared to address emergency situations that might necessitate campus evacuation. There are two possible additional entrances to the campus, one via Middlebrook Road near Exploration Drive and the other at MD 355 near the county park. The Middlebrook Road approach would provide an entrance that is suitable for a second gateway, as the land adjacent to the entrance is primarily owned by the College or by a corporate user. It has the disadvantage of potentially creating a vehicular cut-through situation. The MD 355 entrance would share frontage with residential uses, making it more difficult to project a Montgomery College image at the street. It would also have the disadvantage of providing no access to traffic traveling north on MD 355. However, the likelihood of creating a vehicular short-cut through the campus would be minimized.

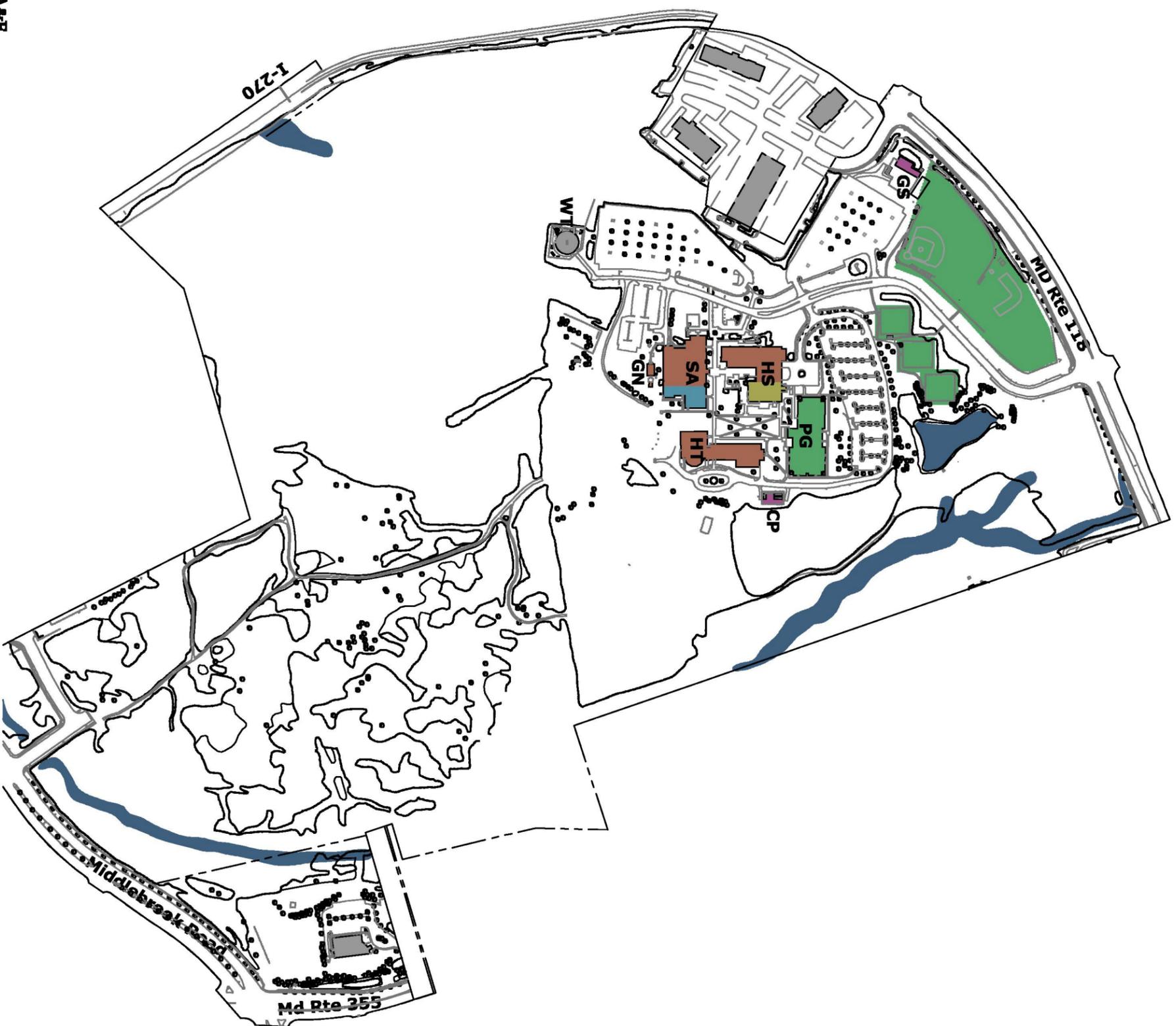
In addition to a second means of accessing the campus proper, with the purchase of the Kay property and the plans to develop that parcel and a portion of the campus as a Biotechnology Park, the opportunity exists to extend Goldenrod Lane into the Biotechnology Park and potentially beyond that to link the Biotechnology Park with campus.

### **3.2.5 Building Usage**

Buildings on this campus generally fall into five categories of use: Administrative, Academic, Operations (facilities-oriented), Recreational, and Service (student, faculty, and staff oriented). Although some facilities have a mixed-use function, categorizing them in this way assists with the recognition of zones of use that may occur on the campus. Figure 3 illustrates the building usage categorizations.

The core buildings on the Germantown campus are for academic use. The High Technology and Science Building is almost entirely dedicated to academic use. The Humanities and Social Sciences building and Sciences and Applied Studies building have

# Germantown Campus Existing Conditions Building Usage Plan



- Administrative usage
- Academic usage
- Operations usage
- Recreational usage
- Service usage
- Existing non-College building

- CG- Child Care
- CP- Central Plant
- GN- Greenhouse
- GS- Grounds Storage Building
- HS- Humanities and Social Sciences
- HT- High Technology and Science Center
- PG- Physical Education
- SA- Sciences and Applied Studies
- WT- Water Tower



academic components with other uses. The Humanities building maintains a large portion of student service areas. The Sciences and Applied Studies building has a large administrative component located within, including the Provost's office. The greenhouse to the south of the Sciences and Applied Studies building does have an academic use, but is also used by the staff to support the Campus' landscaped facilities; it is classified as service usage. The Physical Education building is classified as recreational usage, although it does support College programs that may be considered academic. The athletic fields beyond the campus core are similarly classified as recreational usage. The remaining buildings beyond the campus core, the Central Plant and the Vehicle Maintenance Shop, are primarily facilities service oriented.

### **3.2.6 Functional Adequacy of Facilities**

The campus is severely deficient in both the size and quantity of office and instructional space, study, meeting rooms, and support spaces for lounging and recreation. In general, available building space has dictated programs and services – limiting the campus' ability to respond to program needs and changes in instructional delivery. This situation has severely limited the College's ability to support collaborative learning and collaboration efforts between students and faculty. Lack of space has also resulted in fragmenting disciplines, program identities, and services, and limits the ability of the campus to be a full community resource.

In addition, the circulation network in and through campus buildings does not adequately provide access to all instructional areas on the campus for disabled persons. Some of the older campus facilities are not compliant with the Americans with Disabilities Act (ADA).

Descriptions of the programs and functions in each building are included below. The general adequacy of each building to support these programs and functions is also presented.

**Science and Applied Studies (40,291 NASF, 65,146 GSF)**, constructed in 1978 with partial renovations occurring in the late 1990s, this two story structure includes the Office of Admissions and the Office of Records and Registration, the Student Financial Aid Office, the Cashier's Office, the Career/Transfer Center, the Counseling Office, the Student Life administrative offices, and the offices of the Provost. In addition, there exists the Science Learning Center; two lecture halls; four general purpose classrooms, Natural Science Department laboratories and support spaces including the Landscape Technology and Biotech Programs, and staff and faculty offices for the Departments of Natural Sciences; Accounting; Paralegal; Business and Management; Science, Math, and Technology Division; the Safety and Security Office; and administrative offices of the campus Department of Physical Plant, Operations and Maintenance, and the campus' central Information Technology; Telecommunications rooms; Mail; and Copy Center.

Functional inadequacies include the inability to provide comprehensive student "one-stop" for both study and student services including alleviating the space deficiencies associated with the office and support functions serving admissions, financial aid, registration, and

cashiering. In addition, there is need to expand the capacity of the Science Learning Center, support/storage requirements, and the open computer laboratory.

**Humanities and Social Sciences (51,406 NASF, 75,700 GSF)**, this two story structure plus a basement constructed in 1978 contains 18 general purpose classrooms; the Library; the Bookstore; Game Room; Lounge; the Food Service facility; Art Department Laboratory; the Writing Center; the Child Care Center; AV and IT Campus Services including offices; and offices for the Departments of Communications, English, Art, Social Sciences, and Psychology; Learning Center; Counseling; Financial Aid; Workforce Development and Continuing Education; the Dean of the Division of Humanities, Social Sciences, and Education; and the Division of Distance Learning. In addition, the building houses the Operations and Maintenance Shops and support spaces.

Without exception, each of the primary functions have inadequate space: child care, bookstore, dining/food service, lounge, library, and AV/IT services and the Art laboratory. In addition, all of the offices are undersized and there is insufficient workspace, storage, and service space associated with the Operations and Maintenance (O & M) functions. Improper ventilation from the O & M shop spaces impacts the functional and environmentally safe use of the remaining operations in the building.

**Physical Education Complex (29,370 NASF, 36,770 GSF)**, a one story structure plus a partial basement constructed in 1983 accommodates two general purpose classrooms, pool with seating and storage, main arena with seating and storage, weight room, training room, locker rooms, and offices for the Health and Physical Education Department. The physical education facilities are heavily used by the community and local school systems, particularly the pool.

There is need for a fitness center, multipurpose room(s), athletic training room, equipment room/laundry facility, reconfiguration of the locker rooms to accommodate students, faculty, and staff, teams, and officials, storage, as well as “right-sizing” offices.

**High Technology and Science Center (41,779 NASF, 75,542 GSF)**, constructed in 1995, this four story structure houses 9 general purpose classrooms; 11 computer laboratories; Telecommunications; Computer Graphics; Micro- Computer laboratories; Cable/Skills Training laboratories; two Physics laboratories; a Biotechnology laboratory; Mathematics Learning Center; Mathematics Technology Laboratory; and the Globe Hall auditorium with seating for 525 including stage, backstage area, Ticket Booth, Control Booth, and storage. In addition, the building provides lounge spaces and offices for the Dean; Business; Science, Mathematics, and Technology Division; Departments of Mathematics, Computer Applications, Counseling, Natural Sciences, Accounting, Paralegal, Business and Management, and Art.

Currently adequate, the potential of future relocation of the Math Learning Center and Math Technology Laboratory and the Biotechnology program to the proposed Bioscience Education Center will, through minor renovations, convert laboratory space to new uses or to “right-size” offices.

**Grounds Storage Building** (1,623 NASF, 4,295 GSF), two single story structures constructed in 1980. One section is the automotive shop (2 bays) including repair parts storage, a small engines repair area, and staff workstation. The second component, which is unheated, accommodates carpentry materials storage (one overhead door access) and grounds equipment storage (two overhead door access).

The Germantown campus is responsible for providing automotive repair services for the College. Although marginally adequate, this facility will need to be both upgraded and expanded, if not replaced, to provide adequate space and environmental control.

**Greenhouse** (1,288 NASF, 2,075 GSF), constructed in 1993 supports the Landscape Technology program. It is used to support classroom and laboratory instruction and site improvements on the campus. The current facility is adequate to meet the current two-fold usage.

In addition to the aforementioned facilities, there are a few outbuildings that do not contribute to the NASF of the campus but provide valuable support:

Baseball Storage Shed (96 GSF, constructed in 1999)  
Dugout Storage Shed (72 GSF, constructed in 1999)  
Home Team Dugout (380 GSF, constructed in 1999)  
Visitor Dugout (360 GSF, constructed in 1999)  
Landscape Storage Shed (288 GSF, constructed in 1991)  
Press Box (96 GSF, constructed in 2000)  
Tennis Storage Shed (370 GSF, constructed in 1991)  
Greenhouse Storage Shed (280 GSF, constructed in 1993)  
Child Care Storage Shed (80 GSF, constructed in 1999)

### **3.2.7 Building Conditions**

Montgomery College hired Vanderweil Facility Advisors (VFA) to perform a web enabled software-based facilities condition analysis of each of its three campuses which included buildings and site infrastructure components such as electrical utilities, storm sewer, sanitary sewer, parking lots, etc. The primary focus of this effort was to:

- Provide a baseline condition assessment of the College's facilities to include infrastructure components and building systems.
- Provide the College with budget estimates for funding required safety improvements and reducing the deterioration of campus buildings and infrastructure components.
- Assist the College with building code and accessibility compliance and to ensure that the facilities are operated as required.
- Utilize the assessment in the implementation of an ongoing process of the identification and prioritization of maintenance and capital repair projects.
- Provide decision support capabilities with VFA's facility management software solutions.

The facilities analyses include the following:

- Current Condition Analyses – existing facility deficiencies including deferred maintenance, deferred renewal, near-term anticipated renewal, recommended discretionary improvements, and code, non-compliance issues.
- Anticipated capital renewal analyses – projections of ongoing degradation of facilities' components and costs associated with renewal or replacement of these components as they reach the end of their useful life.
- Capital funding analyses – scenario comparisons showing various funding levels and the effect of each on the condition and value of the building.

### **Assessment Methodology**

The deficiencies were classified in several different ways. In addition to detailed specific descriptions, each deficiency was assigned a category, priority, and primary system association. This parallel differentiation allows for multiple queries of the database, facilitating analysis of the data. It is possible, for instance, to query the database for all Priority 1 deficiencies in the electrical systems or all Priority 5 accessibility code issues. The criteria used to determine the priorities, categories, primary systems, and cost estimating are as follows:

- Priority One – Immediate Concerns: Should be undertaken immediately including violations of life safety, building, and electric codes.
- Priority Two - Short Term Concerns (1-2 years): Should be corrected in the near future to maintain the integrity of the building, including systems, which are functioning improperly or not at all, and problems that, if not addressed will cause additional deterioration.
- Priority Three – Long Term Concerns (3-5 years): Should be corrected in the more distant future to maintain the integrity of the building, including systems, that have exceeded their expected useful life, but are still functioning.
- Priority Four – Improvements: Required or desirable to bring the facility to perform as it should, including systems upgrades and aesthetic issues.
- Priority Five – New Code Requirements: Do not conform to codes instituted since the construction of the building, therefore, they are grandfathered in their existing condition. These should be addressed in any major renovation effort, if not before.

Deficiency Categories:

- Code Compliance (violation of the 2000 International Building Code or conditions which pose a hazard to building occupants)
- Building Integrity (components or systems which are broken or in poor condition)
- Functionality (conditions which inhibit current use of space and do not necessarily affect the integrity of the building's systems such as poor temperature control, insufficient electrical service, etc. )
- Aesthetics (problems with the building's appearance which are not functional in nature)
- Energy (conditions which adversely affect energy usage)
- Air/Water Quality (conditions which affect the environmental quality of the water or air)

- Hazardous Materials (Visible observations or College reporting indicating probable presence of hazardous materials)
- Life Safety (violations of the Life Safety Code, NFPA, 101)
- Building Code Accessibility (Compliance with the accessibility requirements of 28 CFR part 36, ADAAG and the Maryland Accessibility Code of COMAR 05.02.02 dated February 1, 1995).

**Facility Condition Index**

An automated standard process for assessing the relative condition of buildings and site infrastructure components, facilitating comparison both within and among the campuses was established. For each building or site component, the Facility Condition Index (FCI) was developed which measures the relative amount of current deficiencies in the building including recommended improvements and grandfathered issues. The total value of recommended corrections is divided by current replacement value for the building or site component resulting in the FCI. The higher the FCI, the poorer the condition of the facility of system component. The FCI ranges for the standard of services for each building or site component are:

- Good: .00 to .05
- Fair: .05 to .10
- Poor: Greater than .10

FCI is a standard measure used throughout the country; it is recommended by both the National Association of College Business Officers (NACUBO) and the Association of Higher Education Facility Officers (APPA). In the attached tables, this is represented by a Deficiency % which takes the FCI and converts it to a percentage of replacement. For example, an FCI of .10 translates into a Deficiency percentage of 10%.

Referencing the following tables, the results of VFA’s survey clearly show that the majority of campus facilities including infrastructure are in fair condition. It should be further noted that this does not reflect “true functional” needs involving general purpose, as well as programmatic or departmental needs such as inadequacy of space to accommodate changes in, or current teaching methodology and technology, proper sizing of instructional space and office space, student gathering space, student support services, etc.

**Table 3.2.7-1  
Total Replacement Value and Current Deficiency Cost**

Sixteen structures (263,157 GSF) which include: 4 major buildings (253,158 GSF) and 12 support facilities (9,999 GSF), central plant, 6 sheds, press box, automotive/storage, greenhouse, 2 dugouts.

	Replacement Value	Current Deficiency	Deficiency as % of Replacement*
Priority One - Five Building Systems	\$36,285,188	\$6,274,269	17%

<u>Infrastructure</u>	\$13,965,956	\$2,555,927	18%
CAMPUS TOTAL	\$50,251,144	\$8,830,196	18%
<b>Priority One-Three Only</b>			
Building Systems	\$36,285,188	\$3,420,546	9%
<u>Infrastructure</u>	\$13,965,956	\$83,411	6%
CAMPUS TOTAL	\$50,251,144	\$3,503,957	7%

\* FCI is calculated by dividing the Deficiency as % of Replacement by 100.

**Table 3.2.7-2**  
**Age of Buildings, GSF, and % of total**

1970's (3 Buildings)	142,766	GSF	54%
1980's (2 Buildings)	41,065	GSF	16%
1990's (11 Buildings)	79,326	GSF	30%
TOTAL (16 Buildings)	263,157	GSF	100%

**Table 3.2.7-3  
Size of Buildings and % of total**

<1,000 GSF (9 buildings)	2,022	GSF	.8%
1,001 – 2,000 GSF (2 buildings)	3,682	GSF	1.4%
2,000 – 5,000 GSF (1 building)	4,295	GSF	1.6%
25,000 – 50,000 (1 building)	36,770	GSF	14.0%
> 50,000 GSF (3 buildings)	216,388	GSF	82.2%
TOTAL (16 Buildings)	263,167	GSF	100%

**Table 3.2.7-4  
Building Deficiency, Category Amount (1-5), and (% of Replacement)**

Less than 25% deficiency (5 buildings)	\$4,363,071	70%
26% to 50% deficiency (5 buildings)	\$1,521,124	24%
51% or greater Deficiency (6 buildings)	\$390,074	6%
TOTAL	\$6,274,269	100%

**3.2.8 Utilities**

As part of this Facilities Master Plan process, the 1991 Utilities Master Plans and 1998 update, and the 1991 Facilities Master Plan were reviewed to determine the adequacy of existing systems and to ascertain the potential for future expansion. In addition, the Facilities Managers for each campus were interviewed to identify completed and planned improvements and to verify existing information.

**Water**

The Germantown campus receives all of its water from the Washington Suburban Sanitary Commission (WSSC) through a meter located adjacent to the Humanities building. The system is adequate for present domestic water and fire flows and future domestic water flows, but inadequate for future fire flows based on simulations using the Kentucky Pipe Model Program using flow requirements of the Insurance Service Office (ISO) Fire Suppression Rating Schedule in the 1991 Utilities Master Plan.

**Sanitary Sewer**

The college owns a sanitary sewer collection system that flows into the WSSC system at one location on the southeast side of the campus. The current system is adequate for all present and future planned capacity based on recommendations and capacity charts in the 1991 Utilities Master Plan.

**Heating System**

Buildings on the Germantown Campus are heated by stand-alone gas fired hot water boilers and heat pumps. There is no central heating plant. The Physical Education Building receives heating water from an underground loop fed from the Humanities building.

**Chilled Water System**

The chilled water system consists of chillers and an ice storage system located in the High Technology and Science Center connected to an underground piping loop that serves the Science and Applied Studies Building, and the Humanities and Social Sciences Building. Portions of these buildings are still being served by packaged systems and heat pumps. The chillers are 2-270 ton water cooled Frick ammonia screw chillers. The thermal ice storage system can produce a capacity of 2400 ton-hours. If eight hours of peak load is considered, the ice storage system will add 300 tons to the chilled water system. The chillers, ice storage system, and the loop have been constructed since the 1991 Utilities Master Plan. The Physical Education Building is a stand-alone system.

**Natural Gas**

The College has installed a central gas line to serve the campus. Each building is independently connected to the central gas line except for the Physical Education Building. All proposed buildings would have to be connected to the gas line if a central heating plant is not planned.

**Electrical**

The current electrical power to the campus is supplied directly from the utility company, PEPCO. There is no existing central power plant on the campus.

Each building in the campus is served and metered separately from the secondary side of the PEPCO's transformers. Primary feeders and transformers are owned and maintained by PEPCO.

**3.2.9 Stormwater Management**

One pond, located on the north side of the campus, provides stormwater management control for the campus, portions of MD Route 118 and the adjacent business park. A series of storm drain pipes on the campus divert the stormwater runoff to the existing pond. This pond provides for both quantity and quality control for all existing buildings, parking, and access roads on the campus with the exception of 3.0 acres that could not be made to drain to the existing pond. The existing High Technology and Science Center and surrounding access road are the only developed portions of campus not managed by this pond. Water quality control for the 3.0 acres not draining to the pond was provided through construction of an oil/grit Sand Filters system. Storm runoff from both the second pond and the High Technology and Science Center is discharged to a tributary of Gunners Branch, located on the east side of the site.

The second pond was retrofitted and enlarged in 1995 to provide water quantity control and compensation storage for 3.0 acres that was the result of construction of the High Technology and Science Center, additional parking and an access road to the building. As part of this retrofit, an enlarged embankment was provided to accommodate a 26' wide access road.

From stormwater management studies completed in July, 1993 by Loiederman Associates, Inc, it is clear that the existing ponds adequately retain the 2-year and 10-year storms and safely convey the 100-year storm event.

**3.2.10 Circulation and Parking**

**Vehicular Access and Circulation**

The Germantown Campus is bounded generally by Germantown Road (MD 118) to the north, Dwight Eisenhower Highway (I-270) to the west, Middlebrook Road to the south and Frederick Road (MD 355) to the east. Regional access is provided by I-270 and Frederick Road. The Germantown Road and Observation Drive intersection is signalized and serves as the only external access point for the campus. The campus access and circulation situation is illustrated in Figure 4. This figure also shows the parking and public transportation facilities currently serving the campus.

Traffic turning movement counts were conducted at the Germantown Road/Observation Drive intersection to determine its operational efficiency as well as the distribution of trips accessing the campus. Analysis of the data obtained indicates that this intersection currently operates within the acceptable level-of-service planning standards. The data also indicates the following campus trip distribution:

<b>Roadway Approach</b>	<b>Distribution</b>
From the north on Observation Drive	10%
From the east on Germantown Road	40%
From the west on Germantown Road	50%

Observation Drive is the “roadway spine” of the campus. This roadway consists of a long “throat” extending between the Germantown Road intersection and the entrances to the recreational facility and Parking Lot A. This segment consists of two (2) horizontal curves, and is provided with appropriate speed signage and pedestrian crosswalks, which all serve as “traffic calming” measures. On-campus vehicle access and circulation are also provided by minor roadways that connect Observation Drive with the parking lots and loading areas. Field observations indicate that vehicular and pedestrian access and circulation occur without any significant operational and safety constraints.

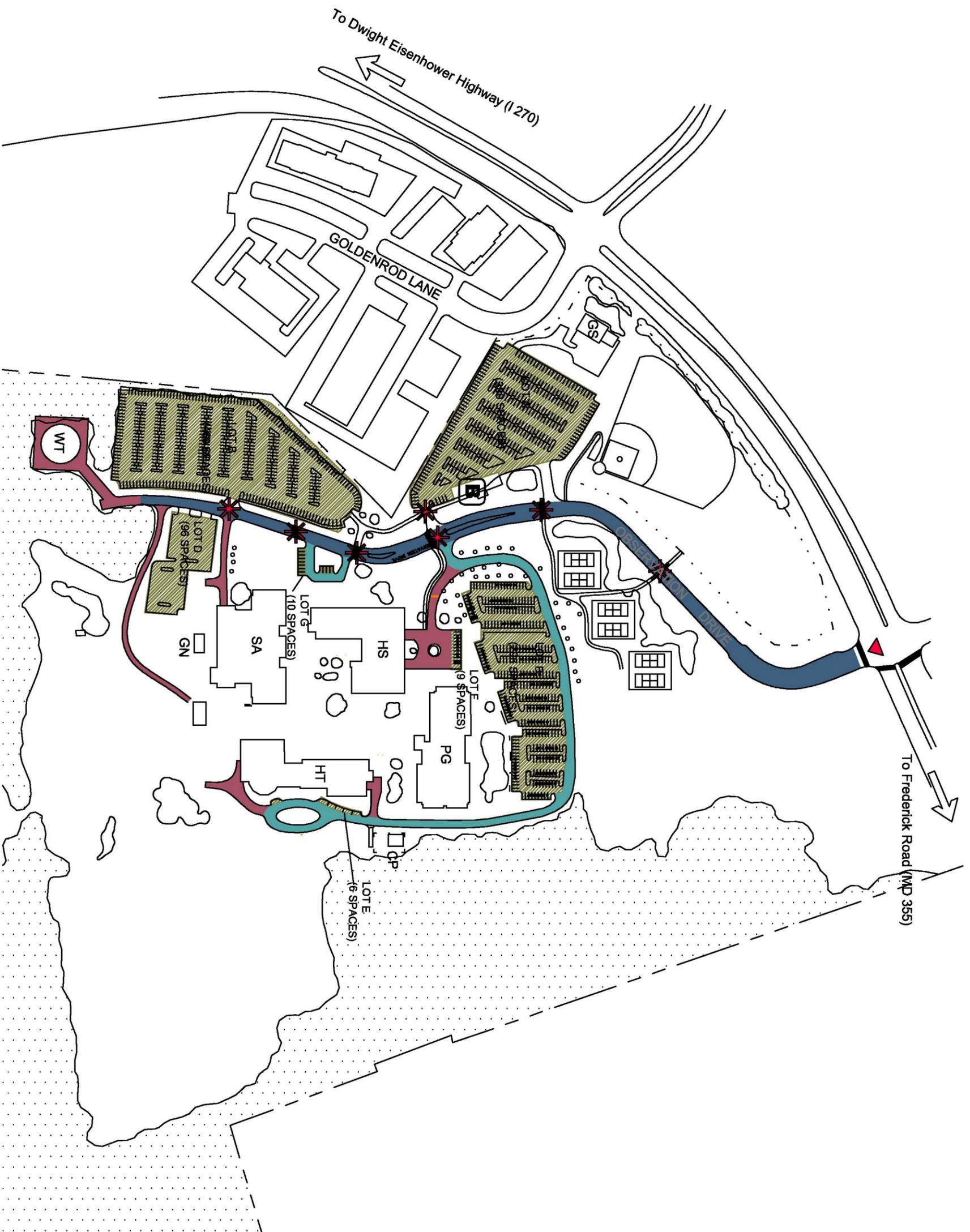
**Parking**

The campus is provided with 1,223 spaces distributed among several surface lots. The peak demand ratio is approximately sixty-eight percent (68%). This indicates that significant excess parking is available. The average walking distance between the parking areas and the campus building is 500 feet, which is quite acceptable based on national standards for educational campuses.

**Public Transportation**

The campus is served by three (3) routes on the Montgomery County Ride-On bus transit system. These routes collectively connect the campus with the Rockville campus, as well as the Rockville and Shady Grove Metro stations.

# Germantown Campus Existing Access, Circulation and Parking Plan



-  Parking
  -  Major vehicular circulation
  -  Minor vehicular circulation
  -  Service road
  -  Bus stop
  -  Campus access point
  -  Pedestrian/Vehicular conflict
- CG- Child Care
  - CP- Central Plant
  - GN- Greenhouse
  - GS- Grounds Storage Building
  - HS- Humanities and Social Sciences
  - HT- High Technology and Science Center
  - PG- Physical Education
  - SA- Sciences and Applied Studies
  - WT- Water Tower

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MONTGOMERY COLLEGE  
FACILITIES MASTER PLAN 2002-2012  
GERMANTOWN CAMPUS

JANUARY 2004  
GT-F4 FIGURE 4



**Issues**

The campus is provided with a single entranceway/access point. Based on the discussions held with the Montgomery County Department of Transportation Traffic Planning Department, this situation is “unacceptable” from the perspectives of daily campus trip generation (which significantly exceeds the County’s standard of 1,000 trips), as well as emergency requirements.

**3.3 FACILITIES PROGRAM****3.3.1 Needs Assessment****Current and Projected Facility Needs**

Assessments of the current and projected facilities needs at the Germantown campus are generated by applying current and projected planning data related to enrollment, instructional delivery, library collections, faculty, and staff to the State of Maryland Guidelines for facilities at community colleges. Refer to Table 3.3.2-1 for this planning data.

Current and projected space needs for each type of space in the campus inventory for which a guideline is available are then computed. Comparisons with the campus’ current inventory and the one planned for 10 years later, given approved capital projects, are made, and surpluses or deficiencies relative to the respective space categories are identified. Table 3.3.2-2 shows this analysis. The Germantown campus has only one approved facility project over the master planning period of 2002 to 2012—the construction of a 3,780 NASF Child Care Center—and this project is included in the guideline assessment. Not included in the guideline assessment is the construction of the Bioscience Education Center currently being planned, although it is included among the proposed facility projects for the campus.

Currently the Germantown campus, excluding Central Administration and Work Force Development and Continuing Education, shows a need of 230,381 NASF, representing a significant overall deficiency of -65,843 NASF, or 40% of the campus’ current inventory of 164,538 NASF. The College is projecting a substantial 35% growth in enrollment at this campus over the next ten years, resulting in an overall projected space deficiency of -155,919 NASF, which represents 95% of the current campus inventory, an almost doubling of the campus size. With deficiencies in every space category, every department on campus—the academic departments, student development programs, the library and learning centers, information technology, and physical plant—is involved in capital projects to meet these facility needs.

**Table 3.3.1-1  
Needs Assessment Planning Data for the Germantown Campus**

	Fall 2002	Fall 2012
FTDE-Credit	1,499	2,029
FTDE-Noncredit	<u>0</u>	<u>0</u>
FTDE-Joint	1,499	2,029
WSCH-Lecture-Credit	18,442	20,688
WSCH-Lecture-Noncredit	<u>0</u>	<u>0</u>
WSCH-Lecture-Joint	18,442	20,688
WSCH-Lab-Credit	6,343	13,444
WSCH-Lab-Noncredit	<u>0</u>	<u>0</u>
WSCH-Lab-Joint	6,343	13,444
FTE Students	2,224	3,010
Bound Volume Equivalents	77,145	91,939
FTE Faculty	112	154
FT-Faculty	69	101
FT-Staff	145	192
Planning Head Count	878	1,188
Student Headcount	4,948	6,432

**Table 3.3.1-2  
Computation of Space Needs for the Germantown Campus**

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
100	CLASSROOM	27,663	20,166	(7,497)	31,032	20,166	(10,866)
200	LABORATORY	50,697	44,314	(6,383)	102,630	44,314	(58,316)
210	Class Laboratory	44,401	35,724	(8,677)	94,108	35,724	(58,384)
220	Open Laboratory	6,296	8,590	2,294	8,522	8,590	68
250	<i>No Allowance</i>						
300	OFFICE	45,282	30,142	(15,140)	60,321	30,142	(30,179)
310	Office/ Conf. Room	43,782	28,066	(15,716)	58,556	28,066	(30,490)
320	Testing/Tutoring	1,500	2,076	576	1,765	2,076	312
350	<i>Included w/ 310</i>						
400	STUDY	20,169	15,317	(4,852)	25,553	15,317	(10,236)
410	Study	9,369	1,730	(7,639)	12,681	1,730	(10,951)
420-30	Stack/Study	7,715	13,421	5,707	9,194	13,421	4,227
440-55	Processing/Service	3,086	166	(2,920)	3,678	166	(3,512)
500	SPECIAL USE	36,600	31,376	(5,224)	42,313	31,376	(10,937)
520-23	Athletic	34,000	27,730	(6,270)	39,290	27,730	(11,560)
530	Media Production	1,600	2,358	758	2,023	2,358	335
580	Greenhouse	1,000	1,288	288	1,000	1,288	288
600	GENERAL USE	33,939	16,519	(17,420)	42,304	19,212	(23,092)
610	Assembly	12,000	6,524	(5,476)	13,058	6,524	(6,534)
620	Exhibition	1,500	0	(1,500)	1,765	0	(1,765)
630	Food Facility	8,956	5,215	(3,741)	12,113	5,215	(6,898)
640	<i>Child Care (N/A)</i>	807	807	0	3,500	3,500	0
650	Lounge	2,634	1,152	(1,482)	3,563	1,152	(2,411)
660	Merchandising	1,600	1,497	(103)	1,865	1,497	(368)
670	<i>Recreation(N/A)</i>	442	442	0	442	442	0
680	Meeting Room	6,000	882	(5,118)	6,000	882	(5,118)
700	SUPPORT	15,531	6,704	(8,827)	19,199	7,511	(11,688)
710	Data Processing	2,500	0	(2,500)	2,500	0	(2,500)
720	Shop/ Storage	8,854	5,967	(2,887)	12,450	5,967	(6,483)
730	<i>Included w/ 720</i>						
740	<i>Included w/ 720</i>						
750	Central Service	4,000	582	(3,418)	4,000	1,389	(2,611)
760	Hazmat Storage	177	155	(22)	249	155	(94)
800	HEALTH CARE	500	0	(500)	606	0	(606)
900	<i>No Allowance</i>						
050	<i>No Allowance</i>						
060	<i>No Allowance</i>						
070	<i>No Allowance</i>						
090	<i>No Allowance</i>						
	<b>Total NASF:</b>	<b>230,381</b>	<b>164,538</b>	<b>(65,843)</b>	<b>323,957</b>	<b>168,038</b>	<b>(155,919)</b>

**3.3.2 Proposed Facilities Programs**

As shown in the following set of projects, the Facilities Master Plan identifies a need for the Germantown campus to add 156,390 NASF to the campus inventory. The core of these project additions represents 90% of the projected campus needs, with 139,920 NASF met of the 155,919 NASF projected deficiency indicated. These projects also incorporate the needs of Work Force Development and Continuing Education, the planned expansion of upper-level biosciences offerings through a partnership with the University of Maryland College Park, and meeting and study support needs of the County's planned Biotechnology Park, totaling 14,200 NASF of ad hoc campus additions in the total campus additions of 156,390 NASF not reflected in the State guidelines.

Together with the reallocations and renovations of spaces within existing campus buildings, the new facilities will support the projected ten-year growth and development of the Germantown campus. The College should monitor carefully discipline growth and changes at this campus, particularly given space constraints at the other two campuses and the unique program opportunities afforded by the upper level science program and the Biotechnology Park interfaces. Additional facilities may well be required, such as a Physics and Mathematical Sciences Building. A description of the programs located within these projects follows. The physical aspects of these projects will be discussed in section 3.4, Master Plan.

#### **Construction of Bioscience Education Center**

This project, which is currently in the justification and specification stage as a capital project, proposes the construction of a new academic building supporting the biosciences programs within the department of Natural Sciences, including Biology, Chemistry, and Biotechnology, and co-locating these facilities with the Science Learning Center. The Physics and Landscape Technology programs of this Department are not to be located in this Center, and the existing Greenhouse remains at its current location. In addition to providing facilities supporting the College's traditional student and curriculum, this Center will also allow the College to partner with the University of Maryland, College Park in providing upper level instruction for baccalaureate majors in the biosciences and possibly graduate study. It also provides Work Force Development and Continuing Education and the College with instructional and videoconferencing and meeting facilities to serve the significant biotechnology industry located in Montgomery County generally and the Biotechnology Park specifically being planned by the County adjacent to the campus.

#### **Renovation of the Science and Applied Studies Building**

This renovation project begins by converting the existing science classrooms and class labs in the Science and Applied Studies Building into space to support the art program, while also retaining and expanding contiguous space to support the Landscape Technology program. With the relocation of the Student Development functions, campus services, including admissions and registration, financial aid, and the cashier, and campus operations and maintenance management, the vacated office and other support space is renovated to house the Dean of Humanities, Social Sciences, and Education, the Departments of Art, Psychology, and Social Sciences, the Landscape Technology program, the WDCE staff not located in the Bioscience Education Center, and the Center for

Teaching and Learning and Distance Learning. The Office of the Provost and Security remain in their current locations and with their current allocations.

#### **Construction of Student Resource Center**

This project provides a new Student Resource Center for the campus, a comprehensive student “one-stop” for both study and student services, and brings together (1) the campus Library from the Humanities Building, (2) Student Development functions and campus services of admissions, financial aid, registration, and cashiering from the Social and Applied Sciences Building, (3) the Writing Center from the Humanities Building, and (4) the Math Learning Center and Math Technology Lab from the High Technology Center. Key needs addressed by this project are the Library needs for study, stack, and processing and service spaces, all significantly constrained in their present location. Also supported in this facility are the media resources and academic computing functions, including the computer training lab. This project supports the planning goals of building identity and synergy. The advantage for the student is the concentration of support resources in a single location. For the campus, space is made available in other buildings that will allow more growth in office space before a building has to be constructed.

#### **Renovation of Humanities and Social Sciences Building**

With the construction of the Child Care Center, Bioscience Education Center, a Student Resource Center, and the Physical Plant Building addition and the relocation of the Art Department, the renovation of Humanities and Social Sciences Building focuses the use of this building to one supporting primarily the English and Communication Departments. Support spaces for the existing dining and bookstore are expanded into the space vacated by the media resources, academic computing, and physical plant functions, and space for MC Copies is provided. The campus mailroom and central copy services are relocated to this facility, also with expanded space.

#### **Construction of Physical Plant Building as an Addition to Grounds Storage Building**

This construction project co-locates management functions of the Facilities Department located in the Science and Applied Studies Building with shop, campus storage, and other operation and maintenance functions located either in the Humanities and Social Sciences Building or the Grounds Storage Building. Apart from issues of functional fragmentation, the location of the carpentry and paint shops in the Humanities Building raises significant concerns about functional mix. While spaces are retained in the Humanities Building for grounds and building storage and central service to facilitate maintenance of the campus, the shops and management functions are relocated to the new Physical Plant Facility, and expansion space is provided.

#### **Alteration of High Technology and Science Center**

The analysis of the needs of the remaining occupants of the High Technology and Science Center—Accounting and Business Administration, Computer Applications, Networking, Mathematics, and Physics—after the Bioscience Education Center is constructed and the Biotechnology program vacates space shows that not all of the growth projected can be accommodated in this building. With the relocation of the Math Learning Center and the Math Technology Lab, the vacated space can be altered to meet projected needs and foster

a strong building identity for the disciplines associated with the Computer Applications, Networking, Accounting, and Business Administration. This strategy will allow the campus, long term, to relocate Physics and possibly Mathematics to a building site near to and interconnected with the Bioscience Education Center.

#### **Renovation of and Addition to the Physical Education Complex and Outdoor Facilities**

This project renovates the Physical Education Complex to bring the amount of physical education and athletic space to a guideline core of 34,000 NASF, as well as providing classroom and office space to support the faculty and staff associated with this facility. Further addition of athletic space should only occur if a substantial increase in the intercollegiate athletic program is planned. Through the renovation, the configuration and amount of locker room space is converted to other uses, and changes in the building flow are created to allow for more user sensitive, and safer control of facility use, including better accessibility for older and/or disabled individuals, more direct access to instructor and coaches' offices, and better location of equipment and other storage. Overall the project should create an atmosphere that invites people to participate in healthy lifestyle activities. Long range campus development at Germantown should incorporate the development of athletic fields to support such sports as softball, soccer, and lacrosse, as well as maintain the current outdoor facilities, supporting tennis, baseball, and golf.

#### **Construction of Additional Child Care Center Units**

While a new Child Care unit is under development for the campus, additional units may be required as the campus grows. These units can be expected to be co-located with that under development and to be of comparable size. The College may want to consider adding observation rooms to each unit to support its expanding program in early childhood education, as well as providing a venue for parents and teachers to observe classroom and social behaviors of children so that appropriate intervention strategies can be planned and implemented.

### **3.4 MASTER PLAN**

#### **3.4.1 Campus Structure and Character**

The Facilities Master Plan for the Germantown Campus is designed to support a 35% increase in enrollment through construction of approximately 166,000 net square feet (287,000 gross square feet) of new space, renovation of 123,000 net square feet (185,000 gross square feet) of existing space, and alteration of 42,000 net square feet (76,000 gross square feet) of existing space.

The proposed Facilities Master Plan envisions improvements to the Germantown campus that expand facilities, improve access, and provide parking, while providing a framework for development that enhances the character and natural features of the campus. The rural character of the Germantown Campus is unique among the College's campus. The site slopes significantly from north to south, and has beautiful natural resources including a stream and mature forest. The Facilities Master Plan locates facilities in linked quadrangles that organize buildings around open spaces, preserving as much undeveloped land as possible.

### **3.4.2 Proposed Land and Building Use**

A summary of proposed projects identified for this campus follows. Refer to Figures GT-F5, GT-F6, and GT-F7 for illustration of the suggested locations, building footprints, and heights of the various projects.

#### **Proposed Projects**

The Facilities Master Plan builds on the successful existing campus quadrangle concept and proposes a second quadrangle to be anchored by a new Biosciences Center and Resource Center. The quadrangle will accommodate another future building or expansion of the Biosciences Center. The quadrangle slopes down from east to west and will need to be designed to accommodate, and take advantage of, this slope. The quadrangle is proposed to be open at its southeast corner to take advantage of views to the forested and undeveloped land to the south.

A key element of the Facilities Master Plan is construction of structured parking. Structured parking is essential to the concept of preserving the open space on campus and providing parking that is convenient to academic buildings. A parking structure is proposed to be built in the ten-year time frame east of the High Technology and Science Center. The High Technology and Science Center was designed to have two front doors, and will provide a link from the parking structure to the existing campus quadrangle.

Also proposed are additions to the Physical Plant Building and the Physical Education Building. Additions to these buildings take advantage of existing facilities.

One of the primary goals of the Facilities Master Plan was to plan for a 40-acre business park to be built half on Montgomery County property (the former Kay property) and half on contiguous College property. The proposed site of the business park borders I 270, providing highly visible sites for future buildings. It is anticipated that creation of the Business Park will create synergies between the College and the business community by providing a business environment that can utilize the educational and technical resources of the college, while allowing students and faculty the opportunities for collaboration and employment with the adjacent businesses.

Various alternatives for this park explored the appropriate physical and aesthetic relationship to the campus. The Master Plan depicts the location for the business park that has a unique identity, separate but related to the College campus. This relationship is supported by a vehicular and pedestrian circulation system for the business park that extends southward from Goldenrod Lane. A connection could be made to Middlebrook Road. The Goldenrod extension is connected to the College loop road in the vicinity of the proposed Child Care Center. The vehicular connection between the Business Park and the campus will incorporate a sidewalk that will facilitate pedestrian circulation between the Business Park and the campus along a ridge that connects the two.

For planning purposes, the Facilities Master Plan is augmented by a separate document that depicts one million gross square feet of building within the Business Park, including

# Germantown Campus Proposed Site Plan 2002 - 2012



- Major greenspace or quadrangle
- Existing building to remain
- New campus building
- New parking structure

- CG- Child Care
- CP- Central Plant
- GN- Greenhouse
- GS- Grounds Storage Building
- HS- Humanities and Social Sciences
- HT- High Technology and Science Center
- PG- Physical Education
- SA- Sciences and Applied Studies
- WT- Water Tower



# Germantown Campus Proposed Land Use Plan 2012-2022



- Major greenspace or quadrangle
- Existing building to remain
- New building in 10 year plan
- New building in 20 year plan
- Parking structure in 10 year plan
- Site work in 20 year plan

- CG- Child Care
- CP- Central Plant
- GN- Greenhouse
- GS- Grounds Storage Building
- HS- Humanities and Social Sciences
- HT- High Technology and Science Center
- PG- Physical Education
- SA- Sciences and Applied Studies
- WT- Water Tower

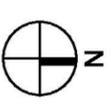


# Germantown Campus Open Space Concepts Plan 2002-2012



- Greenspace or quadrangle
- Existing building to remain
- New campus building

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an incubator facility, with parking primarily in freestanding above grade parking structures. Development of this density with structured above grade parking will leave little land undeveloped within the park and will require extensive tree removal and regrading. Alternatives include less building area and/or construction of terraced or underground parking. The actual development of the Business Park will depend largely upon market forces. Montgomery County has hired the real estate firm of Spaulding and Slye to develop and issue a request for proposals for development of the Business Park.

The Facilities Master Plan recommends that the existing campus road be extended into a loop road that will encompass the existing quadrangle, a new quadrangle proposed in the ten year timeframe, and a third quadrangle that is planned for future growth beyond the ten year timeframe. This loop road will cross the stormwater retention pond as envisioned by the original retention pond design and be entered and exited primarily from a reconfigured entrance at MD Route 118. A spur of this loop road, connecting to Route 355, is proposed as a secondary means of access to, and egress from, the campus.

The Facilities Master Plan also envisions growth in the ten to twenty year timeframe. Planning for this timeframe is helpful in creating a vision for the ultimate development of the campus, and to ensure that plans for the ten year timeframe do not preclude rational future development.

The Plan for the ten to twenty year timeframe includes a building at the entrance to the campus visible from MD 118. There are many possible uses for a building in this visible location, including a signature academic building, a building supporting a public/private partnership, or a building for Workforce Development. The plan for this time frame also proposes a third quadrangle for buildings whose specific uses have not yet been identified. Academic facilities envisioned in the twenty-year time frame include the addition of softball, soccer and lacrosse fields on undeveloped land south of the proposed loop road. Figure 7 shows the proposed locations and configurations of these projects.

### **Open Space**

Building on the existing campus organization, the Facilities Master Plan for the Germantown campus creates a second quadrangle around which buildings are organized. The two quadrangles are linked by pedestrian paths and landscaped in a similar palette of lawn and trees. Opportunities for the placement of sculpture enliven the new quadrangle, and further relate it to the existing quadrangle and its art.

The new quadrangle recognizes desire lines for pedestrians while providing a gracious lawn area ringed with trees, for studying, relaxing, or more active recreation.

The Facilities Master Plan recommends strengthening the link to the campus from Route 118 by providing a walk along Observation Drive from MD 118 to the campus parking, buildings and open spaces.

The Facilities Master Plan also recommends improvements along MD 118 to enhance the campus identity, including a new campus sign and new plantings. The existing chain link

fence should be considered for replacement with a more attractive vinyl clad chain link where it is required to contain the athletic facilities. Where the fence is used to define the campus property a more aesthetically pleasing solution, including planting shrubs, is recommended.

Street tree planting along the existing campus road, as well as the new loop road as it is extended in the future, is included in the Facilities Master Plan improvements.

Pedestrian connections from campus to the future business park and the proposed day care center are also suggested, as there is a strong desire to encourage linkages between the campus and the biotechnology business park.

### **3.4.3 Proposed Utilities**

#### **Water**

Potable water is supplied by Washington Suburban Sanitary Commission (WSSC) through the water tank located on campus. There is a 30" water main that flows out of the water tank and splits into two 24-inch mains. One flows to route 355 and the other one runs on the campus access road to feed the campus buildings and eventually goes to MD Route 118.

Domestic water supply through the existing water supply mains is adequate for the proposed growth within the 10-year horizon period. Supply lines must be extended to the future building sites. Also, additional fire hydrants will be required as part of the campus expansion.

#### **Sanitary Sewer**

A sanitary sewer system is supplied by Washington Suburban Sanitary Commission (WSSC) through an 8 inch gravity line that serves all the existing buildings of the Campus. The existing line runs between the tennis courts and the campus parking and connects to an existing 12" sanitary main and eventually runs along Route 355.

The existing 8" sanitary sewer line has adequate capacity to support the expansion of the campus.

#### **Heating System**

Proposed development of the Germantown Campus will necessitate additional heating capacity. Currently, there is no central heating plant on the Germantown campus, with the exception of the Physical Education Building being fed from the Humanities Building. All campus heating is provided by stand-alone systems. The new Biosciences Education Center will also utilize a stand-alone system. The Facilities Master Plan proposes that these buildings remain as stand-alone systems.

The only other new building in the 10-year plan is the Student Resources Center. Since there is no heating plant to utilize, the Student Resources Center should also have a stand-



Germantown Campus  
Proposed Utilities



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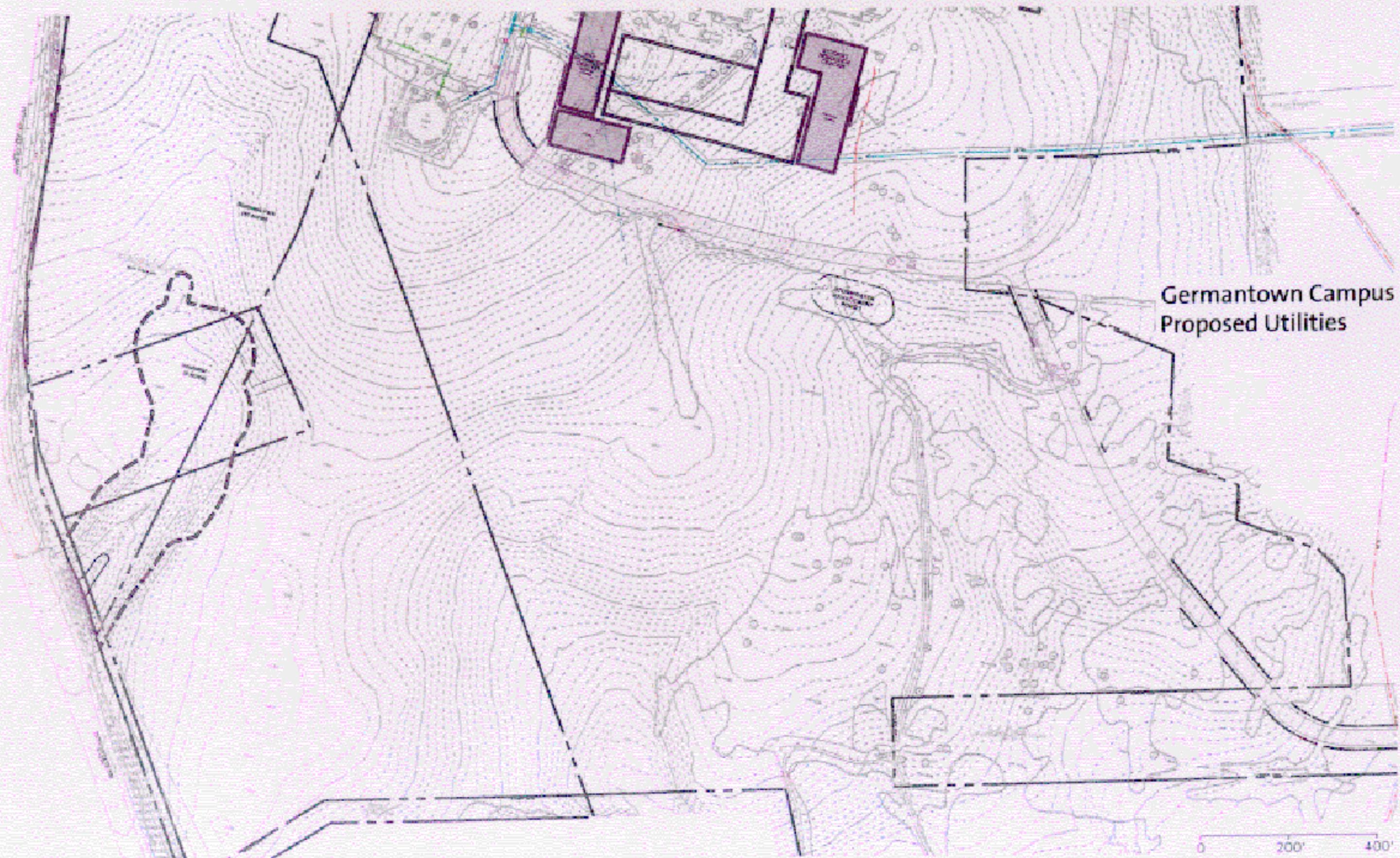
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MONTGOMERY COLLEGE  
FACILITIES MASTER PLAN 2002-2012  
GERMANTOWN CAMPUS

DECEMBER 2003  
GT-F&A FIGURE B-A





Germantown Campus  
Proposed Utilities

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GERMANTOWN CAMPUS

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GT-FBB FIGURE-B



# Germantown Campus Proposed Utilities



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FACILITIES MASTER PLAN 2002-2012  
GERMANTOWN CAMPUS

DECEMBER 2003  
GT-FBC FIGURE B-C



alone heating system. This system should consist of gas-fired boilers producing 3500 MBH and pumps to circulate the water throughout the building.

A large expansion of the Physical Education Building is planned. The Physical Education building is currently heated from the heating plant in the Humanities Building. Since it is unlikely the 2093 MBH Humanities Building plant can absorb the 1125 MBH of additional load, additional capacity will need to be created. This could include either a small gas-fired boiler/hot water system, or gas-fired packaged equipment (rooftop air handling units).

### **Cooling System**

Proposed development of the Germantown Campus will also necessitate additional cooling capacity. With the exception of the Physical Education Building, all buildings on the Germantown campus are supplied with chilled water from the central plant located in the Humanities Building. The two existing 270-ton chillers, supplemented by 2400 ton-hours of ice storage, and assuming a daily peak loading of eight hours, sum to 840 tons of cooling capacity from the plant. This plant will provide adequate cooling capacity for the 655 tons of cooling required by the existing connected buildings, including Science and Technology (180 tons), Humanities (270 tons), and High Technology (205 tons).

The chilled water plant was designed to allow an expansion of 2400 ton-hrs of ice storage and an additional cooling tower. This additional ice storage will prove an additional 300 tons of plant capacity for future buildings. Therefore, with this plant expansion, there will be 1140 tons of cooling capacity. 485 tons of capacity will be available for campus growth.

The new Biosciences Education Center and Student Resources Center have estimated cooling loads of 370 tons and 340 tons, respectively. It is proposed that both buildings be connected to the upgraded chilled water plant. This connection will include evaluation of underground distribution piping sizes to verify capacity. Once capacity is verified, these lines will be extended to the buildings.

The addition to the Physical Education Building is also included in the Facilities Master Plan. The 125 tons of projected additional load is available from the chilled water plant if the ice storage upgrades are made.

### **Electrical**

The design of electrical systems will comply with the Montgomery County and Montgomery College Energy Design Guidelines, ASHRAE Std 90.1, and the National Electrical Code.

New electric services from PEPCO will be required for the proposed new buildings. Each building will be served at 480 volt from its own PEPCO transformer, separately metered. The transformers will be located on grade adjacent to each building. PEPCO will own primary feeders and transformers. PEPCO will also provide secondary conductors up to the property line. Each building will have a main electrical room. The new electric services are estimated as follows:

- The Biosciences Center will require a 2500 ampere, 480 volt service. A 12-way secondary duct bank from PEPCO transformer to the building will be provided by Montgomery College. In addition, provisions will be made to accommodate an expansion under the 20 year plan.
- The Student Resource Center will require a 2500 ampere, 480 volt service. A 12-way secondary duct bank from PEPCO transformer to the building will be provided by Montgomery College.
- The structured parking garage will require a 1200 ampere, 480 volt service. An 8-way secondary duct bank from PEPCO transformer will be provided by Montgomery College.
- The future academic quads will require a 480 volt service under the 20 year plan.

For the proposed building additions, the existing electric services will be upgraded to accommodate the additional loads. All these buildings will be served at 480 volts, as well. The additional loads are estimated as follows:

- The Maintenance Shop Addition will require a 250 ampere, 480 volt service from existing Maintenance Shop.
- The Physical Education Addition will require a 400 ampere, 480 volt service from the existing Physical Education Complex.
- The Child Care Center will require a 100 ampere, 480 volt service per unit.
- The renovation of Humanities and Social Science Building, and High Technology and Science Center will also require additional loads.

Instead of a separate electric service for each building, a single point 13.2 kV service from PEPCO will also be evaluated. It will require installing a 13.2 kV underground primary loop in a 2-way ductbank around the campus. The 13.2 kV loop will originate from the load side of the PEPCO meter, and will supply power to transformers feeding each building. The College will own and operate all electrical distribution systems on the load side of the meter, i.e. primary and secondary feeders and transformers. The College will also need to enter into a contract with an outside firm to handle both routine maintenance and emergency service.

A feasibility study will be performed for on-site power generation, including the use of alternate energy sources such as solar power. Central inverters vs. on-site power generation systems will be evaluated for each individual building. An engine generator instead of central inverter is proposed for buildings housing critical functions, such as central security, central telephone and information technology system. If central inverters are used to supply the emergency power, one inverter (25-50kVA) will be provided in each of the proposed new buildings. The inverter will be located in the main electrical room. For additions to existing buildings, the existing emergency power systems will be evaluated and upgraded, if required.

### **Emergency Power Systems**

Emergency power will be required for life safety systems (i.e. emergency and egress lighting, fire alarm system, etc). In addition, emergency power may be needed to support telephone and security systems.

If a generator is provided, the emergency equipment will be segregated into Emergency, Legally Required Standby, and Optional Standby Systems in accordance with NEC Article 700-702. The generator will be located adjacent to the building.

The requirement for an Uninterruptible Power Supply (UPS) system to protect any non-interruptible loads will be evaluated at schematic design stage.

### **Building Automation Control Systems**

To the maximum extent possible the building systems shall be integrated using IP technology to provide the maximum cost savings and flexibility. The building automation control systems will comply with the ASHRAE Standard 135, Building Automation Control Network, An Open Protocol (BACnet).

### **Fire Alarm System**

An upgrade of the existing fire alarm system is required where additions to existing buildings are proposed. An addressable type fire alarm system is recommended for all new buildings. Provisions should also be made for remote monitoring at a central fire command center. Fire alarm systems will have an open protocol, and will be compatible for integration with other building management systems.

### **Information Technology Systems**

The telephone and information technology system will be centralized and designed in accordance with Montgomery College's Cable and Wire Infrastructure Specifications, and Information Technologies and Security System Design Guidelines.

The system will include copper and fiber optic cabling, underground ductbank and manhole systems to the central hub located in Sciences and Applied Studies Building. The conduits must be sized to accommodate the required amount of cabling being routed from one location to another, and the inner duct partitioned to separate the conduits into a series of multiple partitioned raceways.

Telephone and data outlets, and cable tray systems will be provided throughout buildings. Moreover, telecommunication rooms housing MDF/IDF should be provided.

### **Security**

The design of building security systems will comply with Montgomery College Information Technologies and Security System Design Guidelines.

The security system for the proposed new buildings will be based on a centralized computer-based Security Management System (SMS) for the safety and protection of students, faculty, assets, property and buildings. The overall SMS will integrate and incorporate CCTV where campus personnel or property may be at risk, access control for various spaces in the building and ground floor entrances, intrusion alarm system at areas

subject to robbery or break-in, and alarm monitoring functions. Security systems will have an open protocol, and will be compatible for integration with other building management systems.

The security system will consist of a host, workstations and monitoring and control systems, intelligent data gathering panels, and video transmission equipment.

An Uninterruptible Power Supply (UPS) system will support and sustain key functions of the security system during a power outage.

#### **3.4.4 Proposed Stormwater Management**

Stormwater management for this site will be divided into three sections: A stormwater credit and waiver for the west development, a storage pond serving the south section, and a storage pond for the east section.

The proposed development on the west side of the site consists of a child care facility to be served from the existing parking area at the south end of Observation Drive and an addition to the existing Vehicle Maintenance Shop located on the northwest side of the site. Storm runoff from the proposed child care facility flows to the existing stream located on the Kay property after traversing through more than 700 feet of wooded land. Under the 2000 Maryland Stormwater Management Design Manual, this area can be granted a credit from providing stormwater management if the proposed 1-year flow is less than 2 cfs and all rooftops are disconnected and outfall to a wooded buffer 50' or more in width. At this time, it is probable that these criteria can be met and a credit granted for the child care facility. However, any additional development within this parcel may be subject to full stormwater management requirements. A waiver will be requested for the Vehicle Maintenance Shop addition as the proposed development will not produce flow from the 1-year storm above 2 cfs and the area surrounding the proposed addition does not allow for surface facilities for water quality.

A proposed pond (SWM Pond 1) located outside the loop road extension on the south east side of the property will serve to provide stormwater management quantity control for the new Student Resource Center, Biosciences Education Center, and a portion of the new parking facility and new access road. The pond will be sized to hold 1.35 Ac-ft of runoff and will be approximately 140' in diameter. Proposed storm drains will be required to pipe roof top and surface drainage to the pond. A culvert may be required to pass the water under the proposed access road. Upon exiting the pond, storm runoff will outfall to the existing stream on site which flows towards Middlebrook Road. Water quality control is to be provided by a surface sand filter located within or adjacent to the proposed pond.

A second proposed pond (SWM Pond 2) located on the east side of the property will serve the proposed parking garage, addition to the Physical Education building, and a portion of the parking lot to be located between the Humanities and Science buildings. Until conceptual design, it is not known if runoff from existing buildings will enter the proposed stormwater management pond. Therefore, it has been sized to accept flow from most of the existing Physical Education building as well as half of the Science and Applied Studies



and High Technology buildings. This pond is sized to hold 1.52 Ac-ft of runoff before discharging to the existing stream on the east side of the site. As designed, the pond is 4' deep and approximately 150' in diameter. Proposed storm drain will pipe roof top and parking lot runoff under the existing drive and to the pond. Water quality control is to be provided by a surface sand filter located within or adjacent to the proposed pond.

**Table 3.4.2-1  
Stormwater Management Ponds for the Germantown Campus**

	PROPOSED POND 1	PROPOSED POND 2
Total Drainage Area	11.1 Acres	5.32 Acres
Total Impervious Area	4.8 Acres	4.45 Acres
Total Storage	1.35 Ac-ft	1.52 Ac-ft
Dimensions	4' Deep x 140' Dia.	4' Deep x 150' Dia

**3.4.5 Proposed Circulation and Parking**

This section presents a generalized assessment of the Facilities Master Plan from a transportation perspective. As noted in earlier sections, the plan proposes several land use initiatives for the 2012 horizon period. The key proposals and potential transportation impacts and needs associated with those changes are discussed and evaluated below.

**Vehicular Access**

The campus is currently provided with a single access point. This access is located along Georgetown Road (MD 118) at its intersection with Observation Drive, the main campus roadway. The Master Plan proposes two (2) significant changes. A new roadway would extend from Observation Drive, to and around the eastern and southern sides of the campus core, to form a “ring” road. The northern connection/intersection of Observation Drive and the new road would be situated approximately 200 feet south of the Germantown Road/Observation Drive intersection. The Master Plan also calls for the provision of a secondary access point along Frederick Road (MD 355), with a new roadway connection to the proposed ring road, within the southeastern section of the campus. These roadway changes would enhance external and internal access and circulation, as well as satisfy the emergency access requirements of the Montgomery County Department of Transportation.

**Vehicle Trip Generation Impacts**

The potential traffic generation and circulation impacts of the Master Plan are primarily based on the types and distribution of land use changes proposed, as well as the projected changes in the campus population. The Master Plan proposes building additions, as well as new Biosciences, Student Resource and Child Care buildings and a 500-space parking garage. These building improvements are based on projected changes in full-time equivalent (FTE) day students, faculty and staff, which would have the greatest impact on future trip generation and parking demands.

Forecasts developed recently with the College show the total FTE campus population increasing from 1,751 (2002) to 2,370 (2012), representing a change of approximately 35.0

# Germantown Campus Proposed Roadway Improvements 2002 - 2012



- Major greenspace or quadrangle
- Existing building to remain
- New campus building
- New parking structure

- CG- Child Care
- CP- Central Plant
- GN- Greenhouse
- GS- Grounds Storage Building
- HS- Humanities and Social Sciences
- HT- High Technology and Science Center
- PG- Physical Education
- SA- Sciences and Applied Studies
- WT- Water Tower



percent. The projected incremental campus population consists of 530 FTE daytime students and 89 FTE daytime faculty and staff members. Based on the Institute of Transportation Engineers (ITE) Trip Generation Manual (7<sup>th</sup> Edition, 2003), and assuming a transit usage factor of 5 percent, the incremental campus population would generate 209 AM and 187 PM incremental vehicular peak hour trips. The Germantown Road/Observation Drive intersection currently operates efficiently with significant reserve capacity. In addition, the Master Plan proposes a new secondary access point off Frederick Road, which would provide for a more favorable distribution of trips accessing the campus, and further enhance the operational efficiency of the main access point off Germantown Road. Based on those factors, the incremental trip generation would have a minimal impact on the local area roadway network.

Notwithstanding the above, consideration would need to be given to the potential impacts that other planned land use developments within the immediate campus area, and increased growth in regional (through) traffic could have on year 2012 access conditions. The area land use development activity is currently being researched. However, review of historical Average Daily Traffic (ADT) data obtained from the Maryland State Highway Administration indicate that traffic volumes along Germantown Road and Frederick Road have increased at an average annual rate of 2.8 percent over the period 1993 - 2002. While these factors may not have a significant impact at the main access point along Germantown Road, the secondary access point off Frederick Road may need further consideration, in respect to the requirement of exclusive turn lanes for vehicles accessing the campus.

### **Pedestrian Circulation**

The Master Plan proposes the extension of the existing pedestrian walkway network to connect with the new Biosciences Center, Student Resource Center and garage facilities. The new garage would also reduce pedestrian-vehicular conflicts along Observation Drive, the main campus roadway. The Plan therefore represents an enhancement of pedestrian circulation and safety.

### **Parking**

The campus is currently provided with 1,223 surface parking spaces. The Master Plan calls for 96 spaces to be eliminated to facilitate development of the new Biosciences Education Center, and for construction of a new 500-space garage structure. The net result of these changes would be 1,627 parking spaces.

The future parking demand for the campus was developed based on the year 2002 Full Time Equivalent (FTE) day campus population to peak parking demand ratio (0.53), and the application of this ratio to the projected 2012 FTE population. The parking generation rates recommended in "The Dimensions of Parking" (1993) published by the Urban Land Institute (ULI) were also considered for comparative purposes. Based on a projected 2012 FTE population of 2,370, and considering a practical capacity factor of 95 percent, a parking supply in the range of 1,335 spaces would be required to serve the horizon year daytime campus uses. This parking demand would be accommodated adequately by the future parking supply (1,627 spaces). It is also noted that the new parking garage would reduce travel along the existing Observation Drive segment, as well as

be within easy walking distances of the adjacent existing and proposed campus buildings. Considering the above, the adequacy of parking on the Germantown Campus is not expected to be an issue over the plan horizon.

In summary, the Master Plan could be implemented without significant adverse effects on the adjacent local area roadway network. However, the potential operational constraints noted for the Observation Drive/Ring Road intersection south of Germantown Road, and the southeastern access point of Frederick Road, are worthy of further consideration.

**3.4.6 Implementation**

Based on the College’s anticipated enrollment growth over the 2002 to 2012 period, and supported by the instructional and other needs identified during the master planning process, the College has identified a number of capital projects for the Germantown Campus. Implementation of these projects will allow the College to provide for the physical space needs of the Campus over the ensuing 10-year period. Detailed facility programs will be prepared for each project as the College’s capital funding requests are developed for submission to the State of Maryland and Montgomery County.

Throughout this section the term “new construction” is used to describe a completely new facility, while the term “renovation” is used to describe a complete interior and exterior reconstruction of an existing facility. An “alteration” is used to describe a lesser level of effort than a renovation that does not anticipate extensive program modifications to a facility and the term “addition” is used to describe “new construction” that provides for a major enlargement of an existing facility.

The following table lists the Germantown Campus projects included in this 10-Year Facilities Master Plan, as well as project budget estimates. A brief description is provided of each project with emphasis on the major components of the scope of work for each project. With regard to timing, the Campus projects are separated into a near-term need (2002 to 2007) and a long-term need (2008-2012). Based on current plans, the projects are presented in the recommended sequence for implementation; however, changes in program priorities may lead to changes in the implementation plan.

**Table 3.4.6-1  
Capital Projects for the Germantown Campus**

<b>Project</b>	<b>Budget Estimate in Dollars (1/04)</b>
<b>Near-Term Capital Projects (FY 2004 – FY 2007)</b>	
Child Care Center	911,000
Bioscience Education Center - including extension of Observation Drive and parking	47,610,000
Science and Applied Studies Building Renovation – Phases I and II	8,670,000
<b>Subtotal</b>	<b>57,195,011</b>

Long-Term Capital Projects (FY 2008 – FY 2012)	
Student Resource Center	36,365,000
Parking Garage - including loop road and access to Route 355	10,548,000
Physical Plant Addition	3,378,000
Humanities and Social Sciences Renovation – Phases I and II	7,360,000
High Technology Renovation	5,341,000
Physical Education Center Renovation and Associated Athletic Field Development	8,174,000
<b>Subtotal</b>	<b>71,170,020</b>

**Child Care Center (New Construction):**

This project is currently under design and is anticipated to start construction in fall 2004. This is the first building of a planned three building child care complex located on the west side of the Campus.

**Bioscience Education Center (New Construction):**

The Bioscience Education Center is planned to be located on the high point of the Campus to the southwest of the existing Science and Applied Studies Building. The Center will be the first new building proposed to enclose the new southern quadrangle of the Campus, the development of which is included in the project scope. In addition, scope of the project includes the extension of Observation Drive to the building site, a new connector road along the south edge of the adjacent surface parking lot, and the replacement of an existing 97-space parking lot lost due to the selection of this site for the proposed building.

**Science and Applied Studies Building Renovations:**

This building currently houses a number of science programs that will be relocated to the new Bioscience Education Center when it is completed. Once the second floor is vacated, this part of the building will be renovated (Phase 1) to other Campus requirements identified in the Master Plan. A Phase 2 renovation will be undertaken when various first floor functions related to student intake activities are relocated to the future Student Resource Center when it is completed.

**Student Resource Center (New Construction):**

The Student Resource Center is planned to be located to the south of the existing High Technology and Science Center. As part of this project, Observation Drive will be extended into a Campus loop road from the existing entrance at MD-118 east and south to reconnect near the new Bioscience Education Center. In addition, a road link will also be provided to MD-355 as part of the loop road extension. The new loop road is to include street trees and sidewalks, and the existing Observation Drive is to be upgraded to the same standard.

**Parking Garage No. 1 (New Construction):**

Parking Garage No. 1 is anticipated to be located east of the High Technology and Science Center on the new Campus loop road. It is anticipated that approximately 500 spaces will be provided in this facility.

**Physical Plant Building Addition/Renovation:**

The Physical Plant Building Addition/Renovation will continue to be located at the north edge of the Campus. A building addition is needed to provide additional physical plant support space as the Campus grows.

**Humanities and Social Sciences Building Renovation:**

This building currently houses the Resource and Writing Centers and the Campus Library that will be relocated to the new Student Resource Center when it is completed. In addition, the building currently houses various physical plant functions that are anticipated to be relocated to the Physical Plant Building Addition. Once vacated, this building will be renovated to other Campus requirements identified in the Master Plan.

**High Technology and Science Center Alterations:**

This building currently houses various functions that will be relocated to the new Bioscience Education Center (Biotechnology Lab), the new Student Resource Center (Math Learning Center and Math Technology Lab), and the renovated Humanities and Social Sciences Building (Account, Business, and Mathematics departments). Alterations to the High Technology and Science Center will occur in phases as each of the impacting projects are completed. Once space is vacated in the High Technology and Science Center, the building will be renovated to other Campus requirements identified in the Master Plan.

**Physical Education Center Addition/Renovation:**

This building currently houses the pool, gym, and related physical education functions serving the Campus. This building's addition and renovation will serve to meet the Campus requirements identified in the Master Plan. This project will also include the resurfacing of the existing tennis courts and accessibility improvements to the baseball field facilities.

**GT-A1      Zoning Analysis**

**ZONING ANALYSIS – STANDARD METHOD**

**Applicable Code:** Montgomery County Zoning Ordinance, 1994 (with updates through January 2001)  
 Approved and Adopted Comprehensive Amendment to the Germantown Master Plan (dated July 1989)

<b>Property Address</b>			
<b>Zone</b>	I-3		Note – this analysis assumes that requirements of this zone that relate to adjacent residential zones do not apply to the adjacent site occupied by Montgomery College despite its R-60 designation.
<b>Lot Size</b>	2 Acres minimum		59-C-5.431 (a) (1)
<b>Proposed Use(s)</b>	Research, development and related uses – permitted  General offices – permitted  Laboratories - permitted		Zoning Ordinance Section 59-C-5
<b>Coverage Limitations</b>	Green Area shall be provided for not less than 35% of gross tract area  Off-street parking is not allowed to occupy more than 45% of gross tract area.		Section 59-C-5  In unusual circumstances may be waived by the Planning Board at time of site plan approval upon a finding that a more compatible arrangement of uses would result.
<b>Maximum Density of Development (FAR)</b>	.5 Floor Area Ratio (FAR)  For a 40 acre site this equates to 871,200 square feet of allowable gross floor area  .6 FAR if applicant obtains approval of a traffic mitigation agreement that will result in traffic generation equal to or less than a project with an FAR of .5.		Section 59-C-5
<b>Max. Building Height</b>	100 feet		Section 59-C-5.3.

<p><b>Setbacks</b></p>	<p>1. From abutting commercial or industrial zoning other than the I-3 or R&amp;D zones</p> <p>Buildings – 25'</p> <p>Parking, Loading and Maneuvering Areas – 25'</p> <p>2. From abutting lot classified in the I-3 or R&amp;D zones</p> <p>Buildings: 20'. Where development in the I-3 Zone consists of multiple lots created by the same subdivision plan, the setback requirement from abutting lot lines for all buildings may be reduced by the Planning Board during site plan review pursuant to the applicable provisions of Division 59-D-3 if it is demonstrated that the reduced setback is compatible with existing and proposed development. The Planning Board must not reduce the building setback to less than 10'</p> <p>If proposed building is more than 40 feet in height then 1 foot additional building setback for each 2 feet of height.</p> <p>Parking, Loading and Maneuvering Areas – 20' Where development in the I-3 Zone consists of multiple lots created by the same subdivision plan, the setback requirement from abutting lot lines for all parking, loading and maneuvering areas may be reduced by the Planning Board during site plan review pursuant to the applicable provisions of Division 59-D-3 if it is demonstrated that the reduced setback is compatible with existing and proposed development</p> <p>3. From the following roadways as shown on the approved and adopted master plan</p> <p>An existing or planned limited access freeway          Buildings - 200' (100' from interchange ramp). The setback for parking structures may be reduced below 200 feet but not below 100</p>	<p>Section 59-C-5.33</p>
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	<p>feet upon approval by the planning board.</p> <p>Parking, loading and maneuvering areas – 100' (50' from interchange ramp)</p> <p>4. Two buildings on the same lot must be set back from each other a distance of at least 30 feet.</p>	
<b>Landscaping</b>	<p>Setback areas must be landscaped. In addition to plant material the landscaped area may include but is not limited to pedestrian plazas, art work, and water features.</p> <p>Parking facilities located adjacent to a street right-of-way shall provide a landscaping strip at least 10 feet in width.</p> <p>Landscaped areas shall be provided along the perimeter of a parking facility, other than area adjacent to a street right-of way. The perimeter landscape strip shall be at least 4 feet in width.</p>	<p>Section 59-C-5.432</p> <p>Section 59-E-2.71</p>
<b>Street Frontage and Access</b>	<p>Each lot must have at least 150 feet of frontage on a public or private street, except that the Planning Board may approve a reduction to not less than 50' on a cul-de-sac, a curve, or in other unusual circumstances.</p>	<p>Section 59 – C-5.433</p>
<b>Special Trip Reduction Guidelines</b>	<p>It is the intent of the special trip reduction guidelines to achieve as a goal a reduction in auto trips for I-3 projects of 10 percent below the peak hour trip generation rates adopted by the Planning Board for the administration of the Adequate Public Facilities Ordinance. Design measures should be incorporated in the project to meet trip reduction objectives.</p> <p>Design Guidelines:</p> <p>Buildings clustered near internal streets.</p>	<p>Section 59 – C – 5.436</p>

	<p>An uninterrupted pedestrian circulation system linking the various uses within the project.</p> <p>Space on ground floor for convenience services .</p> <p>Non Design guidelines:</p> <p>Trip reduction programs such as limiting off-street parking after consideration of market demand (off street parking not required to be less than requirements of Article 59-E to achieve trip reduction goals), share-a-ride programs, transit/vanpool discounts.</p> <p>Development phased in accordance with public or private transit availability.</p>	
<b>Off-Street Loading</b>	An adequate number consistent with size and proposed use of building	Section 59-E-1.4
<b>Off-Street Parking</b>	<p>Office Use - Minimum of 3 spaces per 1,000 GSF</p> <p>Child Care – one space for every non-resident staff member and 1 space for every 6 children for drop-off and pick-up.</p> <p>A percentage reduction between 1 and 15% may be approved for private incentives if the development submits a written agreement with the parking facility plan and with the conditions outlined in the referenced section.</p>	<p>Section 59-E-3.2</p> <p>Section 59-E-3.7</p> <p>Section 59-E-3.31 (2)</p>
<b>Bicycle Parking</b>	20 spaces (1 per 20 automobile spaces not to exceed 20 spaces in any one facility)	Section 59-E-2.3
<b>Motorcycle Parking</b>	10 spaces (2% of automobile spaces not to exceed 10 on any one lot)	

**GT-A2      Computation of  
Space Needs**

**FACILITIES INVENTORY BY BUILDING**

COLLEGE: Montgomery College-Germantown

FMP: October 20, 2003

		Year Built:						
		1978	1978	1983	1995	1980	1991	1993
HEGIS CODE	HEGIS CATEGORY	1	2	3	4	5	6	7
		Science & Appl. Studies	Humanities & Soc. Science	Physical Education	High Tech. Science Ctr.	Storage, Grds Vehicle Rep.	Tennis Storage	Greenhouse
<b>100</b>	<b>CLASSROOM</b>	<b>4,457</b>	<b>9,105</b>	<b>657</b>	<b>5,947</b>			
<b>200</b>	<b>LABORATORY</b>	<b>17,655</b>	<b>4,664</b>	<b>0</b>	<b>21,995</b>	<b>0</b>	<b>0</b>	<b>0</b>
210	Class Laboratory	16,018	1,661		18,045			
220	Open Laboratory	1,637	3,003		3,950			
250	Research Lab.							
<b>300</b>	<b>OFFICE</b>	<b>15,401</b>	<b>10,410</b>	<b>893</b>	<b>4,657</b>	<b>0</b>	<b>0</b>	<b>0</b>
310	Office/ Conf. Room	14,186	9,549	893	4,657			
320	Testing/Tutoring	1,215	861					
350	Included w/ 310							
<b>400</b>	<b>STUDY</b>	<b>842</b>	<b>14,475</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
410	Study	842	888					
420-30	Stack/Study		13,421					
440-55	Processing/Service		166					
<b>500</b>	<b>SPECIAL USE</b>	<b>457</b>	<b>1,575</b>	<b>27,820</b>	<b>236</b>	<b>0</b>	<b>0</b>	<b>1,288</b>
520-23	Athletic			27,730			0	
530	Media Production	457	1,575	90	236			
580	Greenhouse							1,288
<b>600</b>	<b>GENERAL USE</b>	<b>202</b>	<b>7,482</b>	<b>0</b>	<b>8,835</b>	<b>0</b>	<b>0</b>	<b>0</b>
610	Assembly				6,524			
620	Exhibition							
630	Food Facility	202	4,736		277			
640	Day Care		807					
650	Lounge		0		1,152			
660	Merchandising		1,497					
670	Recreation		442					
680	Meeting Room				882			
<b>700</b>	<b>SUPPORT</b>	<b>1,277</b>	<b>3,695</b>	<b>0</b>	<b>109</b>	<b>1,623</b>	<b>0</b>	<b>0</b>
710	Data Processing							
720	Shop		2,199			264		
730	Central Storage	649	1,496			864		
740	Vehicle Storage					495		
750	Central Service	473			109			
760	Hazmat Storage	155						
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>40,291</b>	<b>51,406</b>	<b>29,370</b>	<b>41,779</b>	<b>1,623</b>	<b>0</b>	<b>1,288</b>
	<b>Total GSF:</b>	<b>65,146</b>	<b>75,700</b>	<b>36,770</b>	<b>75,542</b>	<b>4,295</b>	<b>370</b>	<b>2,075</b>
	<b>Efficiency (%):</b>	<b>0.62</b>	<b>0.68</b>	<b>0.80</b>	<b>0.55</b>	<b>0.38</b>	<b>0.00</b>	<b>0.62</b>

**FACILITIES INVENTORY BY BUILDING**

COLLEGE: Montgomery College-Germar

FMP: October 20, 2003

Year Built:

HEGIS CODE	HEGIS CATEGORY	8	9	Total Permanent On Campus	1 WDCE	2 Central Admin	Total Temporary On Campus	Total All Space On Campus
<b>100</b>	<b>CLASSROOM</b>			<b>20,166</b>			<b>0</b>	<b>20,166</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>0</b>	<b>44,314</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>44,314</b>
210	Class Laboratory			35,724			0	35,724
220	Open Laboratory			8,590			0	8,590
250	Research Lab.			0			0	0
<b>300</b>	<b>OFFICE</b>	<b>0</b>	<b>0</b>	<b>31,361</b>	<b>1,219</b>	<b>0</b>	<b>1,219</b>	<b>30,142</b>
310	Office/ Conf. Room			29,285	1,219		1,219	28,066
320	Testing/Tutoring			2,076			0	2,076
350	Included w/ 310			0			0	0
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>15,317</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15,317</b>
410	Study			1,730			0	1,730
420-30	Stack/Study			13,421			0	13,421
440-55	Processing/Service			166			0	166
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>31,376</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31,376</b>
520-23	Athletic			27,730			0	27,730
530	Media Production			2,358			0	2,358
580	Greenhouse			1,288			0	1,288
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>0</b>	<b>16,519</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16,519</b>
610	Assembly			6,524			0	6,524
620	Exhibition			0			0	0
630	Food Facility			5,215			0	5,215
640	Day Care			807			0	807
650	Lounge			1,152			0	1,152
660	Merchandising			1,497			0	1,497
670	Recreation			442			0	442
680	Meeting Room			882			0	882
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>0</b>	<b>6,704</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,704</b>
710	Data Processing			0			0	0
720	Shop			2,463			0	2,463
730	Central Storage			3,009			0	3,009
740	Vehicle Storage			495			0	495
750	Central Service			582			0	582
760	Hazmat Storage			155			0	155
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>0</b>	<b>0</b>	<b>165,757</b>	<b>1,219</b>	<b>0</b>	<b>1,219</b>	<b>164,538</b>
	<b>Total GSF:</b>			<b>259,898</b>			<b>0</b>	<b>259,898</b>
	<b>Efficiency (%):</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>0.64</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>0.63</b>

**FACILITIES INVENTORY BY BUILDING**

COLLEGE: Montgomery College-Germar

FMP: October 20, 2003

Year Built:

HEGIS CODE	HEGIS CATEGORY	1	2	Total Leased & Off Campus	Total All Space On & Off
<b>100</b>	<b>CLASSROOM</b>			<b>0</b>	<b>20,166</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>44,314</b>
210	Class Laboratory			0	35,724
220	Open Laboratory			0	8,590
250	Research Lab.			0	0
<b>300</b>	<b>OFFICE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30,142</b>
310	Office/ Conf. Room			0	28,066
320	Testing/Tutoring			0	2,076
350	Included w/ 310			0	0
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15,317</b>
410	Study			0	1,730
420-30	Stack/Study			0	13,421
440-55	Processing/Service			0	166
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31,376</b>
520-23	Athletic			0	27,730
530	Media Production			0	2,358
580	Greenhouse			0	1,288
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16,519</b>
610	Assembly			0	6,524
620	Exhibition			0	0
630	Food Facility			0	5,215
640	Day Care			0	807
650	Lounge			0	1,152
660	Merchandising			0	1,497
670	Recreation			0	442
680	Meeting Room			0	882
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,704</b>
710	Data Processing			0	0
720	Shop			0	2,463
730	Central Storage			0	3,009
740	Vehicle Storage			0	495
750	Central Service			0	582
760	Hazmat Storage			0	155
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>164,538</b>
	<b>Total GSF:</b>			<b>0</b>	<b>259,898</b>
	<b>Efficiency (%):</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>0.63</b>

**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-Germantown

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Fall 2001 Before Gains/ (Losses)					Fall 2002 After Gains/ (Losses)	New Child Humanities Changes
<b>100</b>	<b>CLASSROOM</b>	<b>20,166</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20,166</b>	<b>0</b>
<b>200</b>	<b>LABORATORY</b>	<b>44,314</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>44,314</b>	<b>0</b>
210	Class Laboratory	35,724					35,724	
220	Open Laboratory	8,590					8,590	
250	Research Lab.	0					0	
<b>300</b>	<b>OFFICE</b>	<b>30,142</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30,142</b>	<b>0</b>
310	Office/ Conf. Room	28,066					28,066	
320	Testing/Tutoring	2,076					2,076	
350	Included w/ 310	0					0	
<b>400</b>	<b>STUDY</b>	<b>15,317</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15,317</b>	<b>0</b>
410	Study	1,730					1,730	
420-30	Stack/Study	13,421					13,421	
440-55	Processing/Service	166					166	
<b>500</b>	<b>SPECIAL USE</b>	<b>31,376</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31,376</b>	<b>0</b>
520-23	Athletic	27,730					27,730	
530	Media Production	2,358					2,358	
580	Greenhouse	1,288					1,288	
<b>600</b>	<b>GENERAL USE</b>	<b>16,519</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16,519</b>	<b>(807)</b>
610	Assembly	6,524					6,524	
620	Exhibition	0					0	
630	Food Facility	5,215					5,215	
640	Day Care	807					807	(807)
650	Lounge	1,152					1,152	
660	Merchandising	1,497					1,497	
670	Recreation	442					442	
680	Meeting Room	882					882	
<b>700</b>	<b>SUPPORT</b>	<b>6,704</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,704</b>	<b>807</b>
710	Data Processing	0					0	
720	Shop	2,463					2,463	
730	Central Storage	3,009					3,009	
740	Vehicle Storage	495					495	
750	Central Service	582					582	807
760	Hazmat Storage	155					155	
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>164,538</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>164,538</b>	<b>0</b>

ONLY PERMANENT  
ON CAMPUS SPACE IS  
INCLUDED ON THIS TABLE

THIS TABLE MUST BE  
TAILORED FOR COLLEGE-  
SPECIFIC PROGRAMS

**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-Germ

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Care Bldg Child Care Changes	Fall 2003 After Gains/ (Losses)			Fall 2005 After Gains/ (Losses)	Spring 2009 BioSciences Center Gains	
<b>100</b>	<b>CLASSROOM</b>	<b>0</b>	<b>20,166</b>	<b>0</b>	<b>0</b>	<b>20,166</b>	<b>0</b>	<b>0</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>44,314</b>	<b>0</b>	<b>0</b>	<b>44,314</b>	<b>0</b>	<b>0</b>
210	Class Laboratory		35,724			35,724		
220	Open Laboratory		8,590			8,590		
250	Research Lab.		0			0		
<b>300</b>	<b>OFFICE</b>	<b>280</b>	<b>30,142</b>	<b>0</b>	<b>0</b>	<b>30,142</b>	<b>0</b>	<b>0</b>
310	Office/ Conf. Room		28,066			28,066		
320	Testing/Tutoring		2,076			2,076		
350	Included w/ 310		0			0		
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>15,317</b>	<b>0</b>	<b>0</b>	<b>15,317</b>	<b>0</b>	<b>0</b>
410	Study		1,730			1,730		
420-30	Stack/Study		13,421			13,421		
440-55	Processing/Service		166			166		
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>31,376</b>	<b>0</b>	<b>0</b>	<b>31,376</b>	<b>0</b>	<b>0</b>
520-23	Athletic		27,730			27,730		
530	Media Production		2,358			2,358		
580	Greenhouse		1,288			1,288		
<b>600</b>	<b>GENERAL USE</b>	<b>3,500</b>	<b>19,212</b>	<b>0</b>	<b>0</b>	<b>19,212</b>	<b>0</b>	<b>0</b>
610	Assembly		6,524			6,524		
620	Exhibition		0			0		
630	Food Facility		5,215			5,215		
640	Day Care	3,500	3,500			3,500		
650	Lounge		1,152			1,152		
660	Merchandising		1,497			1,497		
670	Recreation		442			442		
680	Meeting Room		882			882		
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>7,511</b>	<b>0</b>	<b>0</b>	<b>7,511</b>	<b>0</b>	<b>0</b>
710	Data Processing		0			0		
720	Shop		2,463			2,463		
730	Central Storage		3,009			3,009		
740	Vehicle Storage		495			495		
750	Central Service		1,389			1,389		
760	Hazmat Storage		155			155		
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>3,780</b>	<b>168,038</b>	<b>0</b>	<b>0</b>	<b>168,038</b>	<b>0</b>	<b>0</b>

ONLY PERMANENT  
ON CAMPUS SPACE IS  
INCLUDED ON THIS TABLE

Proposed Biotech Center is  
NASF breakdown not avail.

THIS TABLE MUST BE  
TAILORED FOR COLLEGE-  
SPECIFIC PROGRAMS

**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-Germ

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY				Fall 2011 After Gains/ (Losses)
<b>100</b>	<b>CLASSROOM</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20,166</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>44,314</b>
210	Class Laboratory				35,724
220	Open Laboratory				8,590
250	Research Lab.				0
<b>300</b>	<b>OFFICE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30,142</b>
310	Office/ Conf. Room				28,066
320	Testing/Tutoring				2,076
350	<i>Included w/ 310</i>				0
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15,317</b>
410	Study				1,730
420-30	Stack/Study				13,421
440-55	Processing/Service				166
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31,376</b>
520-23	Athletic				27,730
530	Media Production				2,358
580	Greenhouse				1,288
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19,212</b>
610	Assembly				6,524
620	Exhibition				0
630	Food Facility				5,215
640	Day Care				3,500
650	Lounge				1,152
660	Merchandising				1,497
670	Recreation				442
680	Meeting Room				882
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,511</b>
710	Data Processing				0
720	Shop				2,463
730	Central Storage				3,009
740	Vehicle Storage				495
750	Central Service				1,389
760	Hazmat Storage				155
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>168,038</b>

ONLY PERMANENT ON CAMPUS SPACE IS INCLUDED ON THIS TABLE

; 73,000 GSF  
able as of 5/29/02.

THIS TABLE MUST BE TAILORED FOR COLLEGE-SPECIFIC PROGRAMS

**COMPUTATION OF SPACE NEEDS**

COLLEGE: Montgomery College-Germantown

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
<b>100</b>	<b>CLASSROOM</b>	<b>27,663</b>	<b>20,166</b>	<b>(7,497)</b>	<b>31,032</b>	<b>20,166</b>	<b>(10,866)</b>
<b>200</b>	<b>LABORATORY</b>	<b>50,697</b>	<b>44,314</b>	<b>(6,383)</b>	<b>102,630</b>	<b>44,314</b>	<b>(58,316)</b>
210	Class Laboratory	44,401	35,724	(8,677)	94,108	35,724	(58,384)
220	Open Laboratory	6,296	8,590	2,294	8,522	8,590	68
250	No Allowance						
<b>300</b>	<b>OFFICE</b>	<b>45,282</b>	<b>30,142</b>	<b>(15,140)</b>	<b>60,321</b>	<b>30,142</b>	<b>(30,179)</b>
310	Office/ Conf. Room	43,782	28,066	(15,716)	58,556	28,066	(30,490)
320	Testing/Tutoring	1,500	2,076	576	1,765	2,076	312
350	Included w/ 310						
<b>400</b>	<b>STUDY</b>	<b>20,169</b>	<b>15,317</b>	<b>(4,852)</b>	<b>25,553</b>	<b>15,317</b>	<b>(10,236)</b>
410	Study	9,369	1,730	(7,639)	12,681	1,730	(10,951)
420-30	Stack/Study	7,715	13,421	5,707	9,194	13,421	4,227
440-55	Processing/Service	3,086	166	(2,920)	3,678	166	(3,512)
<b>500</b>	<b>SPECIAL USE</b>	<b>36,600</b>	<b>31,376</b>	<b>(5,224)</b>	<b>42,313</b>	<b>31,376</b>	<b>(10,937)</b>
520-23	Athletic	34,000	27,730	(6,270)	39,290	27,730	(11,560)
530	Media Production	1,600	2,358	758	2,023	2,358	335
580	Greenhouse	1,000	1,288	288	1,000	1,288	288
<b>600</b>	<b>GENERAL USE</b>	<b>33,939</b>	<b>16,519</b>	<b>(17,420)</b>	<b>42,304</b>	<b>19,212</b>	<b>(23,092)</b>
610	Assembly	12,000	6,524	(5,476)	13,058	6,524	(6,534)
620	Exhibition	1,500	0	(1,500)	1,765	0	(1,765)
630	Food Facility	8,956	5,215	(3,741)	12,113	5,215	(6,898)
640	Child Care (N/A)	807	807	0	3,500	3,500	0
650	Lounge	2,634	1,152	(1,482)	3,563	1,152	(2,411)
660	Merchandising	1,600	1,497	(103)	1,865	1,497	(368)
670	Recreation(N/A)	442	442	0	442	442	0
680	Meeting Room	6,000	882	(5,118)	6,000	882	(5,118)
<b>700</b>	<b>SUPPORT</b>	<b>15,531</b>	<b>6,704</b>	<b>(8,827)</b>	<b>19,199</b>	<b>7,511</b>	<b>(11,688)</b>
710	Data Processing	2,500	0	(2,500)	2,500	0	(2,500)
720	Shop/ Storage	8,854	5,967	(2,887)	12,450	5,967	(6,483)
730	Included w/ 720						
740	Included w/ 720						
750	Central Service	4,000	582	(3,418)	4,000	1,389	(2,611)
760	Hazmat Storage	177	155	(22)	249	155	(94)
<b>800</b>	<b>HEALTH CARE</b>	<b>500</b>	<b>0</b>	<b>(500)</b>	<b>606</b>	<b>0</b>	<b>(606)</b>
<b>900</b>	<b>No Allowance</b>						
<b>050</b>	<b>No Allowance</b>						
<b>060</b>	<b>No Allowance</b>						
<b>070</b>	<b>No Allowance</b>						
<b>090</b>	<b>No Allowance</b>						
<b>Total NASF:</b>		<b>230,381</b>	<b>164,538</b>	<b>(65,843)</b>	<b>323,957</b>	<b>168,038</b>	<b>(155,919)</b>

ONLY PERMANENT  
ON CAMPUS SPACE IS  
INCLUDED ON THIS TABLE

USE HARD DATA RATHER  
THAN FORMULAS FOR THE  
10-YEAR PROJECTIONS WHEN  
AVAILABLE; WHEN NOT  
AVAILABLE, THE FORMULAS  
WILL PROVIDE REASONABLE  
ESTIMATES

SEE "SPACE ALLOCATION  
GUIDELINES" SHEET FOR  
FORMULAS AND DEFINITIONS

ENROLLMENT STATISTICS		Fall 2002	Fall 2012
	FTDE-C	1,499	2,029
	FTDE-N		0
	FTDE-J	1,499	2,029
	WSCH-Lec-C	18,442	20,688
	WSCH-Lec-N		0
	WSCH-Lec-J	18,442	20,688
	WSCH-Lab-C	6,343	13,444
	WSCH-Lab-N		0
	WSCH-Lab-J	6,343	13,444
	FTE	2,224	3,010
	BVE	77,145	91,939
	FTEF	112	154
Hard Data =	Ft-Fac	69	101
	FT-Staff	145	192
Formulas =	PHC	878	1,188
	Headcount	4,948	6,432

**COMPUTATION OF PARKING NEEDS**

COLLEGE: Montgomery College-Germantown

FMP: October 20, 2003

PARKING CATEGORY	FACTOR	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
FTDE-J	0.75	1,124			1,522		
FT-Faculty & FT-Staff	0.75	161			220		
<b>SUBTOTAL</b>		<b>1,285</b>	<b>0</b>	<b>0</b>	<b>1,742</b>	<b>0</b>	<b>0</b>
Visitors	0.02	26			35		
<b>REGULAR SPACES</b>		<b>1,310</b>	<b>1,163</b>	<b>(147)</b>	<b>1,776</b>	<b>1,163</b>	<b>(613)</b>
Reserved Accessible*		22	24	2	22	24	2
<b>ALL SPACES</b>		<b>1,332</b>	<b>1,187</b>	<b>(145)</b>	<b>1,798</b>	<b>1,187</b>	<b>(611)</b>

\* In addition to the regular parking spaces, the Americans with Disabilities Act requires reserved spaces for disabled individuals. Reserved accessible spaces shall conform to the requirements in the space allocation guidelines:

TOTAL SPACES	REQUIRED ADA	TOTAL SPACES	REQUIRED ADA
<= 25	1	201 - 300	7
26 - 50	2	310 - 400	8
51 - 75	3	410 - 500	9
76 - 100	4	501 - 1,000	2% of total
101 - 150	5	> 1,000	20 plus 1 for each
151 - 200	6		100 beyond 1,000

Note: Calculation of need for reserved accessible spaces (22) is based on number of current and 10 year regular parking spaces (1163) at MC-G.

ONLY PARKING FOR  
ON CAMPUS SPACE IS  
INCLUDED ON THIS TABLE

"NEED" DATA FOR RESERVED  
ACCESSIBLE SPACES MUST  
ENTERED MANUALLY USING  
THE ABOVE ADA GUIDELINES

"NEED" DATA FOR ALL OTHER  
CATEGORIES ARE ENTERED  
AUTOMATICALLY FROM THE  
ENROLLMENT/EMPLOYMENT  
STATISTICS ON TABLE 3

**SPACE ALLOCATION GUIDELINES**

COLLEGE: Montgomery College-Germantown

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	FACTOR FOR FTDE-C		FORMULA
		<= 3,000	> 3,000	
<b>100</b>	<b>CLASSROOM</b>	1.50	1.11	Factor x WSCH-Lec-J
<b>200</b>	<b>LABORATORY</b>			<b>Total</b>
210	Class Laboratory	7.00	5.83	Factor x WSCH-Lab-J
220	Open Laboratory			4.2 x FTDE-C
250	No Allowance			
<b>300</b>	<b>OFFICE</b>			<b>Total</b>
310	Office/ Conf. Room			Core of 1,120 + (166 x (FTEF + FT-Staff))
320	Testing/Tutoring			Core of 1,500 + (0.5 x (FTDE-C beyond 1,500))
350	Included w/ 310			
<b>400</b>	<b>STUDY</b>			<b>Total</b>
410	Study			6.25 x FTDE-C
420-30	Stack/Study			0.1 x BVE
440-55	Processing/Service			Core of 1,200 + (0.4 x (Category-420-30 beyond 1,200))
<b>500</b>	<b>SPECIAL USE</b>			<b>Total</b>
520-23	Athletic			Core of 34,000 + (10 x ( FTDE-C beyond 1,500))
530	Media Production	0.80	2.00	Core of 1,600 + ( Factor x ( FTDE-C beyond 1,500 ))
580	Greenhouse			Core of 1,000
<b>600</b>	<b>GENERAL USE</b>			<b>Total</b>
610	Assembly			Core of 12,000 + (2.0 x (FTDE-C beyond 1,500))
620	Exhibition			Core of 1,500 + (0.5 x (FTDE-C beyond 1,500))
630	Food Facility	10.20	8.40	Factor x PHC
640	No Allowance			
650	Lounge			3.0 x PHC
660	Merchandising			Core of 1,600 + (0.5 x (FTDE-C beyond 1,500))
670	No Allowance			
680	Meeting Room	6,000	8,000	Factor x 1
<b>700</b>	<b>SUPPORT</b>			<b>Total</b>
710	Data Processing			Core of 2,500 + (0.75 x ( FTDE-J beyond 4,000))
720	Shop/ Storage			0.04 x (All categories less 720-40 and 760)
730	Included w/ 720			
740	Included w/ 720			
750	Central Service			Core of 4,000 + (FTDE-C beyond 4,000)
760	Hazmat Storage			0.02 x Categories-720-40
<b>800</b>	<b>HEALTH CARE</b>			Core of 500 + (0.2 x (FTDE-C beyond 1,500))
<b>900</b>	<b>No Allowance</b>			
<b>050</b>	<b>No Allowance</b>			
<b>060</b>	<b>No Allowance</b>			
<b>070</b>	<b>No Allowance</b>			
<b>090</b>	<b>No Allowance</b>			
<b>Total NASF:</b>				

FTDE: Full-time day equivalent students. Fall credit and/or eligible non-credit hours taught between 8 am and 5 pm divided by 15.

-C = credit only; -N = non-credit only; -J = joint credit and non-credit.

WSCH-Lec: Weekly student contact hours for on-campus day students in credit and/or eligible non-credit courses where instruction is primarily lecture. -C = credit only;

-C = credit only; -N = non-credit only; -J = joint credit and non-credit.

WSCH-Lab: Weekly student contact hours for on-campus day students in credit and/or eligible non-credit course where instruction is primarily lab.

-C = credit only; -N = non-credit only; -J = joint credit and non-credit.

FTE: Full-time equivalent students. Fall credit hours divided by 15.

BVE: Bound volume equivalent. 20,000 BVE for the first 1,000 FTE and 1,000 BVE for every 100 FTE above 1,000.

FTEF: Full-time equivalent faculty. Full-time faculty, including librarians, plus 25% of part-time faculty.

FT-Fac: Full-time faculty.

FT-Staff: Full-time staff.

PHC: Planning head count. 50% of the sum of FTDE for on-campus credit and eligible non-credit courses and FTEF and FT-Staff, and includes space for seating, preparation, and storage.

**GT-A3      Environmental Report**

**GT-A3 ENVIRONMENTAL REPORT****Overview**

The Environmental Review for the Facilities Master Plan of Montgomery College was conducted by Froehling and Robertson, Inc. of Baltimore, Maryland and on-site inspections took place on February 1 and April 25, 2002.

This review considered various aspects of environmental issues, including asbestos-containing materials (ACM), lead based paint (LBP), mold, and chemical usage and storage. Also included in this review was the storage and disposal of hazardous waste and hazard communication.

**Asbestos-Containing Materials**

Montgomery College, overall, has a good asbestos-containing material program. The College has Management Plans for the majority of the buildings, has numerous trained and licensed workers, state-of-the-art removal equipment, and a good hazard communication program regarding asbestos for both the College employees and the students.

The College has a written Respiratory Protection Program, a copy of the OSHA Asbestos regulations, work procedures for the removal of the various types of materials encountered on campus, and even a HEPA Vacuum Instruction Guidebook. According to Mr. John Softy, all asbestos-trained personnel have access to this information.

Each campus has an asbestos waste storage area. These areas have extremely limited access and are emptied by an approved waste hauler shortly after receiving asbestos waste. All observed waste observed on the campuses were properly bagged and stored.

In the late 1980s and early 1990s, the College set upon the task to have comprehensive ACM inspections conducted on all of the College's facilities. These reports were made available to the Consultant for review and comment.

Asbestos inspection documents were provided for the following buildings:

Humanities and Social Sciences Building  
Physical Education Building  
Sciences and Applied Studies Building

The Humanities and Social Sciences Building inspection report was prepared by Briggs Associates, Inc. of Columbia, Maryland and is dated June 1991. The report calls out several materials that are positive; however, not enough samples were obtained to confirm certain materials negative. These materials include drywall and ceiling tiles. Furthermore, no samples were obtained of the joint compound. It is recommended that further sampling be conducted of these materials to confirm the materials positive or negative.

The Physical Education Building inspection report was prepared by Briggs Associates, Inc. of Columbia, Maryland and is dated June 1991. The report calls out the floor tile and associated mastic as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include drywall and ceiling tiles. Furthermore, no samples were obtained of the joint compound. It is recommended that further sampling be conducted of these materials to confirm the materials positive or negative.

The Science and Applied Studies Building inspection report was prepared by Briggs Associates, Inc. of Columbia, Maryland and is dated June 1991. The report calls out the floor tile and associated mastic and the transite fume hoods and panels as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include drywall and ceiling tiles. Furthermore, no samples were obtained of the joint compound. It is recommended that further sampling be conducted of these materials to confirm the materials positive or negative.

#### **LEAD BASED PAINT**

Montgomery College does not contain a specific lead based paint program, nor is the College required to due to the fact that there are no residential structures on the three campuses. However, lead based paint is a worker issue under OSHA due to the ages of the College facilities. It is recommended that before the commencement of renovation activities that impact painted surfaces, testing be conducted to determine if the painted surfaces are lead containing. If the painted surfaces are or are suspected to be lead containing, respiratory protection should be worn during all activities during which dust or fumes are generated.

#### **Mold**

Montgomery College has taken a proactive approach to mold contamination inspection and remediation. According to Mr. John Softy, CHMM, the Environmental Safety Coordinator for the College, whenever mold growth is located, the infected area is restricted from public access and remediation efforts are undertaken. Furthermore, during the remediation, ceiling and wall cavity areas are explored to determine the extent of the mold growth. The areas are kept under containment until “clean air” is restored to the affected area. It is recommended that the College continue with its mold surveillance policy.

#### **Hazardous Materials**

The hazardous materials review will cover a variety of subjects - chemical usage and storage, the storage and disposal of hazardous waste and hazard communication. These topics will be discussed in general for the College and for each applicable campus, where applicable.

#### **Chemical Usage and Storage**

Chemical usage and storage covers two distinct groups of people – the maintenance staff and the College students and instructors. Each group uses a different set of materials for varying reasons. Each group will be discussed separately.

The maintenance staff stores the majority of their materials in the Physical Plant sections of the buildings and in the Vehicle Maintenance Shop. These areas were observed to be kept in an orderly fashion with no obvious signs of improper chemical storage. Material Safety Data Sheets (MSDS) were available in these areas and the staff was aware of the MSDS location in the event of emergency. There was also a Personal Protection Equipment (PPE) station in the Physical Plant office.

The College students and instructors use the majority of their chemicals in the Chemistry Lab Area and in the Photography Darkroom. All chemicals were observed to be stored in a locked storage area with only instructors having access to this area. MSDS sheets were available to all individuals working in the laboratory areas, and emergency eyewash and shower stations are located throughout the lab area. Lab instructors indicated that all lab students are required to sign a safety contract. However, no formal instruction is given in the usage of MSDS sheets in the event of an emergency. It is recommended that all students be given formal instruction in the usage and interpretation of MSDS sheets.

#### **Storage and Disposal of Hazardous Waste**

The storage and disposal of hazardous waste will cover both the waste created by the teaching activities as well as the waste of the Physical Plant.

The Physical Plant staff creates a minimum amount of hazardous waste. This waste includes automotive fluids and batteries, asbestos removal waste, and residual waste created by daily maintenance activities, including the disposal of mercury-containing lighting fixtures. As well as can be determined, these materials are properly disposed of, and meticulously documented. All reviewed waste manifests appear to be in compliance.

The Laboratory chemical wastes were observed to be stored in a locked, limited access storage area that is explosion-proof and diked with only properly trained personnel having access to this area. All generated waste is moved to the waste storage room on a daily basis. As well as can be determined, these materials are properly disposed of, and meticulously documented. All reviewed waste manifests appear to be in compliance.

#### **Hazard Communication**

Hazard Communication covers not only the posting of MSDS sheets, but also safety in general. The College has a website, <http://www.montgomerycollege.edu/Departments/envsafe/>. This site is an excellent resource for safety policies, and is available for review for both College employees and students alike at all three campuses. Some of the subjects covered include Work Related Injury and Illness, Backcare, Ergonomics, Bloodborne Pathogens, Cutting and Welding, Lockout/Tagout, and Asbestos Program information. Some of these links will include the College policy for the subject and links to resource and regulatory information.

This website is an excellent way to distribute environmental safety information, but the site does have some weak points. Not all of the subjects, such as Fall Protection, Noise and Hearing Conservation, and Chemical Spill Cleanup, have the policies available online for review. Users are instructed to contact the Environmental Safety Office for information.

It is recommended that links be created for all subjects so that the policy information is available at all times. Furthermore, while this site is accessible to anyone with access to a computer, computers are not always available to everyone. It is recommended that hard copies of all relevant policies be available in affected areas for the College employees and students.

The original copies of all MSDS sheets are kept in the Environmental Safety office. This compilation is maintained in an orderly and easy-to-locate format and is an exhaustive list, easily containing several thousand MSDS sheets. However, no evidence was produced to document a tracking system that details that copies of all relevant MSDS sheets are forwarded to all of the chemical locations. It is recommended that a tracking system be developed to ensure that all MSDS sheets are distributed to the affected locations and that all updated MSDS sheets are also forwarded to the areas.

## **4.0 ROCKVILLE CAMPUS**

### **4.1 BACKGROUND INFORMATION**

#### **4.1.1 Facilities Master Plan**

Montgomery College began this Collegewide Facilities Master Plan effort in 2001. The major components of the Master Plan are the Rockville, Germantown and Takoma Park Campuses, Workforce Development/Continuing Education, and Central Administration. The time frame for the Facilities Master Plan is ten years, 2002 to 2012, and the time frame for twenty-year Land Use Plan extends out to 2022. The overarching goal of the Facilities Master Plan is to establish a framework for the development of capital projects to support the role, mission, and academic vision of Montgomery College.

The Rockville campus of Montgomery College was founded in 1965 and was the College's second campus. The main campus is situated on approximately 82 acres with 19 academic and administrative buildings.

The 1990 Master Plan for the Rockville campus outlined a strategy for the campus that would establish a physical framework for growth. This framework worked toward the provision of a hierarchy of open and built space, the design of quality of life space on campus, and consolidation and expansion of student service functions.

One of the major challenges for the College in the next ten-year planning period will be to correct deficiencies in the amount of, and the quality of, its academic spaces. Almost half of today's campus was constructed in the mid-to-late 1960's and while these facilities have been maintained at a high level, some buildings have ceased to be functionally adequate. Three buildings, the Student Services, Counseling and Advising, and Computer Science buildings have been identified for possible demolition.

The Rockville campus has critical shortages in quality of life spaces. As demands for academic and administrative space have increased, spaces such as meeting rooms, break-out areas, outdoor gathering areas, student lounges, and group study areas have been reduced or converted to teaching spaces. While classrooms are valuable academic spaces, the experience of learning and teaching is not limited to the classroom. Students and faculty require spaces that allow informal educational experiences and these areas are ideal places to learn collaboration and communicate skills and opportunities.

To address these and other challenges, and to establish a coherent, logical framework for development of capital projects, the Facilities Master Plan has established goals and priorities. This Facilities Master Plan for Rockville focuses on:

- providing sufficient and adequate space—classrooms, labs, offices, study, meeting rooms, and support facilities—based on existing and projected needs, so that each and every area can contribute creatively and productively every day to helping students change their lives;

- co-locating departments and functions rationally so that students, visitors, and the College community itself benefit from the ease, energy, and excitement generated by the synergy of proximity;
- presenting students the needed range of opportunities to study and learn collaboratively in supportive environments with the special assistance of faculty, librarians, counselors, and staff;
- affording students opportunities to meet and develop socially through formal programs of leadership, recreation, and athletics, and informally in inviting indoor and outdoor spaces;
- maximizing the land resources available on the campus while retaining its unique character, quality, and setting, and yet meeting the needs of the large numbers of students, faculty, staff, community members, and visitors who come to the campus every day;
- inviting students, faculty, staff, community members, and visitors to participate in the varied campus and College activities by organizing the campus—including buildings, parking, outdoor athletic facilities, and circulation for pedestrians, the disabled and elderly, cars, and trucks—to make their experience pleasant and successful; and
- anticipating the campus' future development beyond the ten-year planning horizon.

#### **4.1.2 Institutional Characteristics**

With an enrollment of 2,489, the Rockville campus has the largest enrollment of the three Montgomery College campuses. With over 14,800 credit students in the 2002 fall term, the campus also serves a substantial non-credit student body through programs of Work Force Development and Continuing Education. Tens of thousands of people come to the campus each year for art exhibits, concerts and theatrical events, athletic events, conferences and lectures, and other events open to the public. The educational offerings of the Rockville campus are organized into five instructional divisions of:

- Business, Management, and Information Science (“BMIS”), comprised of the departments of Business, Management, Computer Applications, and Computer Science
- Fine and Performing Arts (“FPA”), comprised of the departments of Art; Music; Speech, Dance and Theatre; and Visual Communications and Technology
- Humanities (“HUM”), comprised of the departments of Reading, English as a Foreign Language, Foreign Languages, and Philosophy and of English
- Science, Engineering, and Math (“SEM”) comprised of the departments of Biology; Chemistry; Mathematics; and Physics, Engineering, and Geosciences.
- Social Sciences, Education, History, and Health and Physical Education (“SEHHPE”), comprised of the departments of History and Political Science, Health and Physical Education, Psychology, Education, Anthropology, Criminal Justice, and Sociology

These divisions are extended and supported by the Student Development Division, with the Office of the Vice President and Provost providing campus leadership and management. In addition to these units, the Rockville campus is home to the Paul Peck Humanities Institute, the Gordon and Marilyn Macklin Business Institute, and the Arts Institute, each with special programs for the College and outreach to the community. The

Robert E. Parilla Performing Arts Center not only supports the College's academic theatre and dance programs but also serves as a community resource for professional productions by local and national arts organizations. The campus' intercollegiate athletic program sponsors teams in men's baseball, golf, and lacrosse; men's and women's basketball, cross country, indoor and outdoor track, soccer, and tennis; and women's softball and volleyball. Campus-based central administration services include the library, information technology support, admissions and registration, financial aid, cashier's office, physical plant, and auxiliary services including child care, bookstore, and food services.

#### **4.1.3 Academic Programs**

Montgomery College is authorized by the Maryland Higher Education Commission to offer four degrees: the Associate of Arts (A.A.), the Associate of Science (A.S.), the Associate of Arts in Teaching (A.A.T.) for students wanting to transfer to baccalaureate programs, and the Associate of Applied Science (A.A.S.) for those seeking immediate employment. The College also awards certificates ("Cert") that focus on the development of technical skills, as well as letters of recognition ("L of R") for non-degree seeking students who satisfactorily complete certain courses.

In addition to General Education, Student Development, Honors, Cooperative Education, and Women's Studies courses, the Rockville campus offers 62 different degree programs, 42 certificate programs, and 5 letter of recognition programs. The Rockville campus offers the highest numbers of academic programs offered at the College. Academic programs uniquely offered at the Rockville campus are related to the fine and performing arts with two A.A.S. degrees and two certificates in Advertising Art, the A.A. degree in Dance, the A.A. degree and certificate in Music, the A.A.S. degree and 5 certificates in Photography, two A.A. degrees in Theatre, and two A.A.S. degrees and four certificates in Radio and Television; Technical Education, including the A.A.S. degrees and five certificates in Automotive Technology, the A.A.S. degree and certificate in Building Trades Technology, two A.A.S. degrees and two certificates in Architecture and Construction Technology, the A.A.S. degree and certificate in Fire Science, the A.A. and A.A.S. degrees in Interior Design, and the A.A.S. degree and two certificates in Printing Technology; and management, including the A.A.S. degree and certificate in Food and Beverage Management and the A.A.S. degree and certificate in Hotel and Motel Management. Other programs only offered at the Rockville campus include the A.A.S. degree in Criminal Justice, the A.A.S. degree and two certificates in Geography, and the five A.A. degrees and certificate in Health and Physical Education. In addition, the A.A.S. degree in Fire Science and Fire Service Management and the certificate program in Fire and Arson Investigation are approved as statewide programs. These statewide programs are available to students from other geographic areas where the local community college does not offer the same program. The College's Center for Teaching and Learning also finds its home on the Rockville campus, although it is planned to place programs on each campus. Not included here are the programs offered by Workforce Development and Continuing Education.

**Table 4.1.3-1  
2002 Academic Programs Offered at the Rockville Campus**

Program Area	AA	AS	AAT	AAS	Cert	L of R
Advertising Art				2 R	2 R	
Accounting				1 GR	1 GR	
Art	1 GT; 3 R				2 GRT	
Automotive Technology				1 R	5 R	
Business Administration	2 GRT					
Biological/Life Sciences		1 GRT				
Building Trades Technology				1 R	1 R	
Computer Application				1 GRT	3 GRT; 1 R	1 R; 1 GRT
Chemistry/Life Sciences		inc				
Criminal Justice				1 R		
Computer Science/Technologies	1 R; 1 GRT				1 GRT	1 GRT
Architectural/Construction Tech				2 R	2 R	
Dance	1 R					
Education			1 GRT	1 R	1 R	
Electrical Engineering				1 GRT		
Engineering Science				9 GRT		
Food/Beverage Management				1 R	1 R	
Fire Science				1 R	1 R	
Geography				1 R	2 R	
Health	5 R				1 R	
Hotel/Motel Management				1 R	1 R	
Interior Design	1 R			1 R		
Mathematics		1 GRT				
Management				1 GRT; 2 R;1 GR	1 GRT; 2 GR; 1R	2 GRT
Music	1 R				1 R	
Physical Education	inc				inc	
Photography				1 R	5 R	
Physics		1 GRT				
Printing Technology				1 R	2 R	
American Sign Language				1 GRT	1 GRT	
Theatre	2 R					
Television/Radio				2 R	4 R	
General Studies	1 GRT					
Liberal Arts	3 GRT					
Pre-Professional	5 GRT					

GRT: Germantown, Rockville, Takoma Park  
G: Germantown only

R: Rockville only  
T: Takoma Park only

Inc: included

Delivery of all these programs is expected to change substantially over the coming decade. The College has made significant and substantial investments in its classroom environments to incorporate smart instructional technology and to provide and support technology-based learning centers that help students learn effectively and efficiently. Distance learning alternatives will become more available as options, including both entire and partial course and service delivery. Apart from technology, the College must also prepare to address other changes in pedagogy, including increased and earlier instructional use of specialized learning environments and a continued emphasis on collaborative learning.

These instructional delivery changes, together with the increases projected for enrollment, can be expected to have impact on Rockville’s contact hour productions. The ratio of contact hours (WSCH) to credit hours (SCH), which shows the extent to which time scheduled in class is greater than the credit hours earned, is expected to increase only slightly at Rockville from 1.17 to 1.18 in 2012. The majority, 74%, of Rockville’s contact hours are expected to be generated during the day (from 8:00 a.m. to 5:00 p.m., Monday through Friday), the same as in 2002. Finally, the relative percentage of contact hours in lab environments is projected to increase from 27% in 2002 to 39% in 2012, reflecting increased availability of lab environments and changes in pedagogy in disciplines such as Mathematics.

**Table 4.1.3-2  
2002 and 2012 Credit and Contact Hours at the Rockville Campus**

**Contact Hour (WSCH) to Credit Hour (SCH) Ratio**

	2002 WSCH	2002 SCH	2002 WSCH/ SCH	2012 WSCH	10 yr % Chg	2012 SCH	10 yr % Chg	2012 WSCH/ SCH	10 yr % Chg
Rockville	141,830	120,748	1.17	152,786	8%	128,991	7%	1.18	1%
College	222,719	189,471	1.18	280,110	26%	228,662	21%	1.23	7%

**Day and Evening Contact Hour**

	2002 Day WSCH	2002 Evening WSCH	2002 Total WSCH	2002 % Day WSCH	2012 Day WSCH	10 yr % Chg	2012 Evening WSCH	10 yr % Chg	2012 Total WSCH	10 yr % Chg	2012 % Day WSCH
Rockville	105,961	35,869	141,830	74%	113,175	7%	39,611	10%	152,786	8%	74%
College	161,681	61,038	222,719	73%	198,428	23%	81,682	34%	280,110	26%	71%

**Day Lecture and Lab Contact Hour**

	2002 Day Lecture WSCH	2002 Day Lab WSCH	2002 Day Total WSCH	2002 Day % Lab WSCH	2012 Day Lecture WSCH	10 yr % Chg	2012 Day Lab WSCH	10 yr % Chg	2012 Day Total WSCH	10 yr % Chg	2012 Day % Lab WSCH
Rockville	76,829	29,132	105,961	27%	68,696	-11%	44,479	53%	113,175	7%	39%
College	118,046	43,635	161,681	27%	123,128	4%	75,300	73%	198,428	23%	38%

To support academic programs, changes in the Rockville library collection are also planned. Overall, in terms of Physically Bound Volume Equivalents (“PBVE”), the library’s collection is expected to grow by 15%. This rate is below that usually expected for higher

education institutions, where rates of increase for collections are typically planned at 2% to 3% per year.

**Table 4.1.3-3  
2002 and 2012 Rockville Library Collection and PBVE\***

Category	Collection		PBVE	
	2002	2012	2002	2012
Books	122,344	140,696	122,344	140,696
Folios	7,217	8,300	14,434	16,599
Bound Periodicals	687	790	828	952
Documents/Pamphlets	0	0	0	0
Microfilm reels	16,059	18,468	5,353	6,156
Records	1,993	1,993	399	399
Maps	0	0	0	0
Maps in Cases	0	0	0	0
Microform (non-reel)	263	302	3	4
Newspapers Unbound	15	15	268	268
Newspapers Bound	0	0	0	0
Reference Books	12,129	13,948	35,674	41,025
Slides	0	0	0	0
Periodicals Unbound	770	770	3,080	3,080
Video Disks	0	0	0	0
Audio Tapes	1,417	1,630	354	407
Computer Diskettes	244	281	49	56
Compact Disks	1,990	2,289	398	458
Videotapes	4,021	4,624	3,351	3,853
Films (Reel-to-Reel)	0	0	0	0
			186,534	213,952
				15%

\* Physically Bound Volume Equivalent

**4.1.4 Enrollment**

Over the past three-year period, headcount enrollment has increased 10%, from 13,431 students in 1999 to 14,817 in 2002. Over this same period, however, the average student credit hour load has decreased slightly from 8.4 credits to 8.1 credits, with the result that FTE student enrollment has increased by only 7%. The College 2002 average credit hour load is projected to be 8.7 credits, and the expectation is that the average credit hour load at Rockville will increase by 2012 to 8.2 credits, still below the projected College average credit load of 9.0 credits, but slightly above the 2002 level for Rockville. As a result, the projected 15,793 headcount students are expected to equate to 8,599 FTE students, an increase of 7% over 2002 FTE enrollments.

These enrollment projections reflect the College’s understanding that the Rockville campus is at capacity and that demand for the College’s programs must be directed to the other two campuses where students can be more readily accommodated. The College is

also going to monitor demand carefully and determine whether a physical presence in the eastern sector of the County can be justified relative to educational needs and required resources. Such a presence would not only include credit and non-credit program options but also be in conjunction with other County efforts at developing a science and technology park for this area.

**Table 4.1.4-1  
Fall Term Rockville Campus Enrollment Statistics**

	1999	2000	2001	2002	3 yr % Chg	2012	10 yr % Chg
Headcount	13,431	13,573	14,334	14,817	10%	15,793	7%
Credit Load	8.4	8.4	8.3	8.1	-4%	8.2	1%
FTE Students	7,512	7,597	7,908	8,050	7%	8,599	7%

Given the overall goal to control enrollment growth at the Rockville campus to a modest 7% over the next 10 years, higher enrollment growth is expected in GITE (14%), Science, Engineering, and Mathematics (12%), and Social Sciences, History, Health, and Physical Education (10%). While the Humanities Division will continue to generate the largest amount of credit hours, it is projected grow only by 4%. Similarly, the Fine and Performing Arts Division is expected to grow by only 6%. Only the division of Business, Management, and Information Science is expected to continue to lose enrollments, decreasing from 18,357 SCH in 2002 to 17,888 SCH in 2012, a decline of -3%. This decrease is in addition to the 9% decrease observed over the past three-year period.

**Table 4.1.4-2  
Fall Term Credit Hours by Division at the Rockville Campus**

	1999	2000	2001	2002	3 yr Chg	2012	10 yr Chg
Student Dev	764	811	867	872	14%	890	2%
Honors	--	--	--	155	n/a	310	98%
BMIS	20,091	20,548	20,362	18,357	-9%	17,888	-3%
FPA	15,409	16,149	16,644	16,803	9%	17,891	6%
Humanities	30,452	30,260	31,936	33,836	11%	35,217	4%
SEM	25,145	25,138	26,874	28,130	12%	31,801	13%
S&ESHPE	16,951	17,429	18,059	18,199	7%	19,972	10%
GITE	3,871	3,620	3,880	4,396	14%	5,022	14%
Rockville (Total)	112,683	113,955	118,622	120,748	7%	128,991	7%

**4.1.5 Faculty and Staff**

The College projects that its number of FTE faculty will increase at a rate comparable to its overall increase in enrollment, from 672.50 to 807.75, an increase of 135.25 FTE faculty, or 20%. Faculty supporting the Rockville campus will increase by much less, only by 8%, from 418.50 FTE faculty to 452.25 FTE faculty. The number of full-time faculty will increase by 31 positions, from 284 to 315, or 11%, while the number of part-time faculty will increase by only 11 positions from 538 to 549, or 2%. Campus and division projections of faculty seek to reduce and/or equalize the credit hours loads of faculty and therefore do not necessarily parallel enrollment growth rates. Thus, the growth rate for faculty at Rockville is slightly more than the 7% growth rate in FTE students.

**Table 4.1.5-1  
2002 and 2012 Rockville Faculty Positions by Division**

	2002 FT	2002 PT	2002 FTE	2012 FT	10 yr # (%) Chg	2012 PT	10 yr # (%) Chg	2012 FTE	10 yr # (%) Chg
Student Dev	0	30	7.50	0	0 (0%)	35	5 (17%)	8.75	1.25 (17%)
BMIS	49	61	64.25	46	-3 (-6%)	71	10 (16%)	63.75	-0.50 (-1%)
FPA	46	98	70.50	51	5 (11%)	98	0 (0%)	75.50	5.00 (7%)
Humanities	72	144	108.00	80	13 (22%)	136	-8 (-6%)	114.00	6.00 (6%)
SEM	59	92	82.00	72	13 (22%)	85	-7 (-8%)	93.25	11.25 (14%)
S&ESHPE	40	81	60.25	47	7 (18%)	90	9 (11%)	69.50	9.25 (15%)
GITE	18	32	26.00	19	1 (6%)	34	2 (6%)	27.50	1.50 (6%)
Rockville (Total)	284	538	418.50	315	31 (11%)	549	11 (2%)	452.25	33.75 (8%)

While the College expects its numbers of full-time, part-time, and FTE staff to increase 21% from fall 2002 to fall 2012, consistent with its overall projected increase in fall term FTE enrollment, the Rockville campus is anticipating a 20% increase in staff, so that this campus can achieve a comparable level of staff support as is present at the other two campuses. Overall, the number of Rockville staff is expected to increase by 77.00 FTE positions, with 47 additional full-time staff and 8 additional part-time staff.

The largest growth in positions, not unexpectedly, is planned for the instructional and student development divisions. The increase in staff within the Office of the Vice President and Provost aligns office staffing with staffing on the other campuses. Finally, growth in campus-based Central Administration is based on College-wide ratios of students to staff and faculty to staff to ensure reasonable comparability across campuses, as well as the overall goal of the College to build on economies of scale in projecting the needs for such functional support.

**Table 4.1.5-2  
2002 and 2012 Rockville Staff Positions by Division**

	2002 FT	2002 PT	2002 FTE	2012 FT	10 yr # (%) Chg	2012 PT	10 yr # (%) Chg	2012 FTE	10 yr # (%) Chg
VP/Provost	4	1	4.25	6	2 (50%)	1	0 (0%)	6.25	2.00 (47%)
Student Dev	58	6	59.50	90	32 (55%)	9	1 (50%)	92.25	33.75 (58%)
BMIS	26	3	26.75	30	4 (29%)	4	1 (33%)	31.00	4.25 (16%)
FPA	23	2	23.50	29	6 (26%)	2	0 (0%)	29.50	6.00 (26%)
Humanities	13	6	14.50	16	3 (23%)	7	1 (17%)	17.75	3.25 (22%)
SEM	16	5	17.25	23	7 (44%)	8	1 (60%)	25.00	7.25 (45%)
S&ESHPE	11	2	11.50	14	3 (27%)	2	0 (0%)	14.50	3.00 (26%)
GITE	7	0	7.00	9	2 (29%)	0	0 (0%)	9.00	2.00 (29%)
Special Programs	6	2	6.50	8	2 (15%)	2	0 (0%)	8.50	2.00 (31%)
Other	2	2	2.50	2	0 (0%)	2	0 (0%)	2.50	0.00 (0%)
CTL	5	0	5.00	6	1 (20%)	0	0 (0%)	6.00	1.00 (20%)
Central Adm	198	10	200.50	211	13 (7%)	10	0 (0%)	213.50	13.00 (6%)
Rockville (Total)	369	39	378.75	444	75 (20%)	47	2 (14%)	455.75	77.00 (20%)

## **4.2 EXISTING CONDITIONS**

### **4.2.1 Location**

The Rockville campus of Montgomery College is located approximately 14 miles northwest of the District of Columbia and is within commuting distance from the Metropolitan Washington area.

### **4.2.2 Campus Character and Image**

The Rockville campus is located in a suburban setting north of the city center of Rockville, between the Rockville and Shady Grove Metro Stations. A campus loop road enters the campus off Hungerford Drive on the north, circulates to the west, south, and then east, connecting to two campus entrance points from Mannakee Street. Core campus buildings are surrounded on three sides by surface parking lots to the south, west and north. The extensive amount of surface parking is a prominent feature of the campus.

The campus has very little frontage on the most heavily used adjacent roadway, Hungerford Drive/MD 355. The frontage that it has on Hungerford Drive is the Mannakee Building, a central administration office building, and an office building that has been converted to use as the Homer S. Gudelsky Institute for Technical Education. A sign at the corner of Hungerford Drive and North Campus Drive identifies the campus, along with a building mounted sign at Mannakee Street and Hungerford Drive. Neither intersection is fully successful in identifying the campus beyond.

The campus is characterized by a fairly dense core of buildings that are primarily low rise, and of a consistent warm sand color of brick. Buildings have been organized in such a way that the open spaces between them are primarily linear and act as passages from one building to another. The residual space that is used to pause, study, socialize and recreate is scattered and insufficient. Pockets of mature trees are primarily located around the perimeter of campus.

While there are areas of significant topographic changes on the campus, primarily on the western and eastern edges, the core of campus slopes gradually with the exception of the outdoor amphitheater area. On the western edge of campus the buildings are designed to allow internal vertical circulation, with pedestrian connections from these buildings to the core of campus made by bridges between buildings and across the sloping hillside. This western area of campus also contains a significant number of mature trees surrounding the tallest of the campus buildings. The trees, primarily oaks, provide shade and a sense of scale and buffering for the buildings.

### **4.2.3 Adjacent Land Use**

The campus is bordered by Mannakee Street to the south. Across the street to the south is the Montgomery County Board of Education. To the north and the west, adjacent properties are single-family homes or multi unit residential developments. Along the eastern property line, townhouse style office buildings and MD 355 (Hungerford Drive) bound the campus with commercial uses occupying the eastern side of the road. The Washington Gas utility owns the property to the northeast corner of the campus.

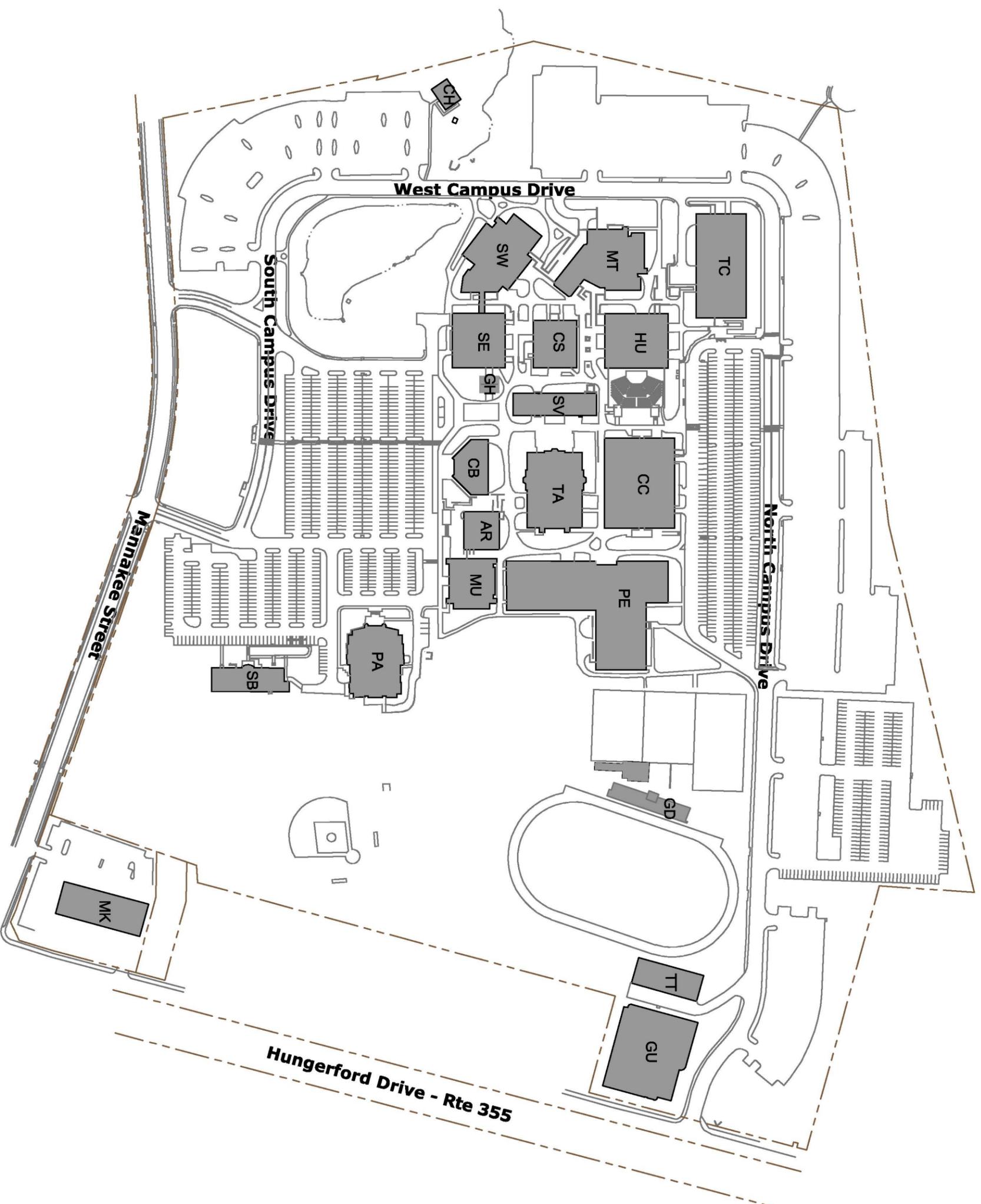
# Rockville Campus Site Character Analysis



- LEGEND**
- CAMPUS FEATURE
  - TREE CANOPY
  - WATER FEATURE
  - PLAYING FIELDS
  - PLACE FOR CAMPUS IDENTITY
  - COMMERCIAL



# Rockville Campus Existing Site Plan



- Existing campus building
- AR- Art Building
- CB- Counseling and Advising Building
- CC- Campus Center
- CH- Child Care Center
- CS- Computer Science
- GD- Grandstand
- GH- Greenhouse
- GU- Homer S. Gudelsky Institute for Technical Education
- HU- Humanities Building
- TT- Interim Technical Training Center
- SB- South Campus Instruction Building
- MK- Mannakee Building
- MT- Macklin Tower
- MU- Music Building
- PE- Physical Education
- PA- Robert E. Parilla Performing Arts Center
- SE- Science East
- SV- Student Services Building
- SW- Science West
- TA- Theatre Arts Building
- TC- Technology Center

BASE MAPPING PROVIDED BY MONTGOMERY COLLEGE. DATA HAS NOT BEEN VERIFIED IN FIELD.



#### **4.2.4 Campus Entrance Experience**

Upon entering at the northern entrance, the view of the campus is of large parking lots, in some cases on both sides of the campus drive. The parking areas are very close to North Campus Drive, with little landscaping to buffer parking or vehicular travel, provide shade, or define pedestrian circulation. Pedestrians must weave through parking and there is little to define their route or crossing points. Once on campus, a pedestrian can easily navigate the campus although there is little hierarchy of scale to the open spaces or circulation to help in wayfinding or to give the campus an identifiable “heart”. The wayfinding signage could be made more clear and attractive.

On the south side of campus, the loop road separates the parking into three distinct areas, with some landscaping provided along the perimeter and within the internal rows of parking. The entrance experience from the south via Mannakee Street includes a view to wooded areas, a pond located in a wooded setting, mature trees and the complex of buildings beyond. The parking areas on the south side of the campus are also prominent. A Metro bus stop is located just inside Mannakee Street on South Campus Drive. Bus riders must traverse the parking lot, aided by a painted median, and a series of stop signs and pedestrian crossing signs to arrive at campus.

#### **4.2.5 Building Usage**

Buildings on this campus generally fall into five categories of use: Administrative, Academic, Operations (facilities-oriented), Recreational, and Service (student, faculty, and staff oriented). Although some facilities have a mixed-use function, categorizing them in this way assists with the recognition of zones of use that may occur on the campus.

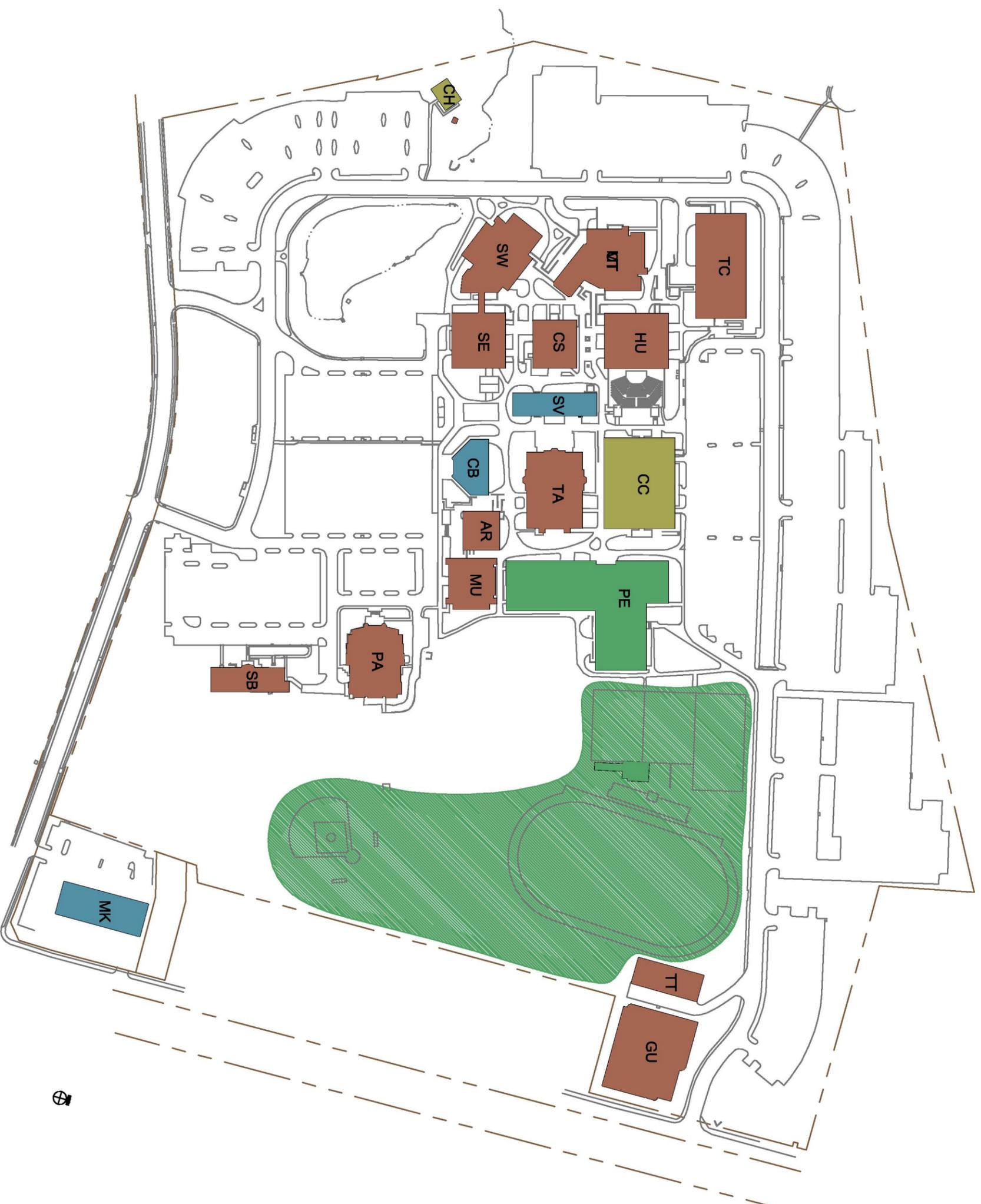
Most of the buildings on the Rockville campus are used for academic purposes. Through the center of the campus, however, there are several facilities that have different functions. The Campus Center is used as a student service building. To its south are the Student Services Building and Counseling and Advising Building, which are classified as administrative buildings. To the east of the Campus Center is the Physical Education building, tennis courts and athletic fields, which are used for recreational purposes. The two buildings located outside of Campus Drive, away from the center of campus, are not academic buildings. The Mannakee Building at the corner of Mannakee Street and MD Rte. 355 is an administrative building, and the Child Care facility is a student and staff service oriented building.

This pattern of development would suggest that future academic buildings be placed close to the center of campus, with service and administrative functions moved to the edges. The recreational facilities are already grouped together, and this configuration should be maintained.

#### **4.2.6 Functional Adequacy of Facilities**

Some of the functional problems affecting programs are inherent in the original design of the buildings. Small floor plates limit flexibility and room size. This further limits the size

# Rockville Campus Existing Conditions Building Usage Plan



- Administrative usage
- Academic usage
- Operations usage
- Recreational usage
- Service usage

- AR- Art Building
- CB- Counseling and Advising Building
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BASE MAPPING PROVIDED BY MONTGOMERY COLLEGE. DATA HAS NOT BEEN VERIFIED IN FIELD.



of classrooms and laboratories that can be accommodated column free within the existing structural bays, as well as the number of spaces that can be accommodated on each floor.

The campus is severely deficient in both the size and quantity of office and instructional space, study, meeting rooms, and support spaces such as lounge and recreation. In general, available building space has dictated programs and services – limiting the campus' ability to respond to program needs and changes in instructional delivery. This situation has severely limited the College's ability to support collaborative learning and collaboration efforts between students and faculty. Lack of space has also resulted in fragmenting disciplines, program identities, and services and limits the ability of the campus to be a full community resource.

In addition, the circulation network in and through campus buildings does not adequately provide access to all instructional areas on the campus for disabled persons. Many campus facilities are not compliant with the Americans with Disabilities Act (ADA).

Descriptions of the programs and functions in each building are included below. The general adequacy of each building to support these programs and functions is also presented.

**Paul Peck Arts Building (14,414 NASF, 25,594 GSF)**, constructed in 1971 and renovated in 2000, this four story structure includes 2 general purpose classrooms and Art studios (sculpture, drawing, ceramics, jewelry, printmaking, and painting), support spaces (plaster room, kiln room, acid room, welding room, solvent room, and storage), a slide library, gallery, and faculty offices and an open computer laboratory.

Insufficient space is available for ceramics, sculpture, jewelry, printmaking, locker rooms for students, and lounge space. In addition, there is need for an Art student study area and additional faculty offices.

**Campus Center (52,196 NASF, 74,302 GSF)**, a two story structure with a ground floor constructed in 1966 and recently renovated accommodates the bookstore; the MC Café; MC Copies (graphics and copy shop); dining rooms for students, faculty and staff; student lounge; MC Munchies (candy and snack shop); and a recreation center. The Campus Center also houses Workforce Development and Continuing Education classrooms and offices, English Department faculty offices, the Trio and Project Success programs, the Department of Management's Hospitality Management food laboratory and support facilities, the Office of Student Life, the Assessment Center, Central Administration's Auxiliary staff offices, and Central Receiving and Warehousing

There is a need to substantially enhance the quality of life on campus for commuting students with recreation activities and with facilities to support their total development. There is also a need to substantially enhance the quality of life for the entire campus community with a wider range of services and merchandising venues. This will require relocation of non-campus student related functions as well as Central Administration functions which currently occupy approximately 40% of the available building NASF.

**Computer Science Building (13,901 NASF, 20,862 GSF)**, a two story building constructed in 1966 houses two general purpose classrooms, three teaching computer laboratories and four open computer laboratories, the campus-based Instructional Technology staff offices, and the College's central computer center.

The existing two-story facility has been partially renovated to provide teaching and open laboratories. However, this building houses a College-wide function which takes away from the academic and support needs of the Rockville campus.

**Gordon and Marilyn Macklin Tower (81,800 NASF, 117,282 GSF)**, constructed in 1971 as a four story base plate and an additional three story office tower above, accommodates the Mathematics and Science Center, the Computer Writing and Language Laboratory, the Provost's offices, Deans' offices, the television studio, the campus library (stack space, study space, and offices/support space), and offices and support spaces for the Departments of Computer Applications, Computer Sciences, English, Humanities Institute, Information Technology, Psychology, Reading, English as a Second Language (ESL), Foreign Languages, and Philosophy.

There is inadequate library study space including group study rooms and lounge space. Departmental collections, for example the Education Department collection, need to be centralized. There is insufficient space to consolidate, either in this building location or other campus locations, departmental administrative and faculty offices, resulting in departmental location fragmentation. Further, there is a need to add additional vertical (ADA) accessibility.

**Theatre Arts (20,118 NASF, 35,032 GSF)**, a two story structure with an inaccessible partial basement that was constructed in 1966 and renovated in the mid 1990s. It houses five general purpose classrooms; a 60 seat lecture hall; class laboratories; offices for Speech, Dance, and Theatre staff and faculty; and a 500 seat arena and stage with support facilities. Classes in speech, dance, and theatre are taught primarily in this building.

Functional issues include insufficient public space for performances, lack of storage space, questionable accessibility at the first and second floor levels, undersized and inadequate number of offices, and minimal back-of-house space (scene shop, costume construction, workspace and storage).

**Humanities (47,750 NASF, 73,912 GSF)**, constructed in 1966 with a ground floor and an additional three floors above ground and renovated in the 1990s, houses a majority of the general purpose classrooms on the campus; computer teaching laboratories and open computer laboratories; Developmental Math Laboratory; Writing and Reading Center; and faculty and staff offices for the Departments of Anthropology, Criminal Justice, Sociology, Business Administration and Economics, Computer Applications, History and Political Science; and the Macklin Business Institute and Center for Teaching and Learning. In addition, the campus' Central Plant, and central telecommunications and mail facility are located in this building.

Although the Humanities Building was recently renovated, the social sciences departments are still fragmented. In addition, there is insufficient space to accommodate the consolidation of the English and Reading Departments and the Writing Center which is split between this building and the Macklin Tower.

**Music (10,221 NASF, 20,499 GSF)**, a two story structure constructed in 1971 and renovated in 2002 includes a recital hall for 118, a rehearsal hall for 110, teaching studios and laboratories, faculty and staff offices, and three general purpose classrooms for use by Music.

As the scope of the 2002 project was limited to renovation of the existing structure, there are still some existing deficiencies in the size and capacities of the teaching laboratories and in future flexibility to accommodate additional full-time staff and support.

**Physical Education Center (58,767 NASF, 84,949 GSF)**, a two story structure constructed in 1966 includes a swimming pool with a separate diving area; two all-purpose gymnasiums; a fitness center; a weight room; multi-purpose room; two dance studios; a Body Density Laboratory, faculty, staff, and student and team locker and shower facilities; training room; nine general purpose classrooms, and faculty and staff offices for the Department of Health and Exercise Science, and Physical Education and Athletics.

Current deficiencies in support of the Health Enhancement, Exercise Science, and Physical Education Department include the need for Health Assessment, Health Education, and Movement Assessment laboratories, expanded Fitness Center, Weight Room, Multi-purpose Room, Sports Medicine Facility, and Aerobics/Combatant Arts Room, redistribution of locker and shower facilities to accommodate student and changes in athletic programs, and “right-sizing” of offices for both faculty and staff.

**Student Services Building (6,810 NASF, 10,448 GSF)**, constructed in 1966, this one story building houses the campus offices of Admissions, Records and Registration, Student Financial Aid, Cashier, and Veteran Affairs. The building also contains the College Central Administration Offices of the Director of Admissions, Records, and Administration and Student Financial Aid.

Assuming the relocation of the Central Administration operations from the building, there is insufficient space to accommodate the campus functions currently in the building. In addition, it is the goal of each of the College’s campuses to bring together student and administrative services to support the concept of “one stop” shopping services for students and the College community relative to both the front door operations and full departmental services (Admissions and Registration, Financial Aid, Cashier, Dean of Student Development, Career Transfer Center, Assessment, Counseling, Disabled Student Services, and Trio program along with support services such as a training facility, storage, resource library, and specialized waiting areas).

**Science East (39,069 NASF, 53,737 GSF)**, a three story building plus a ground floor constructed in 1966 houses Biology and Chemistry Laboratories, seven general purpose

classrooms, a large lecture hall and offices for Biology, Mathematics, and Physics. In addition, the building contains shops and storage for Operations and Maintenance.

Current deficiencies include undersized laboratories and classrooms, insufficient support spaces, lack of technology for instruction, absence of a general purpose open laboratory, and undersized and inadequate number of offices for faculty and staff.

**Science West (27,855 NASF, 41,988 GSF)**, a two story structure including a ground floor constructed in 1971 houses Biology and Chemistry Laboratories; seven general purpose classrooms; a 79 seat lecture hall; offices for Biology, Mathematics, and Chemistry; as well as the English and Reading Departments. In addition, the building contains the administrative offices of Operations and Maintenance.

Current deficiencies include undersized laboratories and classrooms, insufficient support spaces, lack of technology for instruction, absence of a general purpose open laboratory, and undersized and inadequate number of offices for faculty and staff. In addition, Mathematics also has faculty offices in the Macklin Tower.

**Technical Center (40,250 NASF, 55,908 GSF)**, a two story structure constructed in 1966 houses 8 general purpose classrooms; a 72 seat lecture hall; career oriented programs, laboratories, support spaces, and offices under the Departments of Visual Communications Technologies and Applied Technology (such as graphic arts, professional photography, radio/television, applied geography (GIS), architectural technology, interior design, construction management, fire science, and computer-aided design and graphics). In addition, the building includes a small gallery and faculty and staff offices for the Department of Management.

Current deficiencies include undersized laboratories and classrooms, insufficient support spaces, lack of technology for instruction, inadequate lounge space, and undersized and inadequate number of offices for faculty and staff.

**Counseling and Advising Building (10,271 NASF, 17,696 GSF)**, a two story structure constructed in 1969 houses Disability Support Services including the Learning Center, Counseling, Student Employment Services, Career/Transfer Center, Dean of Student Development, and the Safety and Security Office.

Functionally, there are inadequate and undersized spaces for the Career Center, Learning Center, Assessment Center, and Student Employment Center; absence of a central exhibit/display and student kiosk/computer access terminals; and undersized and inadequate number of offices for the Student Services functions. As noted under the Student Services Building, it is the goal of each of the College's campuses to bring together student and administrative services to support the concept of "one stop" shopping services for students and the College community relative to both the front door operations and full departmental services.

In addition to the need for space to accommodate a new Parking Department, there is inadequate support space for the Safety and Security Office. The relocation of the Safety and Security Office would not support this campus goal.

**Parilla Performing Arts Center (14,760 NASF, 28,000 GSF)**, a two story structure with a partial basement constructed in 1984 has a 500 seat theatre and is the site for both campus academic productions and community performances. Campus student productions are presented here as are events in the College's professional theatre series. This facility is also used extensively by the public. Support spaces include stage, orchestra pit, scene shop, storage, green rooms, dressing rooms, box office, and storage.

Current needs include a campus meeting room suite; expansion of performance support spaces (storage of portable tables and chairs, audio-visual storage, scene shop and property storage, costume storage/fitting/repair/laundry, lighting shop/storage, tool/paint rooms), provision of a catering kitchen; additional restrooms; an improved loading dock; and additional offices to support the functions of the Performing Arts Center. These additional needs exclude the desire to expand the seating in the center to attract a broader range of performance venues to serve the Montgomery County community.

**Child Care Center (2,344 NASF, 2,498 GSF)**, constructed in 1986, is licensed to enroll up to 40 children. The pre-engineered, one story structure includes a staff office, two play areas, a kitchen, storage area, and toilets.

The current facility is inadequate as it relates to square footage of play space per student, storage, preparation and office space, and meeting space with parents. In addition, the current arrangement does not provide a medium for parents and teachers to observe classroom and social behaviors of children so that appropriate intervention strategies can be planned and implemented.

**Interim Technical Training Center (6,025 NASF, 9,360 GSF)**, constructed in 1988 houses two corporate classrooms, Building Trades and Sheetmetal and Plumbing Laboratories, 4 vehicle storage bays, a corporate laboratory, storage, a machine shop, and staff/corporate offices.

This pre-engineered one story structure does not fulfill the needs and functions of the Gudelsky Institute for Technology Education.

**Maintenance Shop (4,028 NASF, 4,720 GSF)**, constructed in 1988, is a two story structure that provides carpentry and paint shop space, offices, storage, and a small lounge and locker/shower facility.

In addition to being fragmented from the other Operations and Maintenance shops, support spaces, and administrative offices located in Science East and Science West, a two story approach without a service elevator and adequate, accessible storage is not conducive to providing cost effective and efficient physical plant services to a campus.

**Gudelsky Institute of Technology Education** (40,238 NASF, 64,000 GSF), a two story structure constructed in 1992 is a state-of-the-art technical training facility offering instructional programs in four primary areas: automotive, building and construction, manufacturing and fabrication, and printing management. The facility provides 18 instructional laboratories and support facilities, eight classrooms (three of which serve as a conference center), and faculty and staff offices. In addition, Central Administration's Response Center and Workforce Development and Continuing Education (WDCE) occupy space in this building.

In addition to the need to relocate the Central Administration and WDCE functions from the building and acknowledging that on-going space modifications are necessary to meet changes in market technical training opportunities/requirements, the current need is for storage.

**South Campus Instruction Building** (17,766 NASF, 29,900 GSF), a two story structure plus a ground floor constructed in 1996 was developed to provide flexible space for classrooms, laboratories, and faculty offices during renovations of other campus structures.

This facility has served the original intent despite pressures to utilize this facility for permanent occupancy due to significant space deficiencies throughout the campus.

In addition, there are a few out buildings that do not contribute to the NASF of the campus but provide valuable support:

**Canoe Trailer Shed** (420 GSF, constructed in 1990)

**Concession Stand/Toilet** (240 GSF, constructed in 1994)

**Tennis Football Shed** (600 GSF, constructed in 1997)

#### **4.2.7 Building Conditions**

Montgomery College hired Vanderweil Facility Advisors (VFA) to perform a web enabled software-based facilities condition analysis of each of its three campuses which included its buildings and the site infrastructure components such as electrical utilities, storm sewer, sanitary sewer, parking lots, etc. The primary focus of this effort was to:

- Provide a baseline condition assessment of the College's facilities to include infrastructure components and building systems.
- Provide the College with budget estimates for funding required safety improvements and reducing the deterioration of campus buildings and infrastructure components.
- Assist the College with building code and accessibility compliance and to ensure that the facilities are operated as required.
- Utilize the assessment in the implementation of an ongoing process of the identification and prioritization of maintenance and capital repair projects.
- Provide decision support capabilities with VFA's facility management software solutions.

The facilities analyses include the following:

- Current Condition Analyses – existing facility deficiencies including deferred maintenance, deferred renewal, near-term anticipated renewal, recommended discretionary improvements, and code, non-compliance issues.
- Anticipated capital renewal analyses – projections of ongoing degradation of facilities' components and costs associated with renewal or replacement of these components as they reach the end of their useful life.
- Capital funding analyses – scenario comparisons showing various funding levels and the effect of each on the condition and value of the building.

### **Assessment Methodology**

The deficiencies were classified in several different ways. In addition to detailed specific descriptions, each deficiency was assigned a category, priority, and primary system association. This parallel differentiation allows for multiple queries of the database, facilitating analysis of the data. It is possible, for instance, to query the database for all Priority 1 deficiencies in the electrical systems or all Priority 5 accessibility code issues. The criteria used to determine the priorities, categories, primary systems, and cost estimating are as follows:

- Priority One – Immediate Concerns: Should be undertaken immediately including violations of life safety, building, and electric codes.
- Priority Two - Short Term Concerns (1-2 years): Should be corrected in the near future to maintain the integrity of the building, including systems, which are functioning improperly or not at all, and problems that, if not addressed will cause additional deterioration.
- Priority Three – Long Term Concerns (3-5 years): Should be corrected in the more distant future to maintain the integrity of the building, including systems, that have exceeded their expected useful life, but are still functioning.
- Priority Four – Improvements: Required or desirable to bring the facility to perform as it should, including systems upgrades and aesthetic issues.
- Priority Five – New Code Requirements: Do not conform to codes instituted since the construction of the building, therefore, they are grandfathered in their existing condition. These should be addressed in any major renovation effort, if not before.

#### Deficiency Categories:

- Code Compliance (violation of the 2000 International Building Code or conditions which pose a hazard to building occupants)
- Building Integrity (components or systems which are broken or in poor condition)
- Functionality (conditions which inhibit current use of space and do not necessarily affect the integrity of the building's systems such as poor temperature control, insufficient electrical service, etc.)
- Aesthetics (problems with the building's appearance which are not functional in nature)
- Energy (conditions which adversely affect energy usage)
- Air/Water Quality (conditions which affect the environmental quality of the water or air)
- Hazardous Materials (Visible observations or College reporting indicating probable presence of hazardous materials)

- Life Safety (violations of the Life Safety Code, NFPA, 101)
- Building Code Accessibility (Compliance with the accessibility requirements of 28 CFR part 36, ADAAG and the Maryland Accessibility Code of COMAR 05.02.02 dated February 1, 1995).

**Facility Condition Index**

An automated standard process for assessing the relative condition of buildings and site infrastructure components, facilitating comparison both within and among the campuses was established. For each building or site component, the Facility Condition Index (FCI) was developed which measures the relative amount of current deficiencies in the building including recommended improvements and grandfathered issues. The total value of recommended corrections is divided by current replacement value for the building or site component resulting in the FCI. The higher the FCI, the poorer the condition of the facility or system component. The FCI ranges for the standard of services for each building or site component are:

- Good: .00 to .05
- Fair: .05 to .10
- Poor: Greater than .10

FCI is a standard measure used throughout the country; it is recommended by both the National Association of College Business Officers (NACUBO) and the Association of Higher Education Facility Officers (APPA). In the attached tables, this is represented by a Deficiency % which takes the FCI and converts it to a percentage of replacement. For example, an FCI of .10 translates into a Deficiency percentage of 10%.

Referencing the following table, the results of VFA’s survey clearly show that the majority of campus facilities including infrastructure are in fair to poor condition. It should be further noted that this does not reflect “true functional” needs involving general purpose as well as programmatic or departmental needs such as inadequacy of space to accommodate changes in, or current teaching methodology and technology, proper sizing of instructional space and office space, student gathering space, student support services, etc.

**Table 4.2.7-1  
Total Replacement Value and Current Deficiency Cost**

Twenty-three structures (776,647 GSF) excluding Mannakee (42,102 GSF) which include: 20 major buildings (775,387 GSF) and 3 support facilities (1,260 GSF) Canoe Trailer Shed, Concession Stand, and Tennis Football Shed.

Priority One - Five	Replacement Value	Current Deficiency	Deficiency as % of Replacement*
Building Systems	\$108,651,145	\$22,969,433	21%
Infrastructure	\$12,347,584	\$4,481,630	36%
CAMPUS TOTAL	\$120,998,729	\$27,451,063	23%

Priority One-Three Only

Building Systems	\$108,651,145	\$15,117,588	14%
Infrastructure	\$12,347,584	\$511,714	04%
<b>CAMPUS TOTAL</b>	<b>\$120,998,729</b>	<b>\$15,629,302</b>	<b>13%</b>

\* FCI is derived by dividing the Deficiency as % of Replacement by 100.

**Table 4.2.7-2**  
**Age of Buildings, GSF, and % of total**

1960's (10 Buildings)	431,546	GSF	56%
1970's (4 Buildings)	205,363	GSF	26%
1980's (5 Buildings)	44,578	GSF	6%
1990's (5 Buildings)	95,160	GSF	12%
<b>TOTAL (24 Buildings)</b>	<b>776,647</b>	<b>GSF</b>	<b>100%</b>

**Table 4.2.7-3  
Size of Buildings and % of total**

< 1,000 GSF (3 buildings)	1,260	GSF	0.2%
1,001- 10,000 GSF (4 buildings)	21,278	GSF	2.7%
10,001 - 25,000 (4 buildings)	69,505	GSF	8.9%
26,000- 50,000 (5 buildings)	160,514	GSF	20.7%
> 50,000 GSF (7 buildings)	524,090	GSF	67.5%
<b>TOTAL (23 Buildings)</b>	<b>776,647</b>	<b>GSF</b>	<b>100%</b>

**Table 4.2.7-4  
Building Deficiency Category Amount (1-5) and (% of Replacement)**

Less than 25% deficiency (9 buildings)	\$5,432,998	24%
26% to 50% (10 buildings)	\$17,263,199	75%
51% or greater Deficiency (4 buildings)	\$273,236	1%
<b>TOTAL</b>	<b>\$22,969,433</b>	<b>100%</b>

**4.2.8 Utilities**

As part of this Facilities Master Plan process, the 1991 Utilities Master Plans and 1994 update and the 1991 Facilities Master Plan were reviewed to determine the adequacy of existing systems and to ascertain the potential for future expansion. In addition, the Facilities Managers for each campus were interviewed to identify completed and planned improvements and to verify existing information.

**Water**

The college gets all potable water from the City of Rockville. Two metered supply lines come from Mannakee Street and one metered supply line comes from Hungerford Drive. Some of the piping is deteriorating but not at a uniform rate throughout the campus. The existing piping is adequate to handle all of the present and future domestic water needs but hydraulic simulations using the Kentucky Pipe Model Program based on the flow requirements of the Insurance Service Office (ISO) Fire Suppression Rating Schedule in the 1991 Utilities Master Plan indicate the system is inadequate to handle fire flows on the campus.

**Sanitary Sewer**

The college maintains its own sanitary sewer system with two outfalls located on Mannakee Street. The existing sewer system maintained by the college is adequate for all present and projected future flows based on recommendations and capacity charts in the 1991 Utilities Master Plan.

**Heating System**

The campus is served by a central plant, providing low temperature hot water for space, domestic hot water, and swimming pool heating. The system consists of 3-100 BHP and 1-450 BHP gas-oil fired firetube boilers and centrifugal pumps located in the Humanities building. The water is distributed to the West side of campus by a 10-inch underground

heating water loop. The East side of campus is served by a 12-inch underground heating water loop. The 450 BHP boiler has been installed since the 1991 Master Plan and the 3 other boilers were installed in 1987. All campus buildings are served by this system except for Child Care, the Carpenter Shop, Mannakee, and the Interim Technical Training Center (ITTC). The plant boilers have been sized to meet both the current and anticipated loads of the 1991 Utilities Master Plan.

### **Chilled Water System**

The current chilled water system consists of water-cooled rotary screw chillers and chilled water distribution via underground piping. The central plant chillers are located in the Humanities building and consist of 2-450 ton screw chillers and 1-150 ton natural gas engine-driven screw chiller, all water-cooled. In addition, there is a 4360 ton-hrs thermal ice storage plant. The underground piping loop has been installed since the 1991 Utilities Master Plan was written. The central plant serves all of the campus buildings except the Performing Arts Building which has a stand alone chilled water system; and the Mannakee Building, Child Care, Carpenter Shop, and Interim Technical Training Center (ITTC) which have packaged systems. The Science East building has a backup chiller but is connected to the plant as its primary source of cooling. This backup 225-ton variable speed centrifugal chiller provides redundancy not only to the Science East building, but also to the entire West Loop.

In Spring of 2004, a new backup chiller will be provided at the Campus Center. This 240-ton variable speed centrifugal chiller will provide redundancy for the East Loop.

Based on Montgomery College projections of future load in the 1991 Utilities Master Plan and assuming all buildings will eventually be connected to the central plant, the system is undersized. The current size is 1,050 tons plus 4360 ton-hrs from the thermal ice storage system. For a typical cooling day, with eight hours of peak cooling, the total plant capacity is 1595 tons. The college projects a campus load of 2,700 tons in Table E-2 of the 1991 Utilities Master Plan. This is assuming no load diversity at peak conditions. This condition will be exacerbated by the additional development proposed in the current Facilities Master Plan.

### **Natural Gas**

The current natural gas system consists of three uninterruptible supply systems and one interruptible supply service. Two uninterruptible supply services (Art and Music Buildings and the Gudelsky Institute for Technical Education) serve only instructional needs and not any building mechanical equipment. A third uninterruptible supply service at the Humanities Building feeds the College-owned distribution system that connects to mechanical and other equipment in Science East, Science West, Macklin Tower, Humanities, Technical Center, Student Services, and Campus Center. The interruptible supply service connects to the Campus Central Plant located in the Humanities Building. The alternate fuel for the central plant is No. 2 fuel oil from a 20,000 gallon underground storage tank located next to the Humanities Building.

### **Electrical**

The current electrical power to the campus is supplied directly from the utility company, PEPCO. There is no existing central power plant on the campus. The 1991 Utilities Master Plan recommended that central plant metering for the campus would be cost effective.

Each building in the campus is served and metered separately from the secondary side of the PEPCO’s transformers. Primary feeders and transformers are owned and maintained by PEPCO.

According to the 1991 and 1994 Utilities Master Plans, there is adequate power throughout the existing campus. In addition, there should be adequate power available to support any type of campus growth since the electrical power system is distributed and owned by the utility company.

**4.2.9 Stormwater Management**

Existing Stormwater Management in Rockville Campus consists of series of storm drain pipes, which divert the stormwater runoff to the existing duck pond. The existing pond was constructed in mid 1960’s and provides for both quantity and quality control for all existing buildings, parking, and access roads.

The existing pond was retrofitted and enlarged in 1992 to provide water quantity control for the Gudelsky Institute (GITE) project site. In addition to the GITE building site, stormwater management was provided for the future seven other project sites anticipated at that time.

As part of the retrofit a channel was added on the down stream side of the Campus Drive to provide a 100 year overland flood path.

**4.2.10 Circulation and Parking**

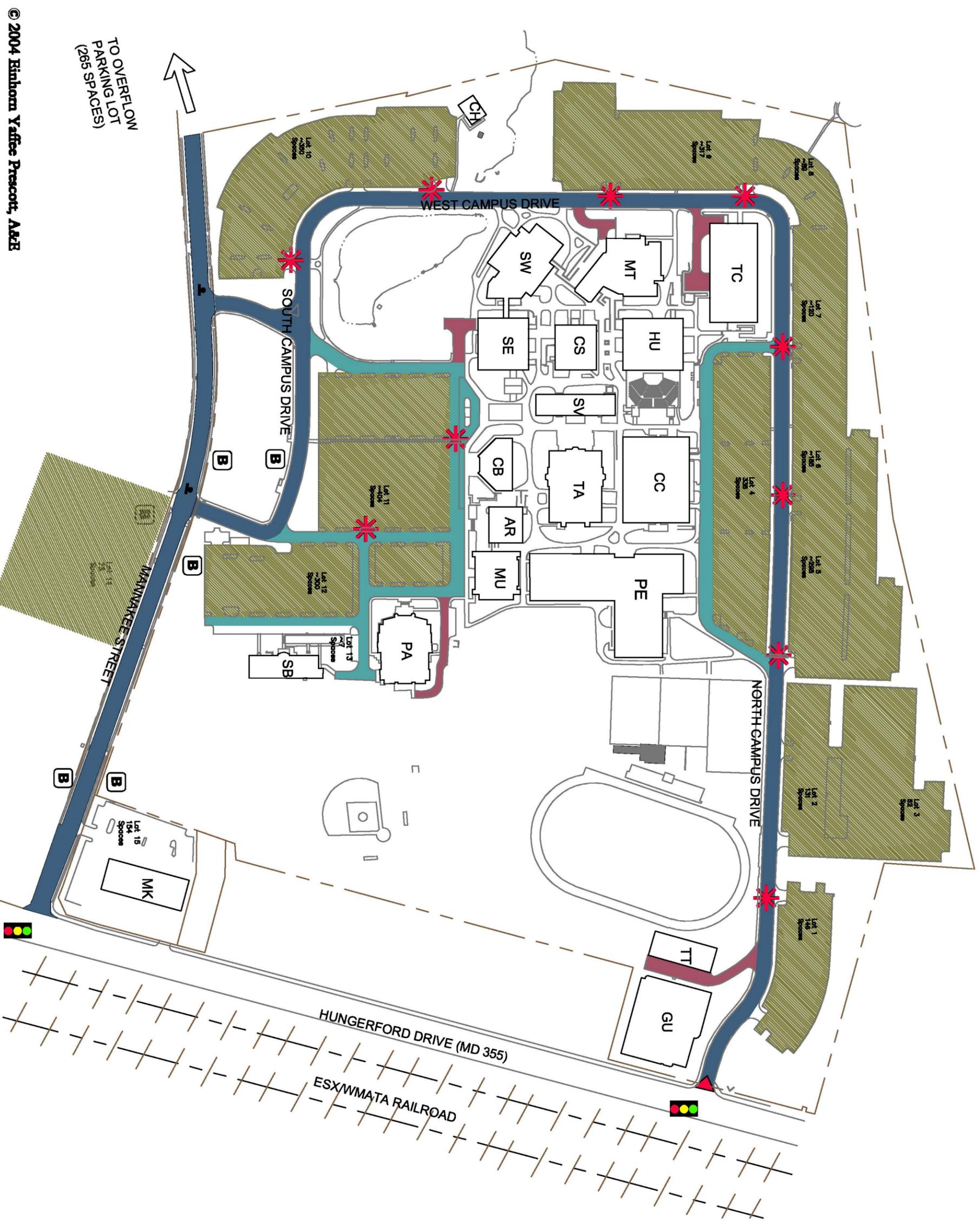
**Vehicular Access and Circulation**

The Rockville Campus is situated northwest of the Hungerford Drive (MD 355)/Mannakee Street intersection, within the City of Rockville. Frederick Road is classified as a “Major” arterial, and Mannakee Street is classified as “Primary” residential facility on the Montgomery County Master Plan of Highways (1992). Direct access to the campus is provided via a signalized entranceway intersection along Hungerford Drive and two (2) unsignalized entranceway intersections along Mannakee Street. The campus access and circulation situation, as well as its parking and public transportation facilities are illustrated in Figure 4.

The roadway and entranceway distributions for campus vehicle trips are as follows:

<b>Roadway Approach</b>	<b>Distribution</b>
From South along MD 355	30%
From North along MD 355	40%
From West along Mannakee Street	30%

# Rockville Campus Existing Access, Circulation and Parking Plan



- Parking
  - Major vehicular circulation
  - Minor vehicular circulation
  - Service road
  - B Bus stop
  - Campus access point
  - \* Pedestrian/Vehicular conflict
  - Traffic signal
  - Stop sign
- AR- Art Building
  - CB- Counseling and Advising Building
  - CC- Campus Center
  - CH- Child Care Center
  - CS- Computer Science
  - GD- Grandstand
  - GH- Greenhouse
  - GU- Homer S. Gudelsky Institute for Technical Education
  - HU- Humanities Building
  - MT- Interim Technical Training Center
  - SB- South Campus Instruction Building
  - MK- Mannakee Building
  - MT- Macklin Tower
  - MU- Music Building
  - PE- Physical Education
  - PA- Robert E. Parilla Performing Arts Center
  - SE- Science East
  - SV- Student Services Building
  - SW- Science West
  - TA- Theatre Arts Building
  - TC- Technology Center

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EYP / O. R. George & Associates

MONTGOMERY COLLEGE  
FACILITIES MASTER PLAN 2002-2012  
ROCKVILLE CAMPUS

JANUARY 2004  
RV-F4 FIGURE 4



Entranceway	Distribution
North Campus Drive off MD 355	40%
East Entranceway off Mannakee Street	25%
West Entranceway off Mannakee Street	35%

The significant percentage indicated above for Mannakee Street (from the west) is primarily due to this roadway’s connection to the I-270/MD Route 28 Interchange to the southwest, via Nelson Street. This percentage is part of the two-way “cut-through” traffic, along Mannakee Street, that is identified as a key concern in the City of Rockville Comprehensive Plan (January, 2002).

Field observations and analysis indicate that the campus’ three external entranceway intersections currently operate within the acceptable planning standards of the Montgomery County Department of Transportation and the City of Rockville. No significant capacity, operational or safety constraints were identified for the access points.

On-site vehicular circulation is provided primarily by a “ring” road (Campus Drive), and its connection to various buildings via minor roadways and parking area drive aisles. No significant internal vehicular circulation deficiencies were identified.

**Pedestrian Circulation**

Pedestrian circulation on campus is provided via a network of sidewalks, crosswalks and related signage. The average pedestrian walking distance between the parking areas and the campus core is 816 feet, which is quite acceptable for educational campuses. No significant pedestrian safety issues were identified on-campus, although improvements to pedestrian circulation within parking areas and crossing Campus Drive would be desirable.

Pedestrian safety related to the crossing of Mannakee Street to and from Parking Lot 14 is an important concern. This lot is located south of Mannakee Street, across from the campus, and its peak period occupancy is approximately sixty-nine percent (69%).

**Parking**

Campus parking is primarily provided within fifteen (15) surface lots. Parking is also allowed along North Campus Drive, and a 265-space overflow lot is located off-campus to the west along Mannakee Street. The total campus parking consists of 3,450 spaces and the peak occupancy is in the range of ninety-five percent (95%). This parking demand could be considered a major issue, as it does not allow for efficient vehicle access, circulation and overall quality of service, whereby a parker is not required to search for the last available space.

**Public Transportation**

The Rockville campus is well served by public transportation on and off-campus. These services include a Washington Metropolitan Area Transit Authority (WMATA) Metrobus route, and two (2) Montgomery County Ride-On routes, which provide connections to several rail stations on the WMATA Red Line. Bus stops and shelters are provided on campus for these transit systems. In addition, the College provides financial support for a “Campus Connection” bus service between the Takoma Park and Rockville Campuses

with stops at three intervening Metro stops, as well as at the Shady Grove Campus of the University of Maryland.

### **Issues**

The Hungerford Drive/Campus Drive North intersection is the only signalized external access point for the campus; and it is the most utilized access point for vehicles entering and departing from the campus.

A significant volume of campus traffic originates from the west along Mannakee Street; and this situation contributes to the “cut-through” traffic pattern identified as a key concern by the City of Rockville.

The two (2) campus entranceway intersections along Mannakee Street currently operate without any significant capacity, operational and safety deficiencies.

The safety of pedestrian movements across Mannakee Street from Parking Lot No. 14 needs to be evaluated further, particularly if future land use development concepts would result in greater use of this parking lot.

The campus is provided with inadequate parking. The observed peak parking demand occupies 95±% of the supply, and this situation leads to inefficient vehicle circulation movements in search of available parking spaces. This situation also contributes to undesignated parking along North Campus Drive, as well as parking violations.

## **4.3 FACILITIES PROGRAM**

### **4.3.1 Needs Assessment**

Assessments of the current and projected facilities needs at the Rockville campus are generated by applying current and projected planning data related to enrollment, instructional delivery, library collections, faculty, and staff to the State of Maryland Guidelines for facilities at community colleges. Refer to Table 4.3.1-1 for this planning data.

Current and projected space needs for each type of space in the campus inventory for which a guideline is available are then computed. Comparisons with the campus' current inventory and the one planned for 10 years later, given approved capital projects, are made, and surpluses or deficiencies relative to the respective space categories are identified. Table 4.3.1-2 shows this analysis. The Rockville campus has no approved facility projects over the planning period of 2002 to 2012. Not included in the guideline assessment is the construction of the Science Center currently being planned, although it is included among the proposed facility projects for the campus.

Currently the Rockville campus, excluding Central Administration and Work Force Development and Continuing Education, shows an overall deficiency of -203,911 NASF, a significant amount of space representing 42% of the campus' current inventory. Even with projected very modest growth in enrollment of 7%, this overall deficiency is projected to

increase to 325,586 NASF in ten years as the campus achieves needed changes in instructional delivery and meets faculty and staffing standards. This overall facility deficiency represents 67% of the current campus inventory. With projected deficiencies in every space category except classroom space, every department on campus—the academic departments, student development programs, the library and learning centers, information technology, and physical plant—is involved in capital projects to meet these facility needs.

**Table 4.3.1-1  
Needs Assessment Planning Data for the Rockville Campus**

	Fall 2002	Fall 2012
FTDE-Credit	6,140	6,559
FTDE-Noncredit	<u>0</u>	<u>0</u>
FTDE-Joint	6,140	6,559
WSCH-Lecture-Credit	76,829	68,696
WSCH-Lecture-Noncredit	<u>0</u>	<u>0</u>
WSCH-Lecture-Joint	76,829	68,696
WSCH-Lab-Credit	29,132	44,479
WSCH-Lab-Noncredit	<u>0</u>	<u>0</u>
WSCH-Lab-Joint	29,132	44,479
FTE Students	8,050	8,599
Bound Volume Equivalents	186,534	213,952
FTE Faculty	419	452
FT-Faculty	284	315
FT-Staff	369	444
Planning Head Count	3,464	3,728
Student Headcount	14,817	15,793

**Table 4.3.1-2  
Computation of Space Needs for the Rockville Campus**

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
100	CLASSROOM	85,280	78,063	(7,217)	76,253	78,063	1,810
200	LABORATORY	195,628	146,310	(49,318)	286,860	146,310	(140,550)
210	Class Laboratory	169,840	114,215	(55,625)	259,313	114,215	(145,098)
220	Open Laboratory	25,788	32,095	6,307	27,548	32,095	4,547
250	<i>No Allowance</i>						
300	OFFICE	135,748	98,450	(37,298)	153,886	98,450	(55,436)
310	Office/ Conf. Room	131,928	89,898	(42,030)	149,856	89,898	(59,958)
320	Testing/Tutoring	3,820	8,552	4,732	4,030	8,552	4,523
350	<i>Included w/ 310</i>						
400	STUDY	64,490	42,958	(21,532)	70,947	42,958	(27,989)
410	Study	38,375	2,967	(35,408)	40,994	2,967	(38,027)
420-30	Stack/Study	18,653	36,494	17,841	21,395	36,494	15,099
440-55	Processing/Service	7,461	3,497	(3,964)	8,558	3,497	(5,061)
500	SPECIAL USE	92,280	58,086	(34,194)	97,308	58,086	(39,222)
520-23	Athletic	80,400	48,197	(32,203)	84,590	48,197	(36,393)
530	Media Production	10,880	7,971	(2,909)	11,718	7,971	(3,747)
580	Greenhouse	1,000	1,918	918	1,000	1,918	918
600	GENERAL USE	80,259	50,757	(29,502)	84,520	50,757	(33,763)
610	Assembly	21,280	21,849	569	22,118	21,849	(269)
620	Exhibition	3,820	2,589	(1,231)	4,030	2,589	(1,441)
630	Food Facility	29,098	11,453	(17,645)	31,311	11,453	(19,858)
640	<i>Child Care N/A</i>	2,265	2,265	0	2,265	2,265	0
650	Lounge	10,392	1,934	(8,458)	11,183	1,934	(9,249)
660	Merchandising	3,920	9,183	5,263	4,130	9,183	5,054
670	<i>Recreation N/A</i>	1,484	1,484	0	1,484	1,484	0
680	Meeting Room	8,000	0	(8,000)	8,000	0	(8,000)
700	SUPPORT	37,392	13,795	(23,597)	42,895	13,795	(29,100)
710	Data Processing	4,105	3,154	(951)	4,419	3,154	(1,265)
720	Shop/ Storage	26,614	9,427	(17,187)	31,291	9,427	(21,864)
730	<i>Included w/ 720</i>						
740	<i>Included w/ 720</i>						
750	Central Service	6,140	1,033	(5,107)	6,559	1,033	(5,526)
760	Hazmat Storage	532	181	(351)	626	181	(445)
800	HEALTH CARE	1,428	174	(1,254)	1,512	174	(1,338)
900	<i>No Allowance</i>						
050	<i>No Allowance</i>						

**4.3.2 Proposed Facilities Programs**

As shown in the following set of projects, the Facilities Master Plan identifies a need for the Rockville campus to make campus changes through new construction, demolition or reallocation of specific buildings, and renovations that result in a net addition of 314,551 NASF to the campus inventory. This net project addition represents 97% of the 325,586 NASF projected campus deficiency. Together with the reallocations and renovations of spaces within existing campus buildings, the new facilities will support the projected modest ten-year growth and development of the Rockville campus. The College should

monitor carefully the enrollment growth at this campus, particularly given its significant space constraints. Additional facilities may well be required, and new campus and College development strategies formulated and implemented, including the addition of a new campus. A description of the programs located within these projects follows. The physical aspects of these projects will be discussed in section 4.4, Master Plan.

#### **Construction of Science Center**

This project proposes the construction of a new academic building supporting the sciences—Biology, Chemistry, Physics, and Engineering—located in the Science East and West Complex and relocates the Observatory currently located on Macklin Tower. Included in the project are the class laboratories, greenhouse, and most of the classrooms required to support science instruction.

#### **Renovation of Science East and Science West (new Math Center)**

Given the construction of the new Science Center, this renovation project reconfigures and reconstructs the entire Science East and Science West complex for facilities originally proposed but not accommodated in the Science Center, including classrooms, the Mathematics Department with Math class labs and offices, and the Math and Science Learning Center. In addition the Education Department and its needed instructional facilities are housed in this Center. The greenhouse is to be demolished, and, to provide accessibility, an addition to Science West will accommodate an elevator, lobby, and mechanical and circulation space.

#### **Construction of a Physical Plant Facility and Demolition of the Maintenance Shop**

Construction of a facility to co-locate the Facilities Department (administrative offices and shops/storage) and Central Administration's Central Receiving and Storage for the campus is proposed. This project will free up space in buildings that are not suitable for continued use (the Maintenance Shop) or are inappropriately mixed (Science East and Science West) and co-locate functions and programs that can readily co-exist, whether on the Rockville campus or an off-campus site. This plan will retain the maintenance and operations facilities currently located in the Humanities Building that are associated with the campus central plant.

#### **Alteration of Gudelsky Institute for Technical Education and Replacement of the Interim Technical Training Center**

With the relocation of the central administration functions from the Gudelsky Institute for Technical Education, the vacated space and that associated with the already vacated photography lab space should be renovated for classroom and class lab needs of the Institute. The Interim Technical Training Center ("ITTC") should be replaced with a facility that is better integrated with the needs and functions of the Institute, including supplies storage for GITE.

#### **Construction of Student Services Center**

This construction project brings together student and administrative services to support the concept of "one stop" shopping services for students and the College community relative to both front door operations and full departmental services. Specifically, it will include: Admissions and Registration, Financial Aid, Cashier, Dean of Student

Development, Career Transfer Center, Assessment, Counseling, Disabled Student Services (DSS), the Trio program, the Office of Safety and Security with a modest health clinic, and a new Parking Department. This facility needs to be a “showcase facility” which should be located at a primary entrance to the Rockville campus. Construction of this facility allows the eventual demolition of the Counseling and Advising Building and the Student Services Building.

#### **Construction of Library Resource Center**

This project provides a new library for the campus, removing it from Macklin Tower. Key needs addressed by this project are the Library needs for study, stack, and processing and service spaces, all significantly constrained in their present location. It provides 1,000 patron stations in a wide variety of study seating options, and sufficient space to hold the campus’ projected collection, including the needed collection of curriculum materials to support the Education program. This facility also provides a café and patron lounge outside of the Library proper, but within the facility.

#### **Renovation of Macklin Tower**

With the construction of a new Library and the Science Center, the renovation of Macklin Tower can be completed. The completion of this renovation will allow the demolition of the Computer Science Building, since the computer facilities and staff supported by this building will be moved to Macklin Tower. This relocation will involve the transfer of the campus main computer room and operations. Certain existing Macklin Tower units will remain, including the Office of the Provost, the Deans’ Suite, and the media production facilities. To align units physically consistent with organizational and functional relationships and synergies, Macklin Tower will support the division of Business, Management, and Information Science, including classrooms and class labs, relocating individuals from the Technical Center, the Humanities Building, Macklin Tower, the Computer Science Building, and the South Campus Instruction Building. The Macklin Business Institute will be housed here, as well. The Food Lab Suite, however, will remain in the Campus Center. The Center for Teaching and Learning will be relocated to this building in proximity to the media production facilities. Its new facilities will include various studios supporting teaching and learning, such as a design/development studio, a presentation studio, and a product planning studio, as well as office space. The Writing Center will be relocated to the Humanities Building addition. In addition, an elevator tower will be added to the building to support accessibility.

#### **Alteration of and Addition to the Humanities Building**

Recognizing that the Humanities Building was recently renovated, this reallocation and very modest alteration project allows the alignment of the social sciences departments physically consistent with organizational and functional relationships and synergies, thereby reducing the significant fragmentation that has occurred over time. An addition to the Humanities Building is constructed to house the English and Reading Departments, although some Reading faculty will be located in the original section of the building. The existing Writing/Reading Center will be co-located with the Writing Center now located in Macklin Tower. The Humanities Institute is relocated to the space vacated by the Writing/Reading Center, while the Center for Teaching and Learning relocates to Macklin Tower to be co-located with the Media Center.

**Renovation of and Addition to the Performing Arts Center**

This project renovates the Performing Arts Center following a study to examine the feasibility of expanding seating in the Center to the goal of 1,000 seats. This level of seating would allow the PAC to attract a broader range of performance venues to serve the Montgomery County community than it currently does. Even if the College decides not to expand the existing PAC stage and seating, a renovation and expansion of PAC is needed to provide a campus meeting room suite, accommodating groups up to 160, to support College and County activities, expansion of performance support spaces, and additional offices to support the functions of the PAC. The expanded offices and performance support spaces recognize that PAC is a year-round functioning performance venue for many groups and organizations beyond those associated with the College. This addition should also provide sufficient restrooms to support both the Meeting Suite and the performances at the PAC. The project should also attempt to provide an improved loading dock situation for the building.

**Alteration of the Technical Center**

This reallocation and alteration project allows the projected growth of the Visual Communications Technologies and Applied Technology Departments to expand into space vacated by the Management Department, as well as conversion of current classrooms to other uses supporting these programs.

**Construction of Art Building Addition**

This project provides an addition to the Art Building to meet current and projected facility needs of the Art, Music, Speech, Dance, and Theatre Arts Departments. Additional music labs are included. The new addition should relocate and expand art studios like the ceramic, sculpture, jewelry, and printmaking studios, while retaining and expanding the color, drawing, and painting studios in the existing building. A dance studio is provided, allowing the facility located in the Physical Education Center to be used for other purposes. Offices for faculty or staff not accommodated in the existing buildings are included. The addition should also provide locker rooms for students, as well as a lounge. An Art Study is also provided supporting use of the Department's art slide and other collections. Hazardous materials storage and waste removal should be provided.

**Reallocation of South Campus Instruction Building to Work Force Development and Continuing Education**

The South Campus Instruction Building should be reallocated for use by Workforce Development and Continuing Education activities at the Rockville campus that currently are housed at the Campus Center. Any residual space available in this building could be used for any campus or College activity.

**Renovation of the Campus Center**

One goal of the facilities master plan for Rockville is to recapture the purpose of the Campus Center for student use by relocating non-related occupants and functions to other facilities. The proposed renovation and space reallocation of the Campus Center would

enhance substantially the quality of student life on campus for commuting students with facilities to support their total development and recreational activities and for the entire campus community with a wide range of service and merchandising venues. It also includes administrative offices associated with student life.

#### **Renovation of and Addition to the Physical Education Center and Outdoor Facilities**

This project renovates the existing Physical Education Center and provides an addition to capitalize on the recent decision to eliminate football from the intercollegiate athletics program and to provide appropriate and needed support for the Health Enhancement, Exercise Science, and Physical Education Department and its programs. The existing fitness center and small multi-purpose room are to be converted to an auxiliary gym, with new expanded Fitness Center and Weight Room being provided as part of the addition. Space for a Health and Wellness Center is provided through the addition of supporting class labs. The locker room space is reallocated, and major changes in the building flow are created to allow for better, more user sensitive, and safer control of facility use, including better accessibility for older and/or disabled individuals. Included in this renovation is a redesign of the office suite to allow for better traffic flow, more direct access to instructor and coaches' offices, and better location of equipment and other storage. Overall the project should create an atmosphere that invites people to participate in healthy lifestyle activities. Relative to its outdoor physical education facilities, the campus and the College should undertake a study of its physical education and intercollegiate athletic programs to develop a comprehensive strategy for outdoor program facilities and their locations.

#### **Construction of Child Care Center Units**

While a new Child Care unit is under consideration for the campus, additional units may be required as the campus grows. These units can be expected to be co-located with that under consideration. The College may want to consider adding observation rooms to each unit to support its expanding program in early childhood education, as well as providing a venue for parents and teachers to observe classroom and social behaviors of children so that appropriate intervention strategies can be planned and implemented.

## **4.4 MASTER PLAN**

### **4.4.1 Campus Structure and Character**

The Facilities Master Plan for the Rockville Campus is designed to support a 7% increase in enrollment through construction of approximately 354,000 net square feet (630,000 gross square feet) of new space, and renovation and reallocation of some of the existing space. These totals exclude a proposed Child Care Center, whose size has not yet been determined.

The physical goals of the Facilities Master Plan include enhancement of the entrances to the campus, creation of open space, development of additional space to meet the College's needs, and renovation of existing space.

The Facilities Master Plan illustrates the expansion opportunities made possible by constructing buildings on the surface parking lots near the southern entrance to the campus. Prominent new buildings create a visible front door to the campus from Mannakee Drive. These include a Science Center, Resource Center and Student Services Center. The reconfigured entrance improves the arrival sequence with a wooded area defined by slightly relocated entrance roads off of Mannakee Drive, a turn-around that provides access to a drop-off area for the Performing Arts Center, connection to the existing ring road, and a future point of connection to an extension of this road to the east to serve future academic buildings anticipated to be built in the ten to twenty year time frame. Eliminated surface parking will be replaced with parking structures.

The existing character of the campus is dense, contributing to the sense that students are crowded in the open spaces that exist between buildings. To address this issue, the Facilities Master Plan creates three significant open spaces. The first, an informal open space on the site of the Computer Science Center, relieves what is currently the densest portion of the campus. This open space builds upon a contiguous smaller existing open space. The second is a more formal entrance plaza that is open to a vehicular and bus drop-off at the southern entrance to the campus, which also addresses the issue of defining an entrance “gateway” at the south of campus. This entrance plaza is proposed to be bounded by three new buildings: the Science Center, Library Resource Center, and Arts Building. The third open space is immediately west of the Performing Arts Center and east of the Student Services Center, and provides a vehicular drop-off for events at the Performing Arts Center. This third open space will be contiguous with the pedestrian Arts Walk that will extend west from the proposed new Fine Arts building, past the existing Theater Arts and Fine Arts buildings and culminate at the Performing Arts Center. The Arts Walk is a concept conceived of by campus occupants that provided an exciting springboard for open space development. Further description of the open space concepts follows discussion of the building projects.

#### **4.4.2 Proposed Land and Building Use**

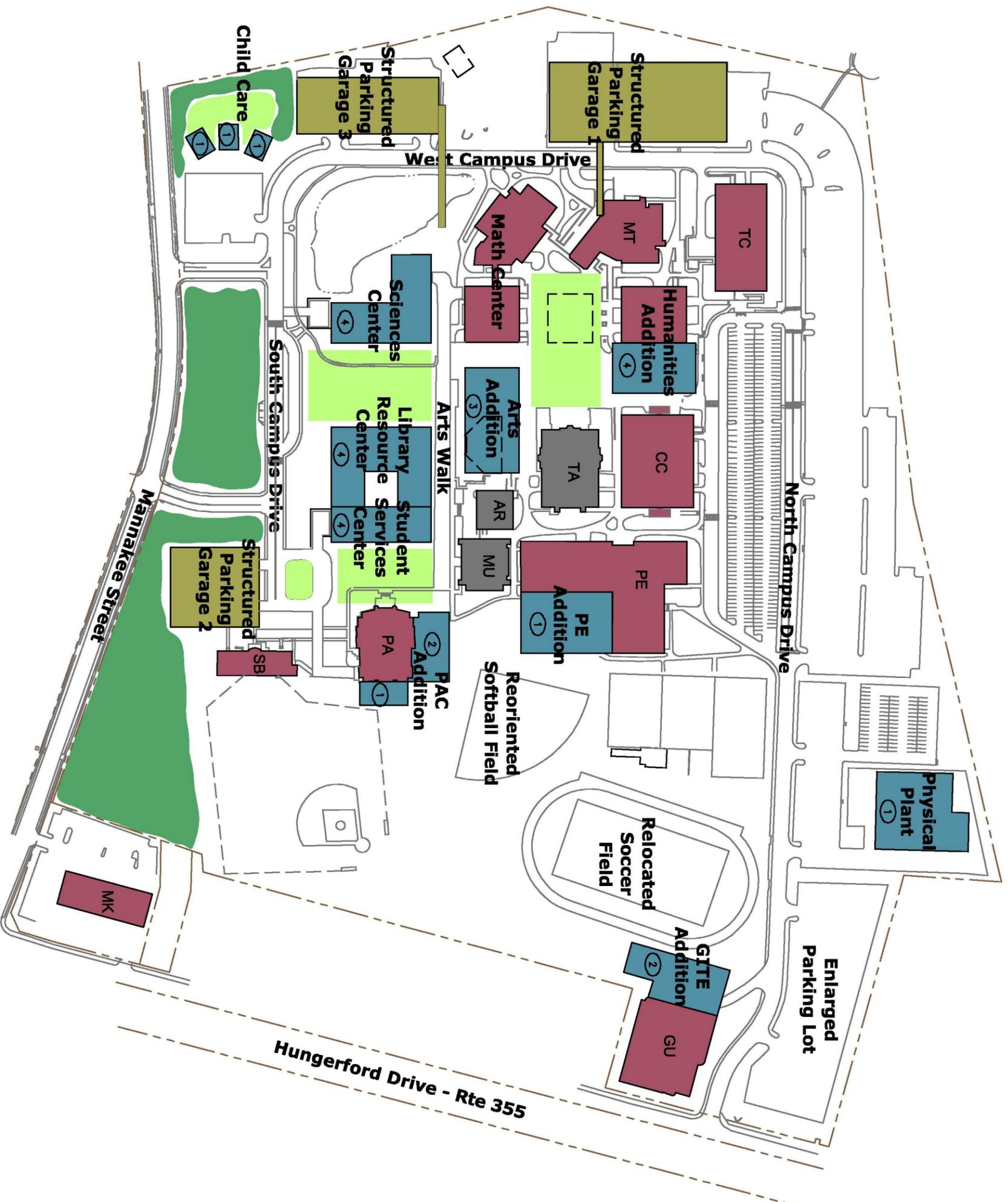
A summary of proposed projects identified for this campus follows. Refer to Figures 5 through 9 for illustration of the suggested locations, building footprints, and heights of the various projects.

#### **New Construction and Demolition Projects**

The Facilities Master Plan proposes construction of the following new buildings:

- A Science Center adjacent to the existing stormwater retention pond. This site is currently used for surface parking and is readily developable as well as prominent. The building will house the biology, chemistry, physics and engineering programs. The building will contain an animal facility, observatory, and greenhouse.
- Physical Plant building to accommodate physical plant needs including offices, shop space and storage.
- A Student Services Center close to the Mannakee entrance. The building will house Student Development (with the exception of Student Life and Athletics), Campus Services, Safety and Security, and the Parking Department. This building

# Rockville Campus Proposed Site Plan 2002 - 2012

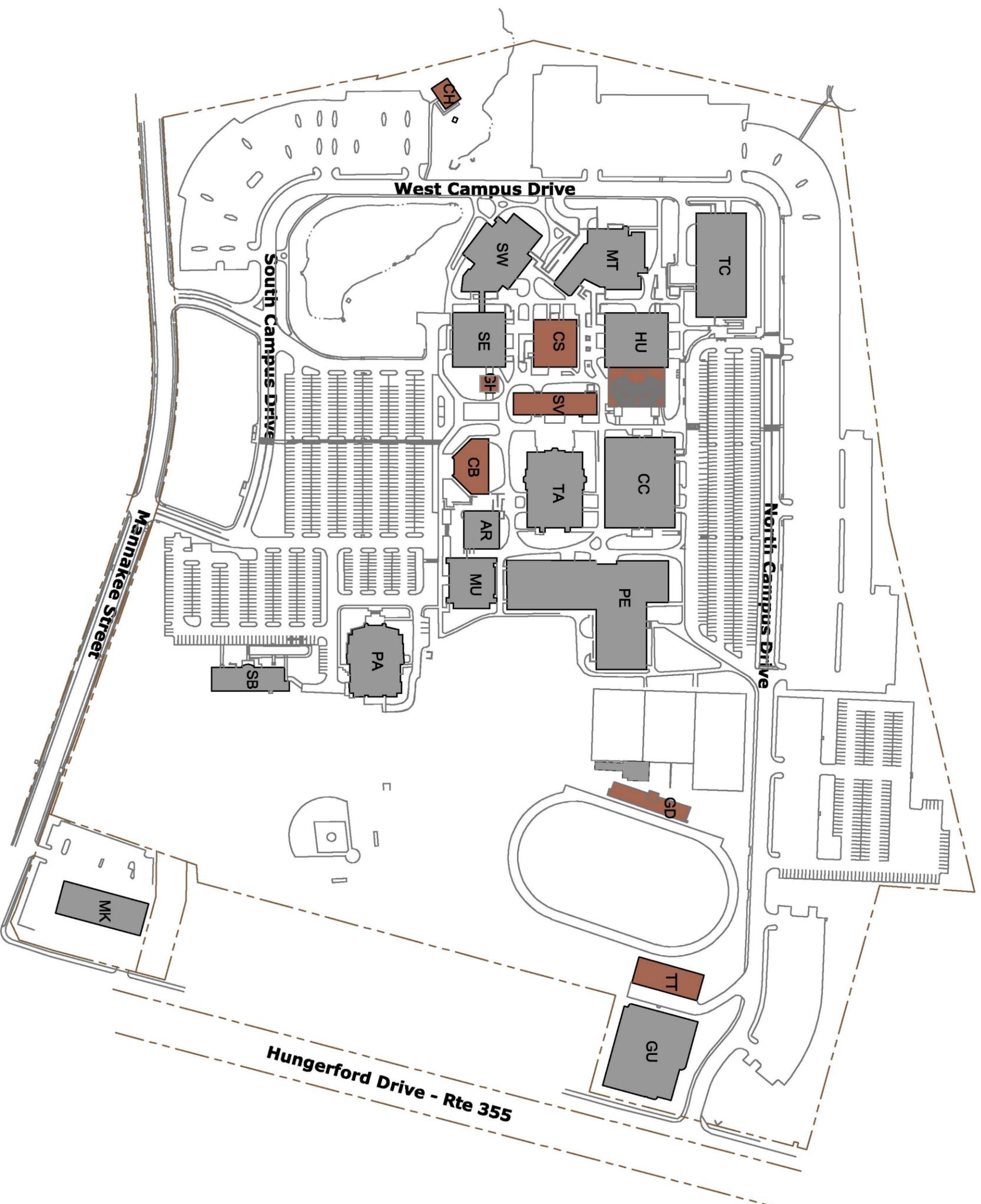


- New landscaped area or quadrangle
  - Existing building to remain
  - New academic building
  - New parking structure
  - Renovated building
  - Demolished building
  - Number of floors
- AR- Art Building
  - CB- Counseling and Advising Building
  - CC- Campus Center
  - CH- Child Care Center
  - CS- Computer Science
  - GD- Grandstand
  - GH- Greenhouse
  - GU- Homer S. Gudelsky Institute for Technical Education
  - HU- Humanities Building
  - TT- Interim Technical Training Center
  - SB- South Campus Instruction Building
  - MK- Mannakee Building
  - MT- Macklin Tower
  - MU- Music Building
  - PE- Physical Education
  - PA- Robert E. Parilla Performing Arts Center
  - SE- Science East
  - SV- Student Services Building
  - SW- Science West
  - TA- Theatre Arts Building
  - TC- Technology Center

BASE MAPPING PROVIDED BY MONTGOMERY COLLEGE. DATA HAS NOT BEEN VERIFIED IN FIELD.



# Rockville Campus Proposed Demolition 2002 - 2012



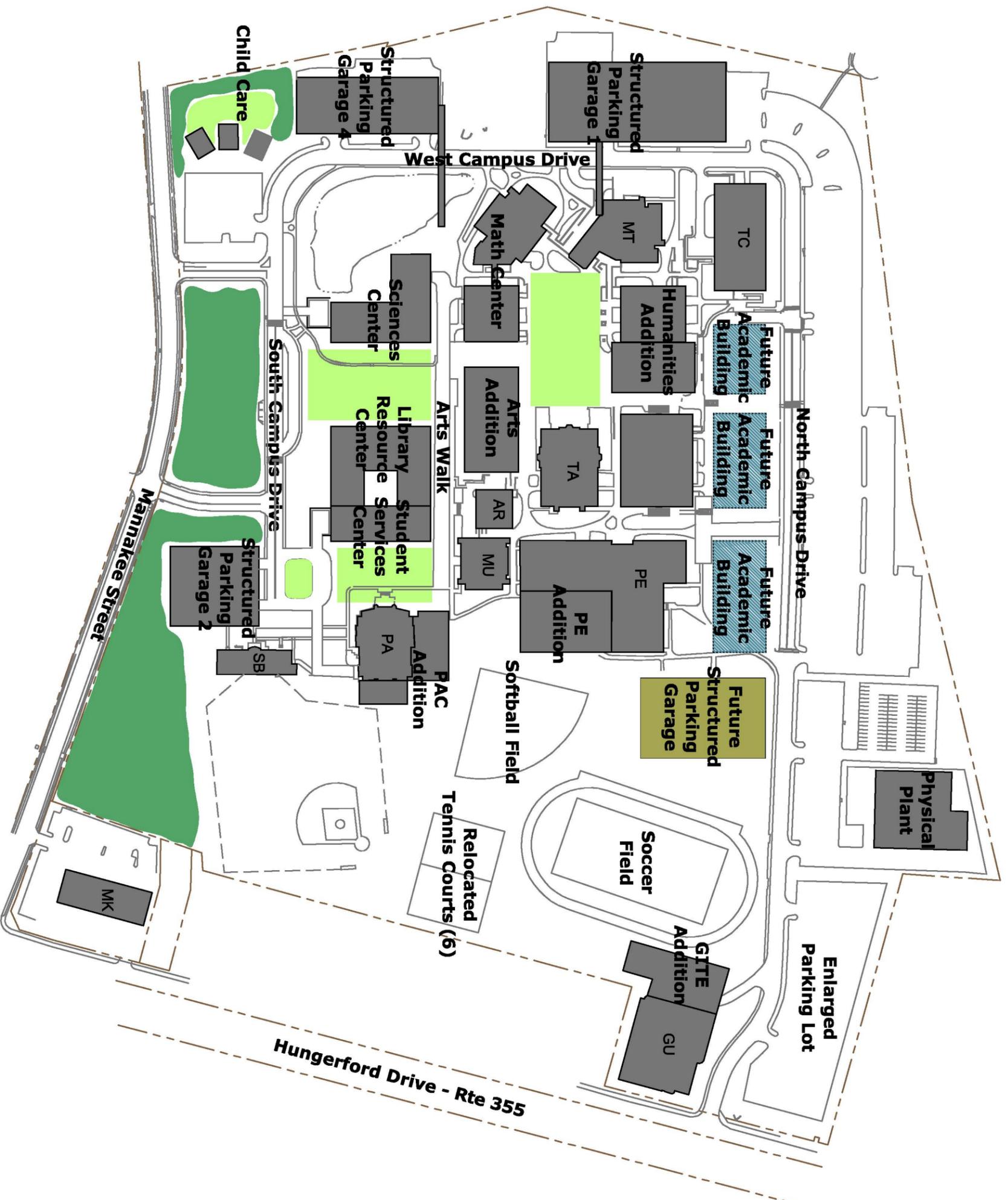
- Existing building to remain
- Proposed demolition

- AR- Art Building
- CB- Counseling and Advising Building
- CC- Campus Center
- CH- Child Care Center
- CS- Computer Science
- GD- Grandstand
- GH- Greenhouse
- GU- Homer S. Gudelsky Institute for Technical Education
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# Rockville Campus Proposed Land Use Plan 2012 - 2022 Option A



- Landscaped area or quadrangle
- Existing building to remain
- New academic building
- New parking structure

- AR- Art Building
- CB- Counseling and Advising Building
- CC- Campus Center
- CH- Child Care Center
- CS- Computer Science
- GD- Grandstand
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is also anticipated to house a new central plant that will support other future buildings.

- A Library Resource Center directly adjacent to the proposed Science Center. The Resource Center will include stack, study, and office space for the Library; a Media Resources facility; an Assessment Center, Writing Center, Math Learning Center, Math Technology Labs, and Computer Training Lab; spaces for Student Organizations including offices and meeting rooms; a Career Center; a Worship Room, a vending area and Café; lounge space for patrons and staff; and meeting rooms for tours and admissions.
- A Child Care facility to be built in phases.

Essential to realization of the Facilities Master Plan is the construction of three parking structures. All of these structures will be located on existing surface parking lots and will be outside of the campus ring road. For safety, the plan proposes above grade pedestrian bridges to cross the ring road for the two structures to the west of West Campus Drive. The other garage located outside the ring road is at a termination point of the ring road in the ten year plan. Traffic in this location will not be as heavy as the other two areas, so it does not require a pedestrian bridge. This structure will provide convenient parking for the Student Services Building and Performing Arts Center. In addition, an interim parking lot to the south of the existing campus will be used to ease parking constraints during construction of new facilities over existing surface parking lots.

The Facilities Master Plan proposes additions to the following buildings:

- The Humanities building to allow for co-location of the Social Science, English, and Reading Departments, as well as the Humanities Institute. The existing Writing/Reading Center will be co-located with the Writing Center in Macklin Tower. The Center for Teaching and Learning will be relocated to Macklin Tower to be co-located with the Media Center. The addition is proposed to be located on the site of the outdoor amphitheater that is currently under construction and is for that reason likely to be one of the later building projects.
- The Performing Arts Center to provide meeting rooms, additional offices and support spaces including a catering kitchen and additional restrooms. The addition will also improve the loading dock area.
- The Art Building to house music class labs, art class labs, a dance studio, and offices. This addition will be located along the Avenue of the Arts.
- The Physical Education building. The addition will house a fitness center, weight room, squash/racquetball courts, academic labs and support spaces for intercollegiate teams.

These additions provide the College with opportunities to undertake smaller projects that add space to constrained programs and improve co-location of departments.

### **Renovations**

Renovations include repositioning many of the campuses existing buildings to new uses. These include:

- Conversion of Science East and West for the Mathematics and Education Departments
- Conversion of Macklin Tower for classrooms; computer labs; computer facilities; the Macklin Business Institute; and offices for Business and Economics, Management, Computer Applications and Computer Science. The campus main computer room and operations will be relocated to this building. The office of the Provost and the Dean's suite currently located in this building will remain. The renovation will include the addition of an elevator to improve accessibility.
- Technical Center to allow for growth of the Visual Communications Technologies and Applied Technology Departments.
- Conversion of the South Campus Instruction Building to Work Force Development and Continuing Education use.
- Campus Center to enhance student life on campus by providing offices for Student Organizations, improvements to the Bookstore and food services, merchandise franchises, space for MC Copies, non-denominational worship space, exhibition space, student lounges, meeting rooms, an open computer lab, recreational spaces, and student lockers. The building will also house a Hospitality Management Lab

These conversions will co-locate programs that are currently distributed on the existing campus. Deferred maintenance items in these existing buildings will be addressed before the conversions take place to enhance the comfort of existing users.

The Facilities Master Plan also envisions growth in the ten to twenty year timeframe. Planning for this timeframe is helpful in creating a vision for the ultimate development of the campus, and to ensure that plans for the ten year timeframe do not preclude rational future development. This Facilities Master Plan presents two options for additional development. The first option proposes construction of new academic buildings to the north of the existing Campus Center and Humanities Buildings. This option contains all academic buildings within the loop road and moves parking to the outside of the road. The second option envisions expansion east into the portion of the campus currently devoted to outdoor recreational facilities. In order to maximize building expansion opportunities, the baseball field, softball field, and soccer field are reconfigured and shifted north. The tennis courts are relocated and reduced in number to a total of 6. The track is eliminated. This twenty-year plan also shows a new stormwater retention pond.

### **Open Space**

The building program needs and analysis of building conditions offer opportunities to provide much needed central open space for the Rockville campus. The recommended removal of the Computer Science and the Student Services buildings in particular create an open space, the Central Quad, that could accommodate an informal amphitheater on a sloping lawn area, and an area of shaded lawn near the very popular and crowded fountain at the entrance to the Theater Arts Building. Presently an important crossroads near the geographic center of the campus, this area will become increasingly vital as the proposed development on the southern side of the campus is implemented.

# Rockville Campus Proposed Open Space Concepts

- Landscaped area or quadrangle
- Existing building to remain
- New academic building
- New parking structure
- Renovated building



Another opportunity to provide open space for incidental learning, group and individual study and recreation is presented with the development of the Sciences Center and the Library Resource Center. Proposed to face one another across an open space that is also the southern pedestrian entrance to campus, these two buildings form two sides of a new quadrangle (Library Quad) that serves as a visual welcome and orientation to the campus. This quadrangle provides an appropriate setting for several key campus buildings, and a pedestrian route from the southern parking areas into campus. The quadrangle accommodates a lay-by with orientation map, lawn of sufficient size to accommodate both active and passive use, shade trees and a terrace associated with the Library Resource Center. The Library Resource Center terrace includes tables, chairs and benches for eating, studying or relaxing. Pedestrian circulation is direct as well as pleasantly curvilinear, a counterpoint to the more rectilinear pedestrian system in the core.

The new quadrangle leads to the western end of the Avenue of the Arts, a linear open space connecting the new open space adjacent to the proposed Science Center on the southwestern end of campus to the Parilla Performing Arts Center on the southeastern end. Along its length, the Avenue of the Arts connects the new network of open spaces, incorporating space for sculpture and areas for music and dance performances, seating and landscape. It terminates at the Arts Quad, an open space in front of the Parilla Center, featuring a vehicular drop-off area.

To the west, two walkways link the parking structures to campus. Parking Garage #1 has a walkway that extends from the garage over West Campus Drive to Macklin Tower. The link from Parking Garage #3 crosses above the road, travels across the tip of the pond with a boardwalk while encircling the pond on its eastern side, and then connects to the existing network of campus paths.

Similarly, on the northern side of campus, pedestrian linkages from the parking areas are clarified at two locations. Through the use of landscaped islands and gateway structures containing orientation kiosks the campus entrance experience is improved and clarified. The Facilities Master Plan suggests removing the row of parking closest to the buildings on the north side of campus to create a landscape island to shade and buffer the parking and more importantly, to relieve the congestion created by cars backing up directly into the roadway. A pedestrian connection from the Mannakee building to the main campus is also proposed.

New entrance signs and landscaping, near Mannakee Street at the two entrance drives and at the intersection of Route 355 and North Campus Drive, are suggested to provide improved visibility and an enhanced College identity.

#### **4.4.3 Proposed Utilities**

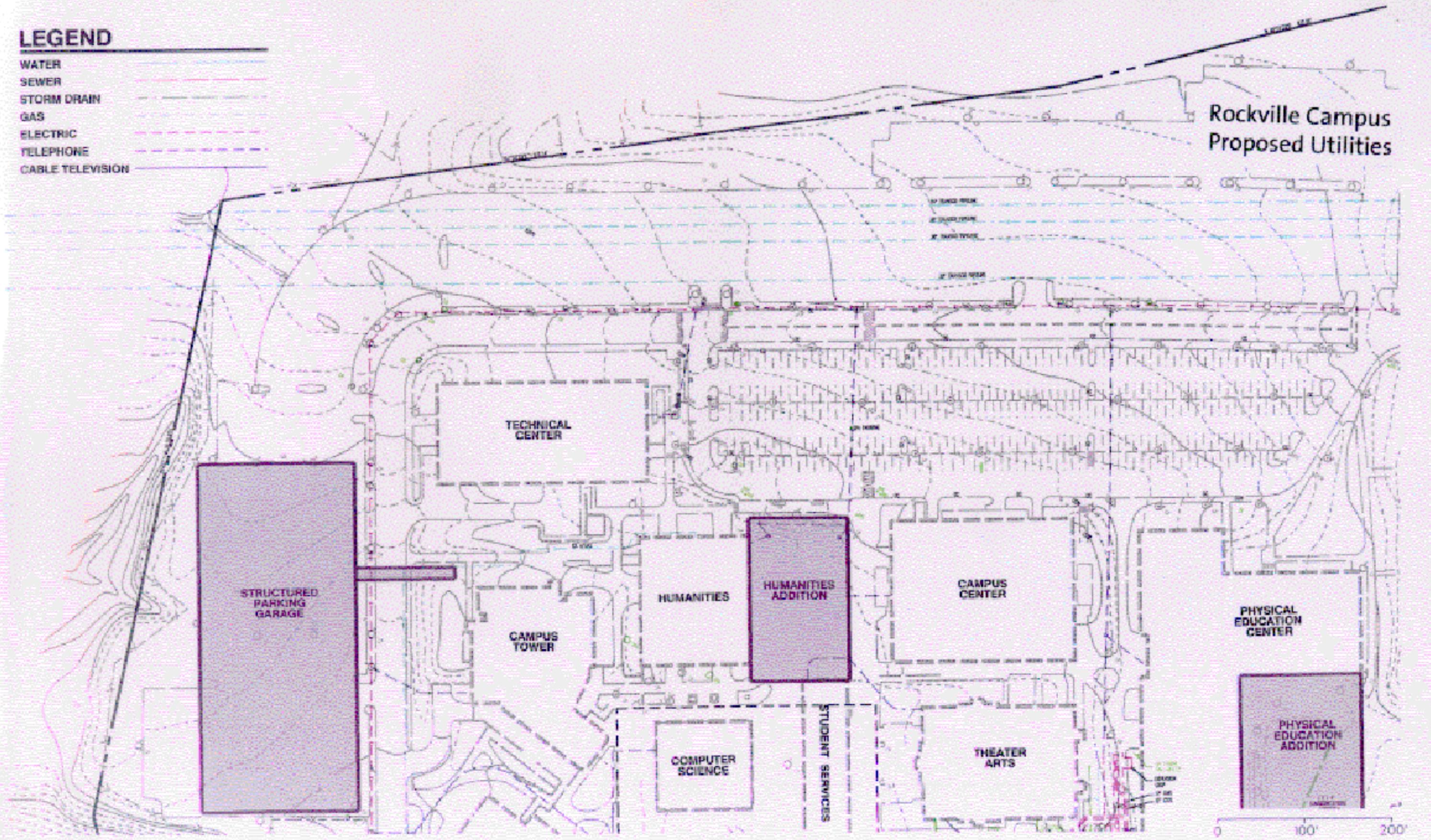
##### **Water**

Potable water is supplied by the City of Rockville through an 8 inch water main that runs on South Campus Drive and an existing 12 inch water line that runs parallel to west

# LEGEND

- WATER
- SEWER
- STORM DRAIN
- GAS
- ELECTRIC
- TELEPHONE
- CABLE TELEVISION

## Rockville Campus Proposed Utilities



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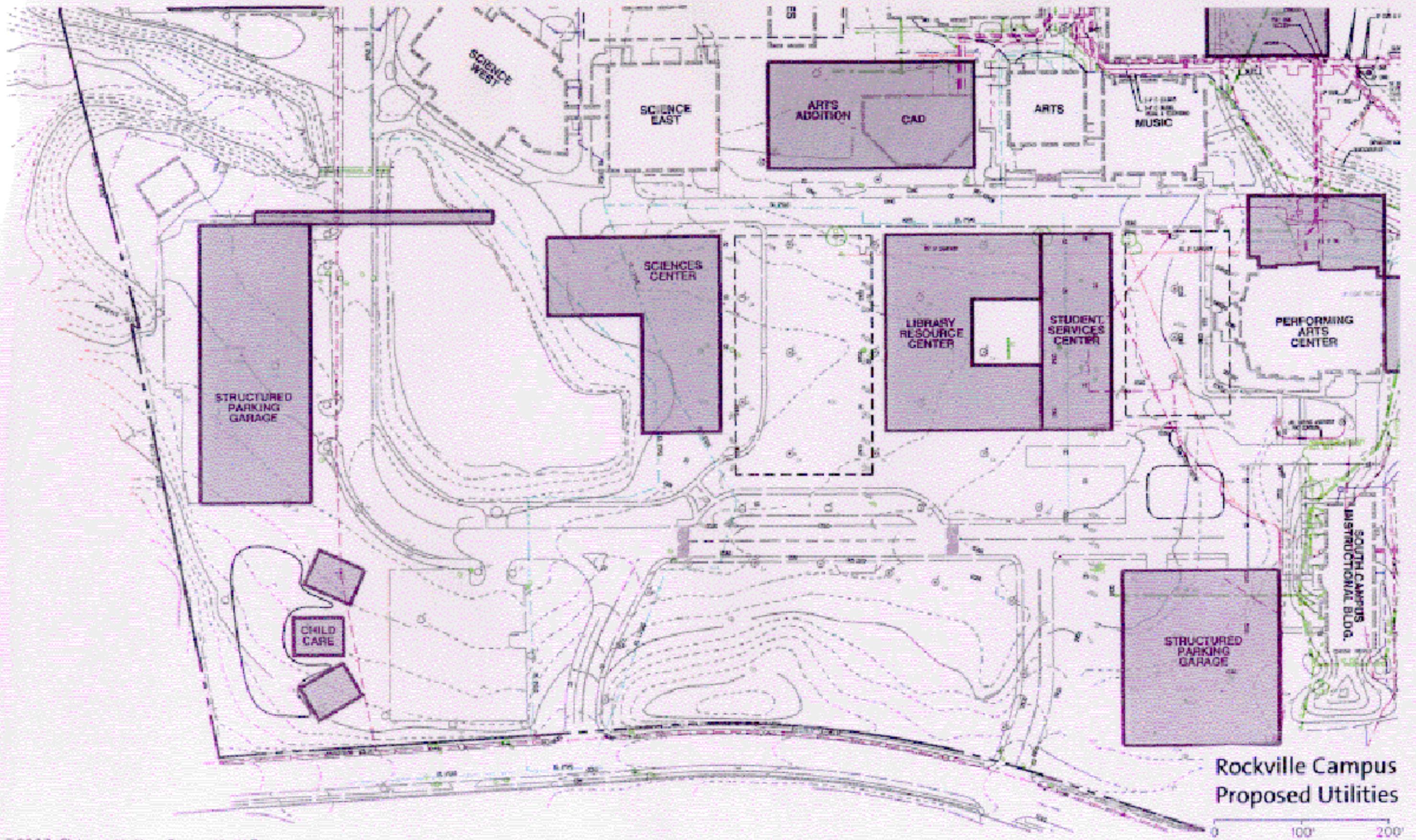


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ROCKVILLE CAMPUS

DECEMBER 2003  
KV-FMA FIGURE-A





Rockville Campus  
Proposed Utilities

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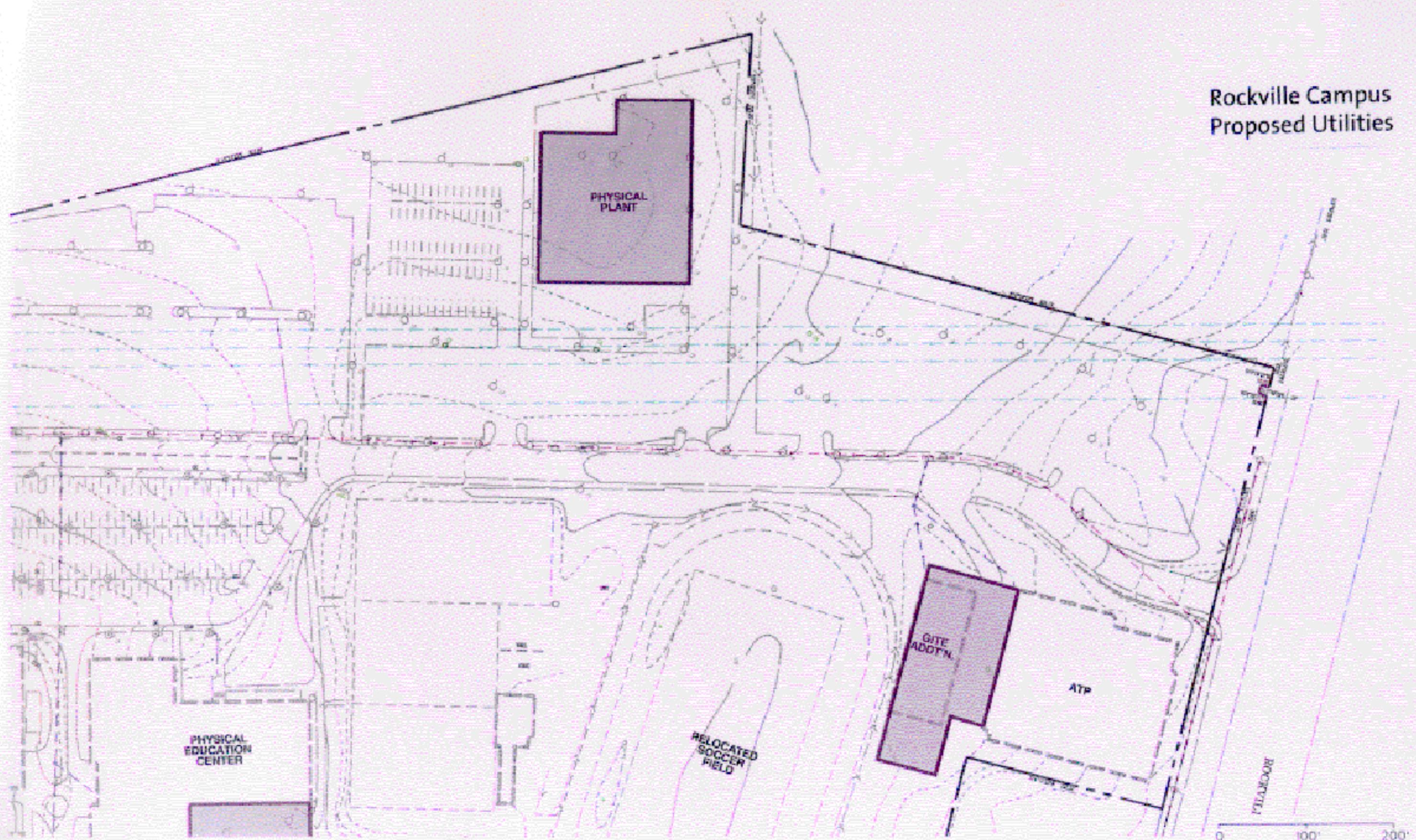
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MONTGOMERY COLLEGE  
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ROCKVILLE CAMPUS

DECEMBER 2003  
RV-F98 FIGURE 9-B



# Rockville Campus Proposed Utilities



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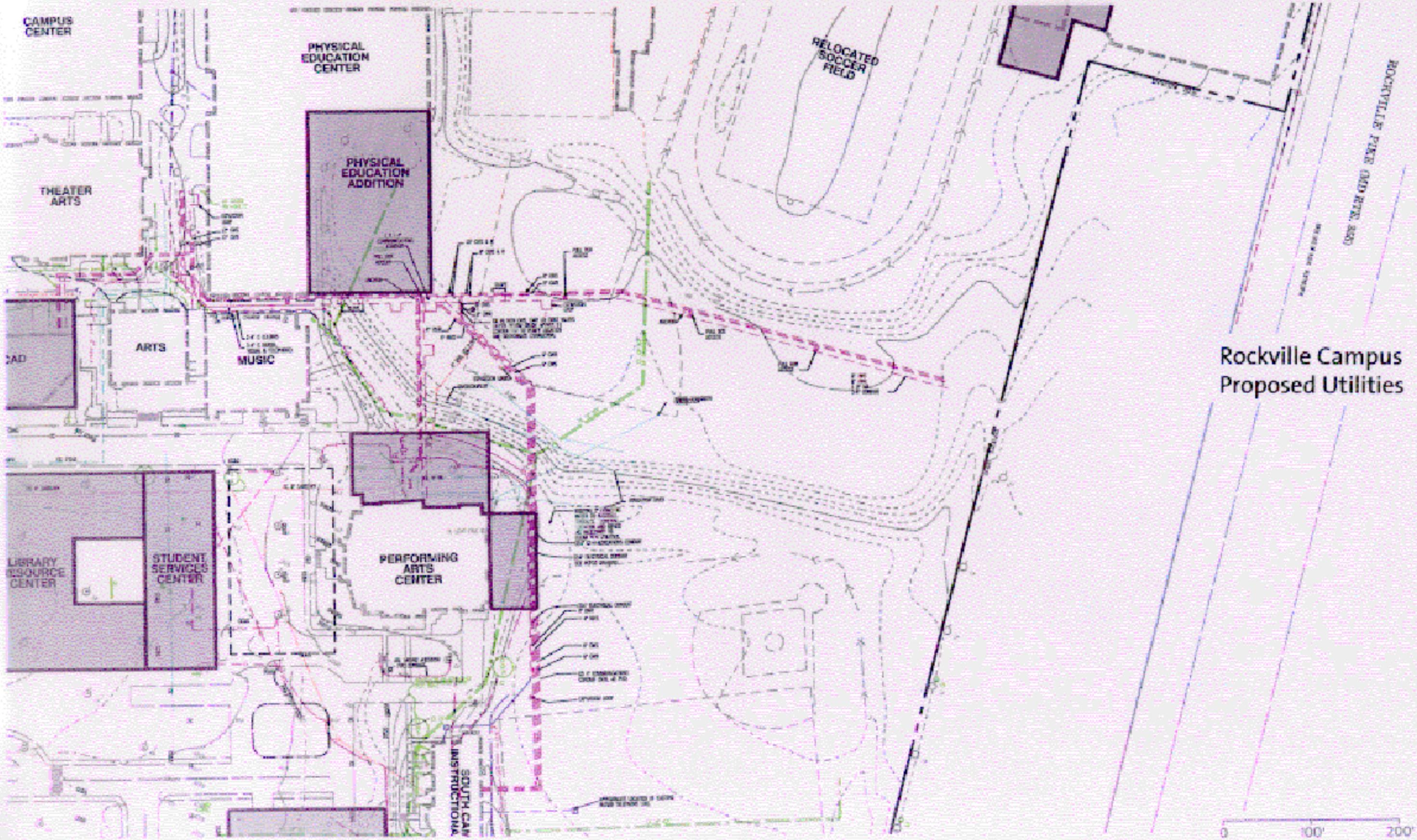


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MONTGOMERY COLLEGE  
FACILITIES MASTER PLAN 2002-2012  
ROCKVILLE CAMPUS

DECEMBER 2003  
RV-FBC FIGURE 9-C





Rockville Campus  
Proposed Utilities

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EYP/

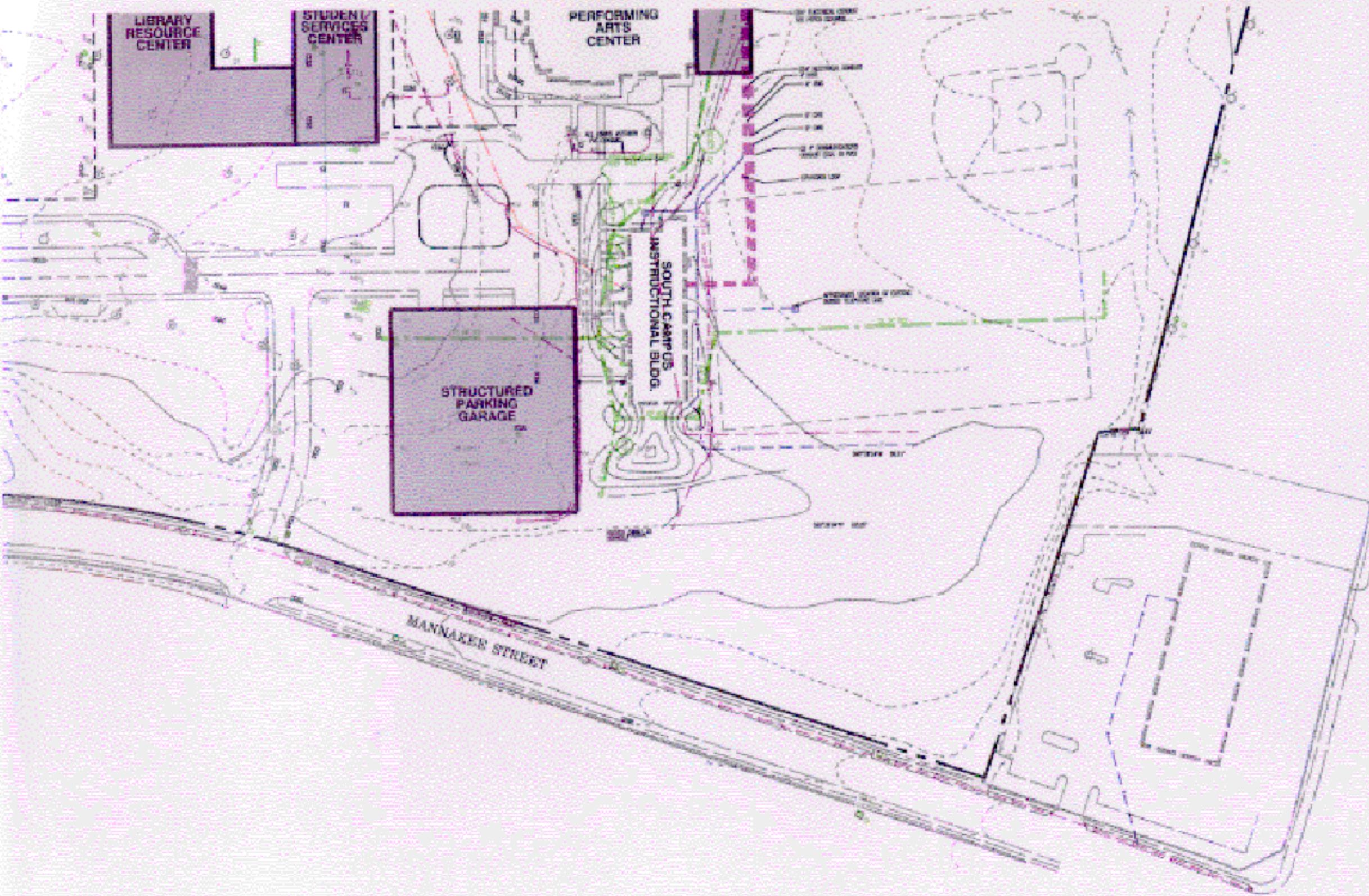
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MONTGOMERY COLLEGE  
FACILITIES MASTER PLAN 2002-2012  
ROCKVILLE CAMPUS

DECEMBER 2003  
RV-FSD FIGURE 9-D



# Rockville Campus Proposed Utilities



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MONTGOMERY COLLEGE  
 FACILITIES MASTER PLAN 2002-2012  
 ROCKVILLE CAMPUS

DECEMBER 2003  
 RV-FSE FIGURE 9-E



Campus Drive through the parking lot. Both lines connect to the 12 inch water main located on Mannakee Street.

Domestic water supply from the existing water supply mains is adequate for expansion planned in the 10-year horizon period. However, additional fire hydrants will be required as part of the campus expansion.

### **Sanitary Sewer**

Sanitary Sewer is supplied by the City of Rockville through an 8 inch gravity line that serves all the existing buildings of the Campus. The existing line runs through the west campus drive and flows through the west side of the campus.

The existing 8" sanitary sewer line has adequate capacity to support the expansion of the campus.

### **Heating System**

Most of the existing buildings on the Rockville campus are provided with heat from the Humanities Building heating plant. The existing plant can provide up to 25,100 MBH of heating. The plant presently has approximately 3,000 MBH excess capacity for future expansion. The future demolition of Counseling and Advising, Student Services, and Computer Sciences will make available from the plant an additional 2,400 MBH for future growth. While this excess capacity can accommodate some growth, this plant does not have the capacity to accommodate all of the planned construction.

This excess capacity could be used to serve the new Math Center (2,200 MBH), Performing Arts Addition (150 MBH), and Physical Education Addition (1,500 MBH). These additions to the plant were chosen because they will be located within the piping distribution system of the existing plant.

The Heating Plant also has the capacity to accommodate the Gudelsky Expansion (1,600 MBH). The underground distribution piping to Gudelsky has the capacity to carry the additional load since it was sized for expansion in this area of campus.

The new Science Center could be added to the Heating Plant, yielding a plant diversity factor of 86%. This will also require an extension to the West Loop piping distribution loop to the new Science Center.

The new Physical Plant Building will require 1,750 MBH of heating capacity. If there is sufficient additional capacity in the underground distribution piping loop to Gudelsky beyond what is required for the Gudelsky Expansion, the loop may extend to the new Physical Plant. It should be evaluated whether it is more cost effective to extend the piping system or provide a stand-alone heating system.

The remaining new buildings in this Facilities Master Plan include the Art Building (2,600 MBH), the Library Resource Center (4,400 MBH), and Student Services Center (1,900

MBH). These buildings are clustered in the same area of campus and their heating requirements could be combined into a new central heating plant. Because the Student Services Center is the first of these three buildings scheduled for construction, the 8900 MBH plant would be provided in this building. This new heating plant would require gas-fired boilers, circulating pumps, and distribution piping to the Library Resource Center and Art Building.

### **Cooling System**

The existing plant, including the ice storage system, has a capacity of 1595 tons. This capacity is not adequate to serve the projected future load of 3000 tons. The Central Cooling Plant has the planned capacity to add two thermal ice storage modules, adding 2400 ton-hrs to the systems. Based on an eight hour peak load, this adds 300 tons to the system. If this additional ice storage capacity is implemented, the total plant capacity will 1895 tons.

The new buildings which will require greater cooling capacity from the plant include the Performing Arts Addition (13 tons), Physical Education Addition (140 tons), Library Resource Center (430 tons), and Student Services Center (190 tons), Gudelsky Addition (146 tons), and Arts Addition (210 tons)

Also, it is possible to switch Science East and Campus Center from the plant to their backup chillers during peak load conditions. This would decrease the plant load by 225 tons and 240 tons, respectively. The total future load would then be reduced to 2535 tons. Therefore, if no diversity factor were used, an additional 640 tons of plant capacity would be required.

This additional 640 tons would most effectively be provided at one of the new buildings, in the form of a smaller second plant, possibly tied into the existing distribution loop for redundancy. The Library Resource Center (430 tons) and Student Services Building (190 tons) most closely match this additional capacity. The Library Resource Center, similar to Science East and Campus Center, would be provided with a variable speed centrifugal chiller, pumps, and cooling tower.

### **Natural Gas**

Natural gas is supplied by Washington Gas Company through a 6-inch gas main within the campus. All the existing buildings are served by various size laterals ranging from 1-1/2 inches to 6 inches that connect to the 6-inch main in Mannakee Street. Based on the 1991 Utilities Master Plan recommendations, the majority of the College-owned wrapped carbon steel pipe has been upgraded to polyethylene pipe. However, some of the original pipe remains and it is recommended that it be replaced as well.

### **Electrical**

The design of electrical systems will comply with the Montgomery County and Montgomery College Energy Design Guidelines, ASHRAE Std 90.1, and the National Electrical Code.

New electric services from PEPCO will be required for the proposed new buildings. Each building will be served at 480 volt from its own PEPCO transformer, separately metered.

The transformers will be located on grade adjacent to each building. PEPCO will own primary feeders and transformers. PEPCO will also provide secondary conductors up to the property line. Each building will have a main electrical room. The new electric services are estimated as follows:

- The Science Center will require a 2500 ampere, 480 volt service. A 12-way secondary duct bank from PEPCO transformer to the building will be provided by Montgomery College.
- The Physical Plant will require a 1000 ampere, 480 volt service. An 8-way secondary duct bank from PEPCO transformer to the building will be provided by Montgomery College.
- The Student Service Center will require a 1600 ampere, 480 volt service. A 12-way secondary duct bank from PEPCO transformer to the building will be provided by Montgomery College.
- The Library Resource Center will require a 2500 ampere, 480 volt service. A 12-way secondary duct bank from PEPCO transformer to the building will be provided by Montgomery College.
- The Arts Addition will require a 1600 ampere, 480 volt service. A 12-way secondary duct bank from PEPCO transformer to the building will be provided by Montgomery College. The electric service to existing Art Building will be maintained.
- The three structured parking garages will require 2500, 1000, and 600 ampere, 480 volt services respectively. New 12-way, 8-way, and 6-way secondary duct banks from PEPCO transformers to the buildings will be provided by Montgomery College.

For the proposed building additions, the existing electric services will be upgraded to accommodate the additional loads. All these buildings will be served at 480 volts, as well. The additional loads are estimated as follows:

- The addition to the Gudelsky Institute will require a 800 ampere, 480 volt service. (The existing electric service to the building will be upgraded to accommodate this additional load.)
- The addition to the Humanities Building will require a 2000 ampere, 480 volt service. (The existing electric service to the building will be upgraded to accommodate this additional load.)
- The addition to the Performing Arts Center will require a 600 ampere, 480 volt service. (The existing electric service to the building will be upgraded to accommodate this additional load.)
- The addition to the Physical Education Center will require a 800 ampere, 480 volt service. (The existing electric service to the building will be upgraded to accommodate this additional load.)
- The renovation of the Math Center (currently Science East and West), Macklin Tower, Technical Center, Instruction Building, and Campus Center, will also require additional loads.
- The Child Care Center will require a 100 ampere, 480 volt service per unit.

Instead of a separate electric service for each building, a single point 13.2 kV service from PEPCO will also be evaluated. It will require installing a 13.2 kV underground primary loop in a 2-way ductbank around the campus. The 13.2 kV loop will originate from the load side of the PEPCO meter, and will supply power to transformers feeding each building. The College will own and operate all electrical distribution systems on the load side of the meter, i.e. primary and secondary feeders and transformers. The College will also need to enter into a contract with an outside firm to handle both routine maintenance and emergency service.

A feasibility study will be performed for on-site power generation, including the use of alternate energy sources such as solar power. Central inverters vs. on-site power generation systems will be evaluated for each individual building. An engine generator instead of central inverter is proposed for buildings housing critical functions, such as central security, central telephone and information technology system. If central inverters are used to supply the emergency power, one inverter (25-50 kVA) will be provided in each of the proposed new buildings. The inverter will be located in the main electrical room. For additions to existing buildings, the existing emergency power systems will be evaluated and upgraded, if required.

#### **Emergency Power Systems**

Emergency power will be required for life safety systems (i.e. emergency and egress lighting, fire alarm system, etc). In addition, emergency power may be needed to support telephone and security systems.

If a generator is provided, the emergency equipment will be segregated into Emergency, Legally Required Standby, and Optional Standby Systems in accordance with NEC Article 700-702. The generator will be located adjacent to the building.

The requirement for an Uninterruptible Power Supply (UPS) system to protect any non-interruptible loads will be evaluated at schematic design stage.

#### **Building Automation Control Systems**

To the maximum extent possible the building systems shall be integrated using IP technology to provide the maximum cost savings and flexibility. The building automation control systems will comply with the ASHRAE Standard 135, Building Automation Control Network, An Open Protocol (BACnet).

#### **Fire Alarm System**

An upgrade of the existing fire alarm system is required where additions to existing buildings are proposed. An addressable type fire alarm system is recommended for all new buildings. Provisions should also be made for remote monitoring at a central fire command center. Fire alarm systems will have an open protocol, and will be compatible for integration with other building management systems.

**Information Technology Systems**

The telephone and information technology system will be centralized and designed in accordance with Montgomery College's Cable and Wire Infrastructure Specifications, and Information Technologies and Security System Design Guidelines.

The system will include copper and fiberoptic cabling, underground ductbank and manhole systems to the central hub. Presently the central hub for information technology is located in the Computer Science Building and the main telephone room is located in Humanities Building. The central hub will, however, be moved to Campus Tower when Computer Science Building is demolished under the 10 year plan. The conduits must be sized to accommodate the required amount of cabling being routed from one location to another, and the inner duct partitioned to separate the conduits into a series of multiple partitioned raceways.

Telephone and data outlets, and cable tray systems will be provided throughout buildings. Moreover, telecommunication rooms housing MDF/IDF should be provided.

**Security**

The design of building security systems will comply with Montgomery College Information Technologies and Security System Design Guidelines.

The security system for the proposed new buildings will be based on a centralized computer-based Security Management System (SMS) for the safety and protection of students, faculty, assets, property and buildings. The overall SMS will integrate and incorporate CCTV where campus personnel or property may be at risk, access control for various spaces in the building and ground floor entrances, intrusion alarm system at areas subject to robbery or break-in, and alarm monitoring functions. Security systems will have an open protocol, and will be compatible for integration with other building management systems.

The security system will consist of a host, workstations and monitoring and control systems, intelligent data gathering panels, and video transmission equipment.

An Uninterruptible Power Supply (UPS) system will support and sustain key functions of the security system during a power outage.

**4.4.4 Proposed Stormwater Management**

Quantity control for this site will be provided through the existing duck pond and a waiver will be requested from the City of Rockville. The pond was retrofitted to provide capacity to control flow for seven proposed buildings totaling an area of approximately 148,000 sq. ft. However, these proposed structures have not been built. The buildings proposed in this Facilities Master Plan include three parking structures and several other building additions and new buildings. Although the number of projects exceeds the seven taken into consideration for the sizing of the pond, the proposed total area (at grade level) is only approximated to be 125,150 sq. ft. Also, the proposed structures are mainly located where there is already impervious ground surface, therefore pre-development and post-development runoff will not be increased.

Under the 2000 Maryland Stormwater Management Design Manual, quality control will have to be provided for the first inch of rain fall over the entire proposed impervious area. Therefore the roof drains from the parking structures and the building will be connected to the storm drain system and filtered through under-ground sand filters prior to discharging to the existing pond. These structures will be accessed through manholes for maintenance purposes. Three under ground sand filters are proposed for the three proposed structures.

#### **4.4.5 Proposed Circulation and Parking**

This section presents a generalized assessment of the campus master plan, from a transportation perspective. As noted in earlier sections, the plan proposes several land use initiatives for the 2012 horizon period. The key proposals and potential transportation impacts and needs associated with those changes are discussed and evaluated below.

##### **Vehicular Access**

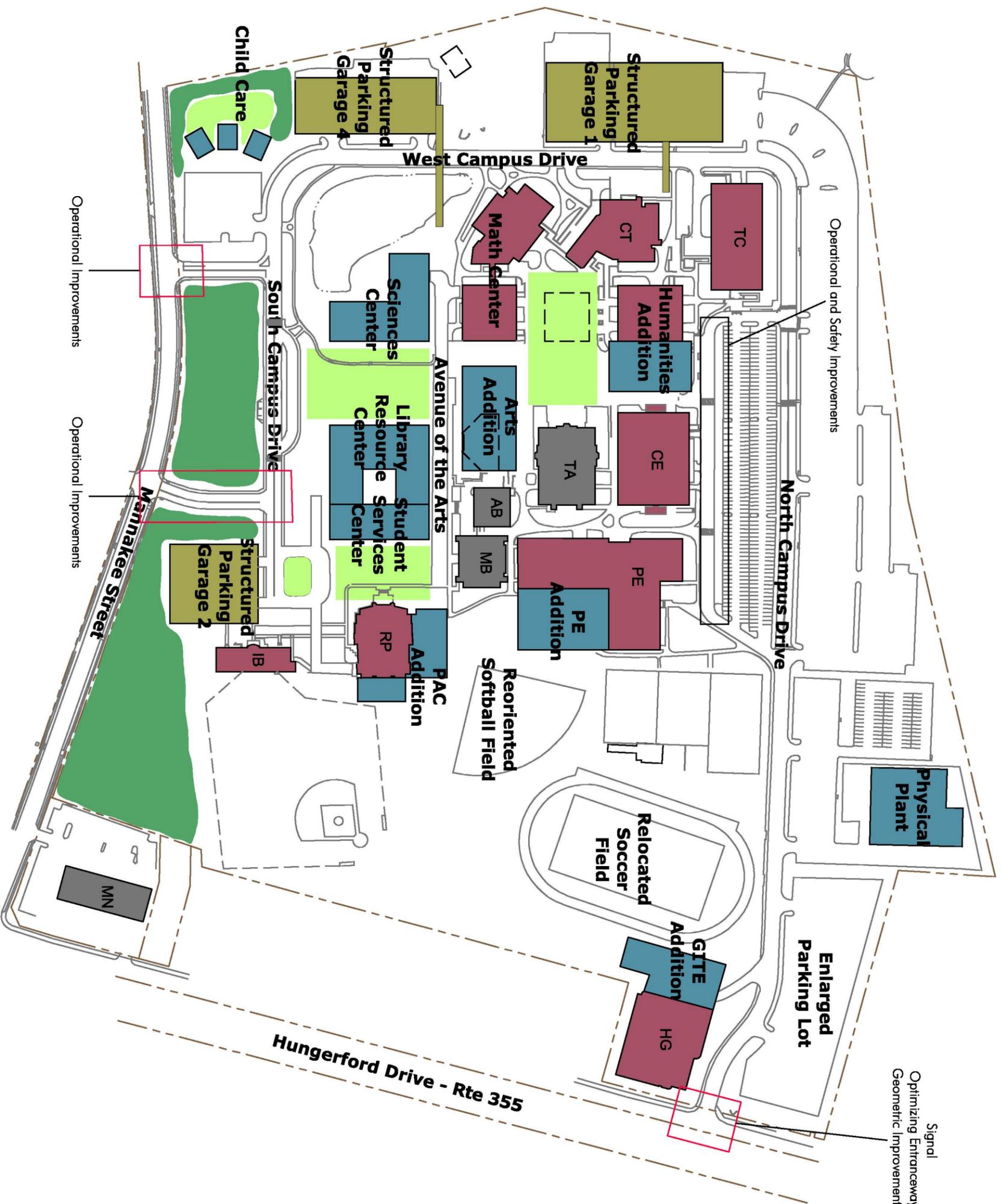
The plan proposes no significant changes in the existing vehicular access situation. External access is provided off Hungerford Drive at North Campus Drive (which is signalized), as well as off Mannakee Street at two (2) unsignalized access points. The plan calls for the access situation to be modified slightly. The secondary roads around Parking Lots 11 and 12 would be eliminated to facilitate the development of three (3) new academic buildings. However, the predominant on-campus vehicular access and circulation movements would be served by Campus Drive which rings the campus building core to the south, west and north.

##### **Vehicle Trip Generation Impacts**

The potential traffic generation and circulation impacts of the Master Plan are primarily based on the types and distribution of land use changes proposed, as well as the projected changes in the campus population. The Master Plan proposes building demolitions, renovations and the development of new building facilities. The proposed new facilities include the Sciences Center, Library Resource Center and Student Services Center, as a southern extension of the existing campus building core. In addition, the Master Plan proposes three (3) garage structures along the southern and western periphery of the campus.

The proposed improvements are based on projected changes in full-time equivalent (FTE) day students, faculty and staff, which would have the greatest impact on trip generation and parking demands. Forecasts developed recently by the College show the total FTE campus population increasing from 6,928 (2002) to 7,455 (2012), representing a change of approximately 7.6 percent. The projected incremental campus population consists of 419 FTE daytime students and 108 FTE daytime faculty and staff members. Based on the Institute of Transportation Engineers (ITE) Trip Generation Manual (7<sup>th</sup> Edition, 2003), and assuming a transit usage factor of 5 percent, the incremental campus population would generate 227 AM and 200 PM total vehicular peak hour trips. These trips would be well distributed, resulting in minimal impacts on the campus access points along Hungerford Drive and Mannakee Street.

# Rockville Campus Proposed Roadway Improvements 2002 - 2012



- New landscaped area or quadrangle
- Existing building to remain
- New academic building
- New parking structure
- Renovated building
- Demolished building

- AR- Art Building
- CB- Counseling and Advising Building
- CC- Campus Center
- CH- Child Care Center
- CS- Computer Science
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- TA- Theatre Arts Building
- TC- Technology Center

BASE MAPPING PROVIDED BY MONTGOMERY COLLEGE. DATA HAS NOT BEEN VERIFIED IN FIELD.



Notwithstanding the above, consideration would need to be given to the potential impacts that other planned land use developments within the immediate campus area, and increased growth in regional (through) traffic could have on year 2012 access conditions. The area land use development activity is currently being researched. However, review of historical Average Daily Traffic (ADT) data obtained from the Maryland State Highway Administration indicates that traffic volumes along Hungerford Drive, have increased at an average annual rate of 2.6 percent over the period 1993 - 2002. These factors may create the need for operational/capacity improvements at the North Campus Drive intersection. Potential improvements would include signal optimization and the widening or re-striping of the North Campus Drive approach to provide for eastbound double left-turn movements.

### **Pedestrian Circulation**

The existing pedestrian desire lines from the parking lots to the campus buildings form a radial pattern. This pattern would continue. However, due to the parking redistribution proposed by the Master Plan, a significant proportion of pedestrian movements would be shifted to the new parking structures along West Campus Drive. The Master Plan calls for each garage to be connected to the campus core via a pedestrian bridge, to obviate the potential impacts of the parking redistribution on pedestrian-vehicular conflicts along West Campus Drive. In addition, to these improvements, pedestrian crosswalks and related signage would need to be provided or upgraded, particularly in the vicinity of the two (2) garages and relocated Child Care Center along West Campus Drive.

### **Parking**

The campus is currently served by 3,296 parking spaces, distributed within fourteen (14) surface lots. This supply includes of a 75-space lot situated across Mannakee Street from the campus, and a 265-space overflow lot situated to the west along Mannakee Street. The Master Plan proposes the elimination of 752  $\pm$  spaces within the southern section of the campus to facilitate the development of the Science Center, Library Resource Center, Student Services Center and a 366-space parking garage; the elimination of 539  $\pm$  parking spaces west of West Campus Drive to facilitate the development of two (2) parking garages with a total capacity of 1,600  $\pm$  spaces, as well as the relocation and development of a new Child Care Center; and the elimination of 186  $\pm$  spaces within the northern section of the campus, primarily to facilitate the development of a Physical Plant. The Master Plan also proposes the expansion of a parking lot to include 100  $\pm$  additional spaces.

The planned parking changes would result in a net gain of 589  $\pm$  spaces. There would also be a significant redistribution of the parking, primarily from the southern to western section of the campus, which in turn would result in a redistribution of traffic from the eastern to western access point along Mannakee Street. This redistribution may present operational/capacity constraints at the western access point.

The future parking demand for the campus was developed based on the year 2002 Full Time Equivalent (FTE) day campus population to peak parking demand ratio (0.41), and the application of this ratio to the projected 2012 FTE population. The parking generation rates recommended in "The Dimensions of Parking" (1993) published by the Urban Land Institute (ULI) were also considered for comparative purposes. Based on a

projected 2012 FTE population of 2,825, and considering a practical capacity factor of 95 percent, a parking supply in the range of 3,400 spaces would be required to serve the horizon year daytime campus uses. This parking demand would be accommodated adequately by the future parking supply 3,885 spaces. Of that supply, 3,545 would be on-campus within easy walking distances.

In summary, no significant transportation constraints to the implementation of the Master Plan have been identified. However, the projected capacity of the Hungerford Drive/North Campus Drive and Mannakee Street/Western Entranceway would need to be further assessed as part of the Master Plan implementation process. In addition, appropriate traffic control and pedestrian amenity improvements would be required, particularly to minimize the potential impacts of the garages on access and circulation along West Campus Drive.

**4.4.6 Implementation**

Based on the College’s anticipated enrollment growth over the 2002 to 2012 period, and supported by the instructional and other needs identified during the master planning process, the College has identified a number of capital projects for the Rockville Campus. Implementation of these projects will allow the College to provide for the physical space needs of the Campus over the ensuing 10-year period. Detailed facility programs will be prepared for each project as the College’s capital funding requests are developed for submission to the State of Maryland and Montgomery County.

Throughout this section the term “new construction” is used to describe a completely new facility, while the term “renovation” is used to describe a complete interior and exterior reconstruction of an existing facility. An “alteration” is used to describe a lesser level of effort than a renovation that does not anticipate extensive program modifications to a facility and the term “addition” is used to describe “new construction” that provides for a major enlargement of an existing facility.

The following table lists the Rockville Campus projects included in this 10-Year Facilities Master Plan, as well as project budget estimates. A brief description is provided of each project with emphasis on the major components of the scope of work for each project. With regard to timing, the Campus projects are separated into a near-term need (2002 to 2007) and a long-term need (2008-2012). Based on current plans, the projects are presented in the recommended sequence for implementation; however, changes in program priorities may lead to changes in the implementation plan.

**Table 4.4.6-1  
Capital Projects for the Rockville Campus**

<b>Project</b>	<b>Budget Estimate in Dollars (1/04)</b>
<b>Near-Term Capital Projects (FY 2004 – FY 2007)</b>	
Interim Surface Parking Lot	500,000
Parking Structure #1	23,200,000

<b>Project</b>	<b>Budget Estimate in Dollars (1/04)</b>
Science Center	43,930,000
Physical Plant	9,111,000
Science East and Science West Renovation – in two phases	25,708,000
<b>Subtotal</b>	<b>102,453,011</b>
<b>Long-Term Capital Projects (FY 2008 – FY 2012)</b>	
Parking Structure #2	13,700,000
Student Services Center with Central Plant and Associated Road Extension, Site Improvements and Student Services Building Demolition	31,705,000
Library Resource Center and Associated Site Improvements and Underground Utility Distribution	42,520,000
Macklin Tower Renovation and Computer Sciences Demolition	9,124,000
Humanities Building Addition and Renovation	31,759,000
Technical Center Alterations	8,944,000
Parilla Performing Arts Center Renovation and Addition	13,706,000
Art Building Addition and Associated Counseling and Advising Building Demolition	23,367,000
Physical Education Center Renovation and Addition and Associated Outdoor Athletic Facilities	16,527,000
Campus Center Renovation	5,527,000
Parking Structure #3	7,700,000
Child Care Center (3 Units)	3,600,000
<b>Subtotal</b>	<b>208,183,020</b>

**Interim Parking Lot (New Construction):**

This parking lot will be located south of the Campus on the undeveloped portion of the neighboring Montgomery County Public Schools (MCPS) site. This lot is anticipated to be completed prior to the construction of Parking Garage No. 1 (see below) as the construction of the garage reduces the Campus parking inventory by approximately 300 spaces. This project is wholly funded by Montgomery County funds and is subject to an agreement between the College and MCPS.

**Parking Garage No. 1 (New Construction):**

Parking Garage No. 1 is proposed to be located west of the West Campus Drive across from Macklin Tower on an existing surface parking lot. The garage is anticipated to provide 1,100 spaces and will include a pedestrian bridge over West Campus Drive that will connect to an existing up-level plaza at Macklin Tower.

**Science Center (New Construction):**

The Science Center provides a new facility for the Biology; Chemistry; and Physics, Engineering, and Geosciences programs that will be relocated from their current homes in Science East and Science West. The new Center will be located on an underdeveloped portion of the Campus adjacent to the existing stormwater pond and onto a portion of an existing surface parking lot.

**Physical Plant Building (New Construction):**

This building is proposed to be located on an existing surface parking area on the north side of the Campus. The parking that will be displaced is anticipated to be offset by the completion of the Interim Parking Lot and Parking Garage No. 1.

**Science East and Science West Building Renovations:**

These buildings currently house many functions that will be relocated to the new Science Center when it is completed. Once vacated, the buildings will be renovated to other Campus requirements identified in the Master Plan. It is anticipated that Science East will be renovated in Phase 1 and Science West in Phase 2. The physical plant offices and shop space located in the two buildings will be relocated to the new Physical Plant Building prior to the renovation project.

**Parking Garage No. 2 (New Construction):**

Parking Garage No. 2 is proposed to be located near the eastern Mannakee Street entrance to the Campus. This project also includes an access road to the garage.

**Student Services Center (New Construction):**

This building would ideally be planned in conjunction with the proposed adjacent Library Resource Center. Essentially co-locating these buildings uses less land and creates a better composition of buildings and open spaces at the entrance to the Campus. This building is proposed to be located on an existing surface parking lot. The parking that will be displaced is to be offset by the completion of Parking Garage No. 2.

With a prominent location at a major entrance to the Campus, this project includes the redevelopment of the entrance road and drop-off area on this side of the Campus, as well as a new outdoor space in front of the adjacent Robert E. Parilla Performing Arts Center. The new Center will also house a central plant operation for the new and expanded facilities on the south and east side of the Campus. Once completed, this project will allow for the demolition of the existing Student Services Center located in the middle of the Campus. This project will include the cost of demolition and improvements to the new Campus quad in the middle of the Campus.

**Library Resource Center (New Construction):**

This building would ideally be planned in conjunction with the proposed adjacent Student Services Center that is anticipated to be constructed first. Essentially co-locating these buildings uses less land and creates a better composition of buildings and open spaces at the entrance to the Campus. This building is proposed to be located on an existing surface

parking lot. The parking that will be displaced is to be offset by the completion of Parking Garage No. 2.

The Library Resource Center forms the edge of a new prominent outdoor space between it and the Science Center. This project includes the development of the outdoor space between the two buildings.

**Macklin Tower Alterations:**

The Campus library is currently housed in this building and is anticipated to be relocated to the new Library Resource Center. It is anticipated that the alterations proposed in this project will be largely limited to the former library space and its reuse for other Campus requirements identified in the Master Plan.

**Humanities Building Addition/Alterations:**

This building currently houses various functions that are anticipated to be relocated to the renovated Macklin Tower. Following these relocations, additional instructional space and the vacated locations will be redeveloped for other Campus requirements identified in the Master Plan. This project also includes the demolition of the Computer Science Building and the redevelopment of the open quadrangle in the middle of the Campus.

**Technical Center Alterations:**

The Technical Center currently houses the Management Department that is proposed to be relocated to Macklin Tower. The alterations to the Technical Center will respond to other Campus requirements identified in the Master Plan.

**Robert E. Parilla Performing Arts Center Addition/Renovation:**

The Performing Arts Center currently houses the Campus' performance space for both College and community use. This addition and renovation respond to service and access improvements for the facility.

**Art Center (New Construction):**

This project is planned for the site of the existing Counseling and Advising Building and therefore includes the demolition of this building. The programs currently housed in the Counseling and Advising Building will be relocated to the new Student Services Center. The Art Center responds to the programmatic requirements of the Art; Music; and Speech, Dance, and Theater departments as identified in the Master Plan. The project also includes major site improvements associated with the development of the Arts Walk from the Theatre Arts Building to the Parilla Performing Arts Center.

**Physical Education Center Addition/Renovation:**

The Physical Education Center currently houses a dance studio that is proposed to be relocated to the new Art Building Addition. The physical education spaces included in this project respond to the programmatic requirements identified in the Master Plan. The project also includes improvements and additions to the Campus' outdoor athletic facilities.

**Campus Center Alterations:**

Campus Center currently houses a number of programs and units that will be relocated to other buildings, including English faculty offices (to the Humanities Building Addition), Workforce Development and Continuing Education classrooms and offices (to the South Campus Instruction Building), and central administration functions (to the future Central Administration Building and the Physical Plant/Central Receiving Building). The bookstore and food service facilities will be expanded and remain in the future Campus Center and the overall building renovation will respond to other Campus requirements identified in the Master Plan.

**Parking Garage #3 (New Construction):**

The Parking Garage is proposed to be located partially on an existing parking lot and partially on an undeveloped portion of the Campus near the eastern Mannakee Street entrance to the Campus. This project also includes an access road to the garage, as well as reconstruction of the Mannakee Street entrance.

**Child Care Center (New Construction):**

This project is planned to be located on an existing surface parking lot in the southwest corner of the Campus.

**RV-A1      Zoning Analysis**

**ZONING ANALYSIS**

**Applicable Codes:** Rockville City Code, February 1990  
City of Rockville Comprehensive Master Plan, November 2002

Property Address	Property at the northwest corner of Mannakee Street and Hungerford Drive											
Zone	R-S (Suburban Residential)	Section 25-273										
Lot Size	20,000 sq. ft. minimum	Section 25-311										
	Child care centers must meet the following lot size standards, based on the number of children being cared for at any one (1) time:	Section 25-355										
	<table border="1"> <thead> <tr> <th>Number of Children</th> <th>Minimum Lot Area</th> </tr> </thead> <tbody> <tr> <td>9 to 12</td> <td>7,000 sq. ft.</td> </tr> <tr> <td>13 to 25</td> <td>10,000 sq. ft.</td> </tr> <tr> <td>26 to 40</td> <td>20,000 sq. ft.</td> </tr> <tr> <td>More than 40</td> <td>30,000 sq. ft., plus 500 square feet for each child over 40</td> </tr> </tbody> </table>	Number of Children	Minimum Lot Area	9 to 12	7,000 sq. ft.	13 to 25	10,000 sq. ft.	26 to 40	20,000 sq. ft.	More than 40	30,000 sq. ft., plus 500 square feet for each child over 40	
Number of Children	Minimum Lot Area											
9 to 12	7,000 sq. ft.											
13 to 25	10,000 sq. ft.											
26 to 40	20,000 sq. ft.											
More than 40	30,000 sq. ft., plus 500 square feet for each child over 40											
	<p>If any child care center cares for more than one hundred (100) children at any one time, and if the special exception approval limits the use of the property so that no more than thirty (30) percent of the children are involved in outside activities at any one time, then the child care center must have a minimum lot area of thirty thousand (30,000) square feet plus four hundred (400) square feet for each child in excess of forty (40).</p>											
Proposed Use(s)	The purpose of all residential zones is to promote a suitable environment for family life through the provision of recreational, religious and educational facilities as basic elements of a balanced neighborhood, to stabilize and protect the essential characteristics of existing residential development, and to foster development compatible with the topography and other natural characteristics of the area.	Section 25-272										

Institutional Use: There is very little housing in the R-S zoning category. The majority of land zoned R-S is for parkland or institutional uses (such as the Montgomery College campus).	City of Rockville Comprehensive Master Plan Chapter 2, Specific Land Use Patterns
Publicly owned or operated buildings	Section 25-296– permitted by special exception
Educational institution – private	Section 25-296– permitted by special exception
Child care centers for 13 or more	Section 25-296– permitted by special exception  Section 25-351 The Board of Appeals shall not grant any petition for a special exception unless it makes the additional findings applicable to such use and the special development and use requirements are complied with or, as an express condition upon the granting of such special exception, will be complied with prior to the issuance of an occupancy permit.  Section 25-355 Additional findings: (1) That such use will not constitute a nuisance because of traffic, number of children being cared for, noise or type of physical activity  (2) That the site provides ample outdoor play space, free from hazard and appropriately equipped for the age and number of children being cared for. Adequate fencing and screen planting may be required, if deemed necessary, to protect adjacent properties against

		intrusion.  (3) The use satisfies all applicable state and county requirements.  (4) If a child care center is located within one thousand (1,000) feet of another center, the cumulative effect of the centers will not have an adverse impact on the neighborhood due to noise, traffic, or other similar facts.
Coverage Limitations	Building coverage can not exceed 25%  Proposed: 18.6%	Section 25-311 Table I
Maximum Density of Development (FAR)	Not applicable for residential zones	Section 25-311 Table I
Max. Building Height	40 feet	Section 25-311 Table I
Setbacks	<ol style="list-style-type: none"> <li>1. From right-of-way of limited access, major or arterial highway – 50'</li> <li>2. Front Setbacks  Normal Minimum – 35'  Where established setback exceeds normal – Established setback up to 100' In cases where the majority of lots located on one side of a street between two (2) intersecting streets are occupied by buildings having a front setback different from the normal specified, any building hereafter shall conform to the setback line up to the maximum specified.</li> <li>3. Side Setbacks  Side Street Abutting – 25'  Land Abutting – 13'</li> </ol>	<p>Section 25-311 Table I</p> <p>Section 25-311 Table I</p> <p>Note 6</p> <p>Section 25-311 Table I</p>

	<p>4. Rear Setbacks Minimum Depth – 35'</p>	<p>Section 25-311 Table I</p>
<p>Landscaping and Screening Requirements</p>	<p>All air conditioning equipment, transformers, elevator equipment or similar mechanical equipment on any roof, ground or building shall be screened from public view. Such screening shall be done in a manner and with such materials as may be reasonably required by the Planning Commission.</p> <p>It is the policy of the City to have all electric, telephone and other utility lines, cables, transformers and equipment lockers placed underground in all zones. Except as set forth in (a) and (b) below, whenever an extension or relocation of any electric, telephone or other utility line, cable, transformer, or equipment locker is required in connection with the development or redevelopment of any land, any such extension or relocation shall be installed underground.</p> <p>(a) In all zones, for good cause shown, the Planning Commission may approve the extension and/or relocation above ground of electric utility lines not providing direct permanent service in connection with the development or redevelopment of any land within a comprehensive planned development, provided that any such extension and/or relocation may be approved by the Chief of Planning for any applications filed prior to December 1, 1995. Conditions may be attached to any such approval in order to insure that health, safety, and welfare of persons and property in the neighborhood.</p> <p>(b) For good cause shown, the Planning Commission may allow aboveground installation of transformers and equipment lockers subject to the provision of such screening as may reasonably</p>	<p>Section 25-436, Laws of Rockville, Ch. 6, § 3-506</p> <p>Section 25-437, Laws of Rockville, Ch. 6, § 3-507; Ord. No. 2-96, § 2, 1-22-96</p>

	be required by the Planning Commission	
Off-Street Loading	<p>Off-street parking and loading facilities that make it necessary for vehicles to back out directly into a public road are prohibited.</p> <p>No zoning guidelines have been established for the quantity of loading spaces in residential zones.</p> <p>For commercial and industrial zones, adequate off-street space for the loading and unloading of goods and materials shall be provided, taking into consideration the size of building and the lawful uses in such zone. Each loading space provided shall have a minimum width of twelve (12) feet, clearance height of at least fourteen (14) feet, and a depth sufficient to accommodate the maximum length of delivery trucks reasonably likely to serve the building. In the event that tractor-trailer loading or unloading is reasonably likely, a depth of fifty (50) feet shall be provided. Each loading space provided shall have a minimum width of twelve (12) feet, clearance height of at least fourteen (14) feet, and a depth sufficient to accommodate the maximum length of delivery trucks reasonably likely to serve the building. In the event that tractor-trailer loading or unloading is reasonably likely, a depth of fifty (50) feet shall be provided.</p>	<p>Section 25-391b</p> <p>Section 25-414</p>

Off-Street Parking	1. Off-street parking of motor vehicles shall be limited to passenger vehicles, not more than one (1) delivery-type commercial vehicle not exceeding three-quarter ton capacity or one (1) truck that has been issued a special permit pursuant to section 23-27 and one (1) trailer which shall not be used for dwelling purposes or any accessory use, provided such trailer is parked behind the front building line.	Section 25-389
	2. Parking facilities shall be provided for the physically handicapped and aged as specified in the Maryland Building Code for the Handicapped and Aged.  (Laws of Rockville, Ch. 6, § 3-401(o))  State law references: Maryland Building Code for the Handicapped, Anno. Code of Md., Art. 41, § 257JK.	Section 25-388
	3. Requirements for the provision of parking facilities may be satisfied on a separate lot from the use served by a permanent automobile parking structure. An automobile parking structure so established must be located so that a major point of pedestrian access to such structure is within a five hundred (500) foot walking distance of the entrance to the use serviced thereby. The Planning Commission may attach such conditions to the approval of an automobile parking structure as may be reasonable and necessary to assure that the use will be consistent with the purpose and intent of this chapter.	Section 25-391 c
	All garages or other space allocated for parking of vehicles within buildings or in basements or open spaces on the roofs of buildings shall be considered part of the required off-street parking	Section 25-394

facilities and may be included as such in computing the area requirements outlined in this article.

4. Quantity of spaces for educational institutions: One (1) parking space for each two (2) employees, including teachers and administrators, plus sufficient off-street space for the safe and convenient loading and unloading of students, plus additional facilities for student parking, taking into consideration the total number of students, the percentage of students driving automobiles, and the requirements for stadium, gymnasium and auditorium use as reasonably determined by the Planning Commission. The number of employees for a use shall be computed on the basis of the maximum number of persons to be employed at any one (1) time other than at changes of shifts.

Section 25-395a (14)

Section 25-393

Quantity of spaces for office, general or professional (except medical or dental): One (1) parking space for each three hundred (300) square feet of gross floor area, which area shall include cellars or basements designed and available for tenant use or occupancy, but shall not include floor area used for off-street parking.

Section 25-395a (25)

Quantity of spaces for child care: In residential zones, one (1) parking space shall be required for every four (4) nonresident children. For purposes of this requirement, the required number of spaces may be allowed on the street abutting the site.

Section 25-395a (39) (a)

Quantity of spaces for library: One (1) parking space for each two hundred (200) square feet of gross floor area.

Section 25-395a (10)

5. No off-street parking area shall contain more than one hundred fifty (150) spaces. If a greater number of spaces is required by this article,

Section 25-411f

separate parking areas of not more than one hundred fifty (150) spaces shall be provided and shall be separated by a landscaped area at least ten (10) feet in width.

**RV-A2      Computation of  
Space Needs**

**FACILITIES INVENTORY BY BUILDING**

COLLEGE: Montgomery College-Rockville

FMP: October 20, 2003

		1971	1966	1966	1971	1966	1966	1971
HEGIS CODE	HEGIS CATEGORY	1 Art	2 Campus Center	3 Computer Science	4 Macklin Tower	5 Theatre Arts	6 Humanities	7 Music
<b>100</b>	<b>CLASSROOM</b>	<b>1,675</b>	<b>5,819</b>	<b>1,358</b>	<b>0</b>	<b>3,552</b>	<b>20,110</b>	<b>3,118</b>
<b>200</b>	<b>LABORATORY</b>	<b>9,994</b>	<b>4,392</b>	<b>5,379</b>	<b>10,500</b>	<b>7,068</b>	<b>13,710</b>	<b>5,373</b>
210	Class Laboratory	9,890	3,116	2,219		7,068	8,795	3,838
220	Open Laboratory	104	1,276	3,160	10,500		4,915	1,535
250	Research Lab.							
<b>300</b>	<b>OFFICE</b>	<b>1,358</b>	<b>16,634</b>	<b>3,668</b>	<b>23,459</b>	<b>1,573</b>	<b>11,560</b>	<b>1,730</b>
310	Office/ Conf. Room	1,358	13,722	3,668	20,681	1,573	10,600	1,730
320	Testing/Tutoring		2,912		2,778		960	
350	Included w/ 310							
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40,820</b>	<b>0</b>	<b>0</b>	<b>0</b>
410	Study				829			
420-30	Stack/Study				36,494			
440-55	Processing/Service				3,497			
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,608</b>	<b>104</b>	<b>214</b>	<b>0</b>
520-23	Athletic							
530	Media Production		0		6,608	104	214	0
580	Greenhouse							
<b>600</b>	<b>GENERAL USE</b>	<b>1,387</b>	<b>22,299</b>	<b>0</b>	<b>413</b>	<b>7,701</b>	<b>563</b>	<b>0</b>
610	Assembly					7,701		
620	Exhibition	1,387						
630	Food Facility		10,802		413		238	
640	Day Care							
650	Lounge		830			0	325	
660	Merchandising		9,183					
670	Recreation		1,484					
680	Meeting Room							
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>3,052</b>	<b>3,496</b>	<b>0</b>	<b>120</b>	<b>1,593</b>	<b>0</b>
710	Data Processing			2,969				
720	Shop			527			893	
730	Central Storage		2,939			120		
740	Vehicle Storage							
750	Central Service		113				700	
760	Hazmat Storage							
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>14,414</b>	<b>52,196</b>	<b>13,901</b>	<b>81,800</b>	<b>20,118</b>	<b>47,750</b>	<b>10,221</b>
	<b>Total GSF:</b>	<b>25,594</b>	<b>74,302</b>	<b>20,862</b>	<b>117,282</b>	<b>35,032</b>	<b>73,912</b>	<b>20,499</b>
	<b>Efficiency (%):</b>	<b>0.56</b>	<b>0.70</b>	<b>0.67</b>	<b>0.70</b>	<b>0.57</b>	<b>0.65</b>	<b>0.50</b>

**FACILITIES INVENTORY BY BUILDIN**

COLLEGE: Montgomery College-Rock

FMP: October 20, 2003

Year Built:		1966	1966	1966	1971	1966	1969	1984
		8	9	10	11	12	13	14
HEGIS CODE	HEGIS CATEGORY	Physical Education	Student Services	Science East	Science West	Technical Center	Counseling & Advising	Performing Arts Center
<b>100</b>	<b>CLASSROOM</b>	<b>5,274</b>		<b>9,741</b>	<b>7,495</b>	<b>6,755</b>		
<b>200</b>	<b>LABORATORY</b>	<b>2,142</b>	<b>0</b>	<b>16,061</b>	<b>14,220</b>	<b>25,864</b>	<b>0</b>	<b>0</b>
210	Class Laboratory	2,142		15,296	14,220	14,748		
220	Open Laboratory			765		11,116		
250	Research Lab.							
<b>300</b>	<b>OFFICE</b>	<b>3,015</b>	<b>6,763</b>	<b>6,865</b>	<b>6,014</b>	<b>5,745</b>	<b>8,241</b>	<b>612</b>
310	Office/ Conf. Room	3,015	6,763	6,865	6,014	5,745	6,339	612
320	Testing/Tutoring				0		1,902	
350	Included w/ 310							
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>282</b>	<b>1,856</b>	<b>0</b>
410	Study					282	1,856	
420-30	Stack/Study							
440-55	Processing/Service							
<b>500</b>	<b>SPECIAL USE</b>	<b>48,336</b>	<b>0</b>	<b>2,444</b>	<b>49</b>	<b>224</b>	<b>0</b>	<b>0</b>
520-23	Athletic	48,197						
530	Media Production	139		526	49	224		
580	Greenhouse			1,918				
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,302</b>	<b>0</b>	<b>14,148</b>
610	Assembly							14,148
620	Exhibition					1,202		
630	Food Facility							
640	Day Care							
650	Lounge					100	0	
660	Merchandising							
670	Recreation							
680	Meeting Room							
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>47</b>	<b>3,958</b>	<b>77</b>	<b>78</b>	<b>0</b>	<b>0</b>
710	Data Processing		47					
720	Shop			3,777				
730	Central Storage					78		
740	Vehicle Storage							
750	Central Service				77			
760	Hazmat Storage			181				
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>174</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>58,767</b>	<b>6,810</b>	<b>39,069</b>	<b>27,855</b>	<b>40,250</b>	<b>10,271</b>	<b>14,760</b>
	<b>Total GSF:</b>	<b>84,949</b>	<b>10,448</b>	<b>53,737</b>	<b>41,988</b>	<b>55,908</b>	<b>17,696</b>	<b>28,000</b>
	<b>Efficiency (%):</b>	<b>0.69</b>	<b>0.65</b>	<b>0.73</b>	<b>0.66</b>	<b>0.72</b>	<b>0.58</b>	<b>0.53</b>

**FACILITIES INVENTORY BY BUILDIN**

COLLEGE: Montgomery College-Rock

FMP: October 20, 2003

Year Built:		1985	1986	1988	1988	1992	1990	1996
HEGIS CODE	HEGIS CATEGORY	15 Mannakee	16 Child Care	17 ITTC	18 Maintenance Shop	19 Gudelsky Institute	20 Canoe Shed	21 S. Campus Instruction
<b>100</b>	<b>CLASSROOM</b>			<b>812</b>		<b>5,009</b>		<b>12,658</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>0</b>	<b>4,878</b>	<b>0</b>	<b>29,680</b>	<b>0</b>	<b>1,510</b>
210	Class Laboratory			4,878		29,680		1,510
220	Open Laboratory							
250	Research Lab.							
<b>300</b>	<b>OFFICE</b>	<b>31,764</b>	<b>79</b>	<b>335</b>	<b>488</b>	<b>4,964</b>	<b>0</b>	<b>2,540</b>
310	Office/ Conf. Room	31,764	79	335	488	4,334		2,540
320	Testing/Tutoring					630		
350	Included w/ 310							
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
410	Study							
420-30	Stack/Study							
440-55	Processing/Service							
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>35</b>	<b>0</b>	<b>72</b>
520-23	Athletic						0	
530	Media Production					35		72
580	Greenhouse							
<b>600</b>	<b>GENERAL USE</b>	<b>592</b>	<b>2,265</b>	<b>0</b>	<b>0</b>	<b>550</b>	<b>0</b>	<b>129</b>
610	Assembly							
620	Exhibition							
630	Food Facility							
640	Day Care		2,265					
650	Lounge	592				550		129
660	Merchandising							
670	Recreation							
680	Meeting Room			0				
<b>700</b>	<b>SUPPORT</b>	<b>381</b>	<b>0</b>	<b>0</b>	<b>3,540</b>	<b>0</b>	<b>0</b>	<b>857</b>
710	Data Processing	138						
720	Shop				1,982			
730	Central Storage	100			1,558			857
740	Vehicle Storage			0				
750	Central Service	143						
760	Hazmat Storage							
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>32,737</b>	<b>2,344</b>	<b>6,025</b>	<b>4,028</b>	<b>40,238</b>	<b>0</b>	<b>17,766</b>
	<b>Total GSF:</b>	<b>42,102</b>	<b>2,498</b>	<b>9,360</b>	<b>4,720</b>	<b>64,000</b>	<b>420</b>	<b>29,900</b>
	<b>Efficiency (%):</b>	<b>0.78</b>	<b>0.94</b>	<b>0.64</b>	<b>0.85</b>	<b>0.63</b>	<b>0.00</b>	<b>0.59</b>

**FACILITIES INVENTORY BY BUILDIN**

COLLEGE: Montgomery College-Rock

FMP: October 20, 2003

Year Built:

HEGIS CODE	HEGIS CATEGORY	Total Permanent On Campus	Year Built:		Total Temporary On Campus	Total All Space On Campus	1	2
			1 WDCE	2 Central Admin				
<b>100</b>	<b>CLASSROOM</b>	<b>83,376</b>	<b>5,313</b>		<b>5,313</b>	<b>78,063</b>		
<b>200</b>	<b>LABORATORY</b>	<b>150,771</b>	<b>4,461</b>	<b>0</b>	<b>4,461</b>	<b>146,310</b>	<b>0</b>	<b>0</b>
210	Class Laboratory	117,400	3,185		3,185	114,215		
220	Open Laboratory	33,371	1,276		1,276	32,095		
250	Research Lab.	0			0	0		
<b>300</b>	<b>OFFICE</b>	<b>137,407</b>	<b>3,661</b>	<b>35,296</b>	<b>38,957</b>	<b>98,450</b>	<b>0</b>	<b>0</b>
310	Office/ Conf. Room	128,225	3,031	35,296	38,327	89,898		
320	Testing/Tutoring	9,182	630		630	8,552		
350	Included w/ 310	0			0	0		
<b>400</b>	<b>STUDY</b>	<b>42,958</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42,958</b>	<b>0</b>	<b>0</b>
410	Study	2,967			0	2,967		
420-30	Stack/Study	36,494			0	36,494		
440-55	Processing/Service	3,497			0	3,497		
<b>500</b>	<b>SPECIAL USE</b>	<b>58,086</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>58,086</b>	<b>0</b>	<b>0</b>
520-23	Athletic	48,197			0	48,197		
530	Media Production	7,971			0	7,971		
580	Greenhouse	1,918			0	1,918		
<b>600</b>	<b>GENERAL USE</b>	<b>51,349</b>	<b>0</b>	<b>592</b>	<b>592</b>	<b>50,757</b>	<b>0</b>	<b>0</b>
610	Assembly	21,849			0	21,849		
620	Exhibition	2,589			0	2,589		
630	Food Facility	11,453			0	11,453		
640	Day Care	2,265			0	2,265		
650	Lounge	2,526		592	592	1,934		
660	Merchandising	9,183			0	9,183		
670	Recreation	1,484			0	1,484		
680	Meeting Room	0			0	0		
<b>700</b>	<b>SUPPORT</b>	<b>17,199</b>	<b>0</b>	<b>3,404</b>	<b>3,404</b>	<b>13,795</b>	<b>0</b>	<b>0</b>
710	Data Processing	3,154			0	3,154		
720	Shop	7,179			0	7,179		
730	Central Storage	5,652		3,404	3,404	2,248		
740	Vehicle Storage	0			0	0		
750	Central Service	1,033			0	1,033		
760	Hazmat Storage	181			0	181		
<b>800</b>	<b>HEALTH CARE</b>	<b>174</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>174</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>541,320</b>	<b>13,435</b>	<b>39,292</b>	<b>52,727</b>	<b>488,593</b>	<b>0</b>	<b>0</b>
	<b>Total GSF:</b>	<b>813,209</b>	<b>13,435</b>	<b>39,292</b>	<b>52,727</b>	<b>865,936</b>	<b>0</b>	<b>0</b>
	<b>Efficiency (%):</b>	<b>0.67</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>0.56</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>

**FACILITIES INVENTORY BY BUILDIN**

COLLEGE: Montgomery College-Rock

FMP: October 20, 2003

Year Built:

HEGIS CODE	HEGIS CATEGORY	Total Leased & Off Campus	Total All Space On & Off
<b>100</b>	<b>CLASSROOM</b>	<b>0</b>	<b>78,063</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>146,310</b>
210	Class Laboratory	0	114,215
220	Open Laboratory	0	32,095
250	Research Lab.	0	0
<b>300</b>	<b>OFFICE</b>	<b>0</b>	<b>98,450</b>
310	Office/ Conf. Room	0	89,898
320	Testing/Tutoring	0	8,552
350	<i>Included w/ 310</i>	0	0
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>42,958</b>
410	Study	0	2,967
420-30	Stack/Study	0	36,494
440-55	Processing/Service	0	3,497
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>58,086</b>
520-23	Athletic	0	48,197
530	Media Production	0	7,971
580	Greenhouse	0	1,918
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>50,757</b>
610	Assembly	0	21,849
620	Exhibition	0	2,589
630	Food Facility	0	11,453
640	Day Care	0	2,265
650	Lounge	0	1,934
660	Merchandising	0	9,183
670	Recreation	0	1,484
680	Meeting Room	0	0
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>13,795</b>
710	Data Processing	0	3,154
720	Shop	0	7,179
730	Central Storage	0	2,248
740	Vehicle Storage	0	0
750	Central Service	0	1,033
760	Hazmat Storage	0	181
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>174</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>0</b>	<b>488,593</b>
	<b>Total GSF:</b>	<b>0</b>	<b>865,936</b>
	<b>Efficiency (%):</b>	<b>#DIV/0!</b>	<b>0.56</b>

**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-Rockville

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Fall 2002 Before Gains/ (Losses)					Fall 2003 After Gains/ (Losses)
<b>100</b>	<b>CLASSROOM</b>	<b>78,063</b>				<b>0</b>	<b>78,063</b>
<b>200</b>	<b>LABORATORY</b>	<b>146,310</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>146,310</b>
210	Class Laboratory	114,215					114,215
220	Open Laboratory	32,095					32,095
250	Research Lab.	0					0
<b>300</b>	<b>OFFICE</b>	<b>98,450</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>98,450</b>
310	Office/ Conf. Room	89,898					89,898
320	Testing/Tutoring	8,552					8,552
350	Included w/ 310	0					0
<b>400</b>	<b>STUDY</b>	<b>42,958</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42,958</b>
410	Study	2,967					2,967
420-30	Stack/Study	36,494					36,494
440-55	Processing/Service	3,497					3,497
<b>500</b>	<b>SPECIAL USE</b>	<b>58,086</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>58,086</b>
520-23	Athletic	48,197					48,197
530	Media Production	7,971					7,971
580	Greenhouse	1,918					1,918
<b>600</b>	<b>GENERAL USE</b>	<b>50,757</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,757</b>
610	Assembly	21,849					21,849
620	Exhibition	2,589					2,589
630	Food Facility	11,453					11,453
640	Day Care	2,265					2,265
650	Lounge	1,934					1,934
660	Merchandising	9,183					9,183
670	Recreation	1,484					1,484
680	Meeting Room	0					0
<b>700</b>	<b>SUPPORT</b>	<b>13,795</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13,795</b>
710	Data Processing	3,154					3,154
720	Shop	7,179					7,179
730	Central Storage	2,248					2,248
740	Vehicle Storage	0					0
750	Central Service	1,033					1,033
760	Hazmat Storage	181					181
<b>800</b>	<b>HEALTH CARE</b>	<b>174</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>174</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>					<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>
<b>Total NASF:</b>		<b>488,593</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>488,593</b>

ONLY PERMANENT  
ON CAMPUS SPACE IS  
INCLUDED ON THIS TABLE

THIS TABLE MUST BE  
TAILORED FOR COLLEGE-  
SPECIFIC PROGRAMS

**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-Rock

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY		Fall 2004 After Gains/ (Losses)	Parking Garage		Fall 2005 After Gains/ (Losses)	Fall 2007 Science Center Gains	Reno Science East Gains
				Gains	Losses			
<b>100</b>	<b>CLASSROOM</b>	<b>0</b>	<b>78,063</b>	<b>0</b>	<b>0</b>	<b>78,063</b>	<b>0</b>	<b>0</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>146,310</b>	<b>0</b>	<b>0</b>	<b>146,310</b>	<b>0</b>	<b>0</b>
210	Class Laboratory		114,215			114,215		
220	Open Laboratory		32,095			32,095		
250	Research Lab.		0			0		
<b>300</b>	<b>OFFICE</b>	<b>0</b>	<b>98,450</b>	<b>0</b>	<b>0</b>	<b>98,450</b>	<b>0</b>	<b>0</b>
310	Office/ Conf. Room		89,898			89,898		
320	Testing/Tutoring		8,552			8,552		
350	Included w/ 310		0			0		
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>42,958</b>	<b>0</b>	<b>0</b>	<b>42,958</b>	<b>0</b>	<b>0</b>
410	Study		2,967			2,967		
420-30	Stack/Study		36,494			36,494		
440-55	Processing/Service		3,497			3,497		
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>58,086</b>	<b>0</b>	<b>0</b>	<b>58,086</b>	<b>0</b>	<b>0</b>
520-23	Athletic		48,197			48,197		
530	Media Production		7,971			7,971		
580	Greenhouse		1,918			1,918		
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>50,757</b>	<b>0</b>	<b>0</b>	<b>50,757</b>	<b>0</b>	<b>0</b>
610	Assembly		21,849			21,849		
620	Exhibition		2,589			2,589		
630	Food Facility		11,453			11,453		
640	Day Care		2,265			2,265		
650	Lounge		1,934			1,934		
660	Merchandising		9,183			9,183		
670	Recreation		1,484			1,484		
680	Meeting Room		0			0		
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>13,795</b>	<b>0</b>	<b>0</b>	<b>13,795</b>	<b>0</b>	<b>0</b>
710	Data Processing		3,154			3,154		
720	Shop		7,179			7,179		
730	Central Storage		2,248			2,248		
740	Vehicle Storage		0			0		
750	Central Service		1,033			1,033		
760	Hazmat Storage		181			181		
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>174</b>	<b>0</b>	<b>0</b>	<b>174</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>0</b>	<b>488,593</b>	<b>0</b>	<b>0</b>	<b>488,593</b>	<b>0</b>	<b>0</b>

ONLY PERMANENT  
ON CAMPUS SPACE IS  
INCLUDED ON THIS TABLE

Proposed Science Center  
NASF breakdown not avail:  
SE/SW renovation data per

THIS TABLE MUST BE  
TAILORED FOR COLLEGE-  
SPECIFIC PROGRAMS

**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-Rock

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Renovation	Renovation		Fall 2012	Fall 2012
		Science East (Losses)	Science West Gains	Science West (Losses)	Remove Leased Space	After Gains/ (Losses)
<b>100</b>	<b>CLASSROOM</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>78,063</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>146,310</b>
210	Class Laboratory					114,215
220	Open Laboratory					32,095
250	Research Lab.					0
<b>300</b>	<b>OFFICE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>98,450</b>
310	Office/ Conf. Room					89,898
320	Testing/Tutoring					8,552
350	<i>Included w/ 310</i>					0
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42,958</b>
410	Study					2,967
420-30	Stack/Study					36,494
440-55	Processing/Service					3,497
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>58,086</b>
520-23	Athletic					48,197
530	Media Production					7,971
580	Greenhouse					1,918
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,757</b>
610	Assembly					21,849
620	Exhibition					2,589
630	Food Facility					11,453
640	Day Care					2,265
650	Lounge					1,934
660	Merchandising					9,183
670	Recreation					1,484
680	Meeting Room					0
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13,795</b>
710	Data Processing					3,154
720	Shop					7,179
730	Central Storage					2,248
740	Vehicle Storage					0
750	Central Service					1,033
760	Hazmat Storage					181
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>174</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>488,593</b>

ONLY PERMANENT  
ON CAMPUS SPACE IS  
INCLUDED ON THIS TABLE

is 71,000 GSF  
able as of 5/29/02  
pending completion of Master Plan in 2002

Proposed Science Center is 71,000 GSF  
NASF breakdown not available as of 5/29/02.  
SE/SW renovation data pending completion of Master PI

THIS TABLE MUST BE  
TAILORED FOR COLLEGE-  
SPECIFIC PROGRAMS

**COMPUTATION OF SPACE NEEDS**  
 COLLEGE: Montgomery College-Rockville  
 FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
<b>100</b>	<b>CLASSROOM</b>	<b>85,280</b>	<b>78,063</b>	<b>(7,217)</b>	<b>76,253</b>	<b>78,063</b>	<b>1,810</b>
<b>200</b>	<b>LABORATORY</b>	<b>195,628</b>	<b>146,310</b>	<b>(49,318)</b>	<b>286,860</b>	<b>146,310</b>	<b>(140,550)</b>
210	Class Laboratory	169,840	114,215	(55,625)	259,313	114,215	(145,098)
220	Open Laboratory	25,788	32,095	6,307	27,548	32,095	4,547
250	No Allowance						
<b>300</b>	<b>OFFICE</b>	<b>135,748</b>	<b>98,450</b>	<b>(37,298)</b>	<b>153,886</b>	<b>98,450</b>	<b>(55,436)</b>
310	Office/ Conf. Room	131,928	89,898	(42,030)	149,856	89,898	(59,958)
320	Testing/Tutoring	3,820	8,552	4,732	4,030	8,552	4,523
350	Included w/ 310						
<b>400</b>	<b>STUDY</b>	<b>64,490</b>	<b>42,958</b>	<b>(21,532)</b>	<b>70,947</b>	<b>42,958</b>	<b>(27,989)</b>
410	Study	38,375	2,967	(35,408)	40,994	2,967	(38,027)
420-30	Stack/Study	18,653	36,494	17,841	21,395	36,494	15,099
440-55	Processing/Service	7,461	3,497	(3,964)	8,558	3,497	(5,061)
<b>500</b>	<b>SPECIAL USE</b>	<b>92,280</b>	<b>58,086</b>	<b>(34,194)</b>	<b>97,308</b>	<b>58,086</b>	<b>(39,222)</b>
520-23	Athletic	80,400	48,197	(32,203)	84,590	48,197	(36,393)
530	Media Production	10,880	7,971	(2,909)	11,718	7,971	(3,747)
580	Greenhouse	1,000	1,918	918	1,000	1,918	918
<b>600</b>	<b>GENERAL USE</b>	<b>80,259</b>	<b>50,757</b>	<b>(29,502)</b>	<b>84,520</b>	<b>50,757</b>	<b>(33,763)</b>
610	Assembly	21,280	21,849	569	22,118	21,849	(269)
620	Exhibition	3,820	2,589	(1,231)	4,030	2,589	(1,441)
630	Food Facility	29,098	11,453	(17,645)	31,311	11,453	(19,858)
640	Child Care N/A	2,265	2,265	0	2,265	2,265	0
650	Lounge	10,392	1,934	(8,458)	11,183	1,934	(9,249)
660	Merchandising	3,920	9,183	5,263	4,130	9,183	5,054
670	Recreation N/A	1,484	1,484	0	1,484	1,484	0
680	Meeting Room	8,000	0	(8,000)	8,000	0	(8,000)
<b>700</b>	<b>SUPPORT</b>	<b>37,392</b>	<b>13,795</b>	<b>(23,597)</b>	<b>42,895</b>	<b>13,795</b>	<b>(29,100)</b>
710	Data Processing	4,105	3,154	(951)	4,419	3,154	(1,265)
720	Shop/ Storage	26,614	9,427	(17,187)	31,291	9,427	(21,864)
730	Included w/ 720						
740	Included w/ 720						
750	Central Service	6,140	1,033	(5,107)	6,559	1,033	(5,526)
760	Hazmat Storage	532	181	(351)	626	181	(445)
<b>800</b>	<b>HEALTH CARE</b>	<b>1,428</b>	<b>174</b>	<b>(1,254)</b>	<b>1,512</b>	<b>174</b>	<b>(1,338)</b>
<b>900</b>	<b>No Allowance</b>						
<b>050</b>	<b>No Allowance</b>						
<b>060</b>	<b>Alterations</b>						
<b>070</b>	<b>No Allowance</b>						
<b>090</b>	<b>Other Org.</b>						
	<b>Total NASF:</b>	<b>692,504</b>	<b>488,593</b>	<b>(203,911)</b>	<b>814,179</b>	<b>488,593</b>	<b>(325,586)</b>

ONLY PERMANENT  
 ON CAMPUS SPACE IS  
 INCLUDED ON THIS TABLE

USE HARD DATA RATHER  
 THAN FORMULAS FOR THE  
 10-YEAR PROJECTIONS WHEN  
 AVAILABLE; WHEN NOT  
 AVAILABLE, THE FORMULAS  
 WILL PROVIDE REASONABLE  
 ESTIMATES

SEE "SPACE ALLOCATION  
 GUIDELINES" SHEET FOR  
 FORMULAS AND DEFINITIONS

ENROLLMENT STATISTICS		Fall 2002	Fall 2012
	FTDE-C	6,140	6,559
	FTDE-N		0
	FTDE-J	6,140	6,559
	WSCH-Lec-C	76,829	68,696
	WSCH-Lec-N		0
	WSCH-Lec-J	76,829	68,696
	WSCH-Lab-C	29,132	44,479
	WSCH-Lab-N		0
	WSCH-Lab-J	29,132	44,479
	FTE	8,050	8,599
	BVE	186,534	213,952
	FTEF	419	452
Hard Data =	FT-Fac	284	315
	FT-Staff	369	444
Formulas =	PHC	3,464	3,728
	Headcount	14,817	15,793

**COMPUTATION OF PARKING NEEDS**  
 COLLEGE: Montgomery College-Rockville  
 FMP: October 20, 2003

PARKING CATEGORY	FACTOR	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
FTDE-J	0.75	4,605			4,919		
FT-Faculty & FT-Staff	0.75	490			569		
<b>SUBTOTAL</b>		<b>5,095</b>	<b>0</b>	<b>0</b>	<b>5,489</b>	<b>0</b>	<b>0</b>
Visitors	0.02	102			110		
<b>REGULAR SPACES</b>		<b>5,197</b>	<b>3,379</b>	<b>(1,818)</b>	<b>5,598</b>	<b>3,379</b>	<b>(2,219)</b>
Reserved Accessible*		44	49	5	44	49	5
<b>ALL SPACES</b>		<b>5,241</b>	<b>3,428</b>	<b>(1,813)</b>	<b>5,642</b>	<b>3,428</b>	<b>(2,214)</b>

\* In addition to the regular parking spaces, the Americans with Disabilities Act requires reserved spaces for disabled individuals. Reserved accessible spaces shall conform to the requirements in the space allocation guidelines:

TOTAL SPACES	REQUIRED ADA	TOTAL SPACES	REQUIRED ADA
<= 25	1	201 - 300	7
26 - 50	2	310 - 400	8
51 - 75	3	410 - 500	9
76 - 100	4	501 - 1,000	2% of total
101 - 150	5	> 1,000	20 plus 1 for each
151 - 200	6		100 beyond 1,000

Note: Calculation of current and 10 year need for reserved accessible spaces for MC-R (44) is based on the current and 10-year inventory of regular spaces (3379).

ONLY PARKING FOR  
 ON CAMPUS SPACE IS  
 INCLUDED ON THIS TABLE

"NEED" DATA FOR RESERVED  
 ACCESSIBLE SPACES MUST  
 ENTERED MANUALLY USING  
 THE ABOVE ADA GUIDELINES

"NEED" DATA FOR ALL OTHER  
 CATEGORIES ARE ENTERED  
 AUTOMATICALLY FROM THE  
 ENROLLMENT/EMPLOYMENT  
 STATISTICS ON TABLE 3

**SPACE ALLOCATION GUIDELINES**

COLLEGE: Montgomery College-Rockville

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	FTDE-C FACTOR		FORMULA
		<= 3,000	> 3,000	
<b>100</b>	<b>CLASSROOM</b>	1.50	1.11	Factor x WSCH-Lec-J
<b>200</b>	<b>LABORATORY</b>			<b>Total</b>
210	Class Laboratory	7.00	5.83	Factor x WSCH-Lab-J
220	Open Laboratory			4.2 x FTDE-C
250	No Allowance			
<b>300</b>	<b>OFFICE</b>			<b>Total</b>
310	Office/ Conf. Room			Core of 1,120 + (166 x (FTEF + FT-Staff))
320	Testing/Tutoring			Core of 1,500 + (0.5 x (FTDE-C beyond 1,500))
350	Included w/ 310			
<b>400</b>	<b>STUDY</b>			<b>Total</b>
410	Study			6.25 x FTDE-C
420-30	Stack/Study			0.1 x BVE
440-55	Processing/Service			Core of 1,200 + (0.4 x (Category-420-30 beyond 1,200))
<b>500</b>	<b>SPECIAL USE</b>			<b>Total</b>
520-23	Athletic			Core of 34,000 + (10 x ( FTDE-C beyond 1,500))
530	Media Production	0.80	2.00	Core of 1,600 + ( Factor x ( FTDE-C beyond 1,500 ))
580	Greenhouse			Core of 1,000
<b>600</b>	<b>GENERAL USE</b>			<b>Total</b>
610	Assembly			Core of 12,000 + (2.0 x (FTDE-C beyond 1,500))
620	Exhibition			Core of 1,500 + (0.5 x (FTDE-C beyond 1,500))
630	Food Facility	10.20	8.40	Factor x PHC
640	No Allowance			
650	Lounge			3.0 x PHC
660	Merchandising			Core of 1,600 + (0.5 x (FTDE-C beyond 1,500))
670	No Allowance			
680	Meeting Room	6,000	8,000	Factor x 1
<b>700</b>	<b>SUPPORT</b>			<b>Total</b>
710	Data Processing			Core of 2,500 + (0.75 x ( FTDE-J beyond 4,000))
720	Shop/ Storage			0.04 x (All categories less 720-40 and 760)
730	Included w/ 720			
740	Included w/ 720			
750	Central Service			Core of 4,000 + (FTDE-C beyond 4,000)
760	Hazmat Storage			0.02 x Categories-720-40
<b>800</b>	<b>HEALTH CARE</b>			Core of 500 + (0.2 x (FTDE-C beyond 1,500))
<b>900</b>	<b>No Allowance</b>			
<b>050</b>	<b>No Allowance</b>			
<b>060</b>	<b>No Allowance</b>			
<b>070</b>	<b>No Allowance</b>			
<b>090</b>	<b>No Allowance</b>			
	<b>Total NASF:</b>			

FTDE: Full-time day equivalent students. Fall credit and/or eligible non-credit hours taught between 8 am and 5 pm divided by 15.

-C = credit only; -N = non-credit only; -J = joint credit and non-credit.

WSCH-Lec: Weekly student contact hours for on-campus day students in credit and/or eligible non-credit courses where instruction is primarily lecture. -C = credit only;

-C = credit only; -N = non-credit only; -J = joint credit and non-credit.

WSCH-Lab: Weekly student contact hours for on-campus day students in credit and/or eligible non-credit course where instruction is primarily lab.

-C = credit only; -N = non-credit only; -J = joint credit and non-credit.

FTE: Full-time equivalent students. Fall credit hours divided by 15.

BVE: Bound volume equivalent. 20,000 BVE for the first 1,000 FTE and 1,000 BVE for every 100 FTE above 1,000.

FTEF: Full-time equivalent faculty. Full-time faculty, including librarians, plus 25% of part-time faculty.

FT-Fac: Full-time faculty.

FT-Staff: Full-time staff.

PHC: Planning head count. 50% of the sum of FTDE for on-campus credit and eligible non-credit courses and FTEF and FT-Staff, and includes space for seating, preparation, and storage.

**RV-A3      Environmental Report**

**RV-A3 ENVIRONMENTAL REPORT****Overview**

The Environmental Review for the Facilities Master Plan of Montgomery College was conducted by Froehling and Robertson, Inc. of Baltimore, Maryland and on-site inspections took place on February 1 and April 25, 2002.

This review considered various aspects of environmental issues, including asbestos-containing materials (ACM), lead based paint (LBP), mold, and chemical usage and storage. Also included in this review was the storage and disposal of hazardous waste and hazard communication.

Each of these categories will be covered individually for each of the three campuses (Germantown, Rockville, and Takoma Park). Following the review will be recommendations for any of the categories.

**Asbestos-Containing Materials**

Montgomery College, overall, has a good asbestos-containing material program. The College has Management Plans for the majority of the buildings, has numerous trained and licensed workers, state-of-the-art removal equipment, and a good hazard communication program regarding asbestos for both the College employees and the students.

The College has a written Respiratory Protection Program, a copy of the OSHA Asbestos regulations, work procedures for the removal of the various types of materials encountered on campus, and even a HEPA Vacuum Instruction Guidebook. According to Mr. John Softy, all asbestos-trained personnel have access to this information.

Each campus has an asbestos waste storage area. These areas have extremely limited access and are emptied by an approved waste hauler shortly after receiving asbestos waste. All observed waste observed on the campuses were properly bagged and stored.

In the late 1980s and early 1990s, the College set upon the task to have comprehensive ACM inspections conducted on all of the College's facilities. These reports were made available to the Consultant for review and comment.

Asbestos inspection documents were provided for the following buildings:

- Art Building
- Campus Center Building
- Computer Science Building
- Campus Tower Building
- Humanities Building
- Music Building
- Robert E. Parilla Performing Arts Center
- Physical Education Center
- Science Building East
- Science Building West

Student Services Building  
Theatre Arts Building

The Art Building Asbestos Inspection Report was conducted by Dynamac Corporation of Rockville, Maryland and is dated June 1991. The report calls out the floor tile and associated mastic, ceiling tiles, black tar pipe wrap, tank insulation, and pipe fitting insulation as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include drywall, plaster, and flex duct connectors. Furthermore, no samples were obtained of the joint compound and the floor tile mastic was assumed to be positive. It is recommended that further sampling be conducted of these materials, including the floor tile mastic, to confirm the materials positive or negative.

The Campus Center Building Inspection Report was conducted by Environmental Protection Systems of Chantilly, Virginia and is dated February, 1993. The report calls out various types of floor tile, thermal system mastic, plaster, and pipe fitting insulation as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include several types of floor tile, pipe fitting insulation, HVAC boots, and several types of plaster. Furthermore, the floor tile mastic was assumed to be positive. It is recommended that further sampling be conducted of these materials, including the floor tile mastic, to confirm the materials positive or negative.

The Computer Science Building Inspection Report was conducted by Environmental Protection Systems of Rockville, Maryland and is dated February, 1988. The report calls out spray-on fireproofing, pipe fitting insulation, and tank insulation as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include ceiling tiles, plaster, HVAC boots, and a second type of spray-on insulation. Furthermore, the floor tile and associated mastic was assumed to be positive. It is recommended that further sampling be conducted of these materials, including the floor tile and associated mastic, to confirm the materials positive or negative.

The Campus Tower Inspection Report was conducted by Environmental Protection Systems of Chantilly, Virginia and is dated April, 1990. The report calls out various types of floor tile, one type of ceiling tile, the red border strip, tank insulation, and duct mastic as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include several types of floor tile, floor tile mastic, pipe insulation, HVAC boots, and plaster. It is recommended that further sampling be conducted of these materials to confirm the materials positive or negative.

The Humanities Building Inspection Report was conducted by Environmental Protection Systems of Chantilly, Virginia and is dated April, 1990. The report calls out various types of floor tile, spray-on fireproofing, and thermal system mastic as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include several types of ceiling tile and drywall and the joint compound was not sampled at all. It is recommended that further sampling be conducted of these materials to confirm the materials positive or negative.

The Music Building Asbestos Inspection Report was conducted by Dynamac Corporation of Rockville, Maryland and is dated June 1991. The report Amendment #1 indicates that all asbestos containing materials were removed from this building. No further action is required.

The Robert E. Parilla Performing Arts Center Inspection Report was prepared by Briggs Associates, Inc. of Columbia, Maryland and is dated June 1991. The report calls out the floor tile as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include ceiling tiles, floor tile mastic, plaster and drywall. Furthermore, the joint compound was not sampled at all. It is recommended that further sampling be conducted of these materials to confirm the materials positive or negative.

The Physical Education Building Inspection Report was conducted by Environmental Protection Systems of Rockville, Maryland and is dated February, 1988. The report calls out spray-on fireproofing and pipe fitting insulation as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include ceiling tiles and drywall and no joint compound samples were obtained. Furthermore, the floor tile and associated mastic was assumed to be positive. It is recommended that further sampling be conducted of these materials, including the floor tile and associated mastic, to confirm the materials positive or negative.

The Science East Building Re-inspection Report was conducted by Ms. Sharon L. Draper of the Office of Facilities and is dated August 1993. The report calls out spray-on fireproofing, pipe fitting insulation, thermal system mastic, ceiling tiles, transite fumehoods, and floor tiles as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include various types of plaster, HVAC tape, and some types of ceiling tiles. Furthermore, the floor tile mastic and the transite planters were assumed to be positive. It is recommended that further sampling be conducted of these materials, including the floor tile mastic and the transite planters, to confirm the materials positive or negative.

The Science West Building Asbestos Inspection Report was conducted by Dynamac Corporation of Rockville, Maryland and is dated June 1991. The report calls out pipe mastic, various types of floor tiles, plaster, transite fumehoods, and pipe fitting insulation as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include various types of ceiling tiles, drywall, flex duct connectors, and weather-proofing. Furthermore, the floor tile mastic was assumed to be positive. It is recommended that further sampling be conducted of these materials, including the floor tile mastic, to confirm the materials positive or negative.

The Student Services Building Inspection Report was conducted by Environmental Protection Systems of Rockville, Maryland and is dated February, 1988. The report calls out spray-on fireproofing and pipe fitting insulation as being positive; however, not enough samples were obtained to confirm certain materials negative. These materials include ceiling tiles, plaster, HVAC boots, and roofing felt. Furthermore, the floor tile mastic was assumed to be positive and the floor tile mastic was not sampled at all. It is recommended

that further sampling be conducted of these materials, including the floor tile and associated mastic, to confirm the materials positive or negative.

The Theatre Arts (Fine Arts) Building Inspection Report was conducted by Environmental Protection Systems of Rockville, Maryland and is dated February, 1988. The report Amendment #3 indicates that all asbestos containing materials were removed from this building with the exception of the floor tile mastic. No further action is required.

### **Lead Based Paint**

Montgomery College does not contain a specific lead based paint program, nor is the College required to due to the fact that there are no residential structures on the three campuses. However, lead based paint is a worker issue under OSHA due to the ages of the College facilities. It is recommended that before the commencement of renovation activities that impact painted surfaces, testing be conducted to determine if the painted surfaces are lead containing. If the painted surfaces are or are suspected to be lead containing, respiratory protection should be worn during all activities during which dust or fumes are generated.

### **Mold**

Montgomery College has taken a proactive approach to mold contamination inspection and remediation. According to Mr. John Softy, CHMM, the Environmental Safety Coordinator for the College, whenever mold growth is located, the infected area is restricted from public access and remediation efforts are undertaken. Furthermore, during the remediation, ceiling and wall cavity areas are explored to determine the extent of the mold growth. The areas are kept under containment until "clean air" is restored to the affected area. It is recommended that the College continue with its mold surveillance policy.

### **Hazardous Materials**

The hazardous materials review will cover a variety of subjects - chemical usage and storage, the storage and disposal of hazardous waste and hazard communication. These topics will be discussed in general for the College and for each applicable campus, where applicable.

### **Chemical Usage and Storage**

Chemical usage and storage covers two distinct groups of people - the maintenance staff and the College students and instructors. Each group uses a different set of materials for varying reasons. Each group will be discussed separately.

The maintenance staff stores the majority of their materials in the Physical Plant sections of the buildings and in the Maintenance Shop next to the Athletic Field. These areas were observed to be kept in an orderly fashion with no obvious signs of improper chemical storage. Compressed gas cylinders were observed to be stored in an unsecured manner. It is recommended that all compressed gas cylinders be properly stored by having the cylinders secured to a fixed and stationary object (i.e., wall, column, etc). Material Safety Data Sheets (MSDS) were available in these areas and the staff was aware of the MSDS location in the event of emergency.

The College students and instructors use the majority of their chemicals in the Chemistry Labs, the Jewelry Making Lab, and in the Automotive Shop. All chemicals in the Chemistry Labs and the Jewelry Making Lab were observed to be stored in a locked storage area with only instructors having access to this area. MSDS sheets were available to all individuals working in the laboratory areas, and emergency eyewash and shower stations are located throughout the lab rooms. All materials in the Automotive Shop were observed to be properly stored, and MSDS sheets were in an accessible, central location. Lab instructors indicated that all lab students are required to sign a safety contract and that all Chemistry students are given formal instruction in the usage of MSDS sheets. However, no formal instruction is given in the usage of MSDS sheets in the event of an emergency for the Jewelry and Automotive students. It is recommended that all students be given formal instruction in the usage and interpretation of MSDS sheets and have the students sign a safety contract.

#### **Storage and Disposal of Hazardous Waste**

The storage and disposal of hazardous waste will cover both the waste created by the teaching activities as well as the waste of the Physical Plant.

The Physical Plant staff creates a minimum amount of hazardous waste. This waste includes automotive fluids and batteries, asbestos removal waste, and residual waste created by daily maintenance activities, including the disposal of mercury-containing lighting fixtures and potential PCB-containing ballasts. The asbestos waste is stored in a separate structure between the two Science buildings and is accessible by only properly trained personnel. As well as can be determined, these materials are properly disposed of, and meticulously documented. All reviewed waste manifests appear to be in compliance.

The Laboratory chemical wastes were observed to be stored in a locked, limited access storage area that is explosion-proof and diked with only properly trained personnel having access to this area. All generated waste is moved to the waste storage room on an as-needed basis. While the chemical wastes are waiting to be moved to the Chemical Waste Room, the wastes are stored in the Chemical Storage Rooms on carts and segregated shelves. It is recommended that all chemical waste products be moved to the Chemical Waste Room on a weekly basis at a minimum. As well as can be determined, these materials are properly disposed of, and meticulously documented. All reviewed waste manifests appear to be in compliance.

#### **Hazard Communication**

Hazard Communication covers not only the posting of MSDS sheets, but also safety in general. The College has a website, <http://www.montgomerycollege.edu/Departments/envsafe/>. This site is an excellent resource for safety policies, and is available for review for both College employees and students alike at all three campuses. Some of the subjects covered include Work Related Injury and Illness, Backcare, Ergonomics, Bloodborne Pathogens, Cutting and Welding, Lockout/Tagout, and Asbestos Program information. Some of these links will include the College policy for the subject and links to resource and regulatory information.

This website is an excellent way to distribute environmental safety information, but the site does have some weak points. Not all of the subjects, such as Fall Protection, Noise and Hearing Conservation, and Chemical Spill Cleanup, have the policies available online for review. Users are instructed to contact the Environmental Safety Office for information. It is recommended that links be created for all subjects so that the policy information is available at all times. Furthermore, while this site is accessible to anyone with access to a computer, computers are not always available to everyone. It is recommended that hard copies of all relevant policies be available in affected areas for the College employees and students.

The original copies of all MSDS sheets are kept in the Environmental Safety office. This compilation is maintained in an orderly and easy-to-locate format and is an exhaustive list, easily containing several thousand MSDS sheets. However, no evidence was produced to document a tracking system that details that copies of all relevant MSDS sheets are forwarded to all of the chemical locations. It is recommended that a tracking system be developed to ensure that all MSDS sheets are distributed to the affected locations and that all updated MSDS sheets are also forwarded to the areas

## **5.0 WORK FORCE DEVELOPMENT/CONTINUING EDUCATION**

### **5.1 BACKGROUND INFORMATION**

#### **5.1.1 Facilities Master Plan**

Montgomery College began this Collegewide Facilities Master Plan effort in 2001. The major components of the Master Plan are the Rockville, Germantown and Takoma Park Campuses, Workforce Development/Continuing Education, and Central Administration. The time frame for the Facilities Master Plan is ten years, 2002 to 2012, and the time frame for twenty-year Land Use Plan extends out to 2022. The overarching goal of the Facilities Master Plan is to establish a framework for the development of capital projects to support the role, mission, and academic vision of Montgomery College.

This Facilities Master Plan looks at Work Force Development/Continuing Education as a unique function distinct from the individual campuses. The vision for Work Force Development/Continuing Education seeks to extend and support the College's mission of meeting multi-leveled educational, economic, and work force development needs. To support this vision and establish a coherent, logical framework for development of capital projects, the Facilities Master Plan has established goals and priorities. This Master Plan for Work Force Development/Continuing Education focuses on:

- providing sufficient and adequate space at each location—classrooms, labs, offices, study, and support facilities—based on existing and projected needs, so that each and every area can contribute creatively and productively every day to helping students change their lives;
- consolidating work force development and continuing education efforts on the Germantown, Rockville, and Takoma Park campuses so that students, visitors, and the College community benefit from the ease, energy, and excitement generated by the synergy of proximity; and
- presenting students the needed range of opportunities to study and learn collaboratively in supportive environments with the special assistance of faculty, counselors, and staff.

#### **5.1.2 Institutional Characteristics**

The Workforce Development and Continuing Education (“WDCE”) programs at Montgomery College provide a wide range of noncredit and credit educational offerings and services designed to meet the needs of County residents and businesses. Individuals in career transitions, those reentering the workforce, and those maintaining current technical skills, as well as those seeking lifelong educational enrichment experiences, are among the more than 26,000 enrollees of WDCE programs each year.

The educational offerings of WDCE to residents, employees, and employers are organized into five program units:

- Community Education and Extended Learning Services
- Professional and Workforce Development

- Gudelsky Institute for Technical Education
- Information Technology Institute
- Health Sciences Institute

WDCE efforts are present on all three campuses, two leased sites at the Gaithersburg and Westfield Centers, and other community sites. The Gudelsky Institute, named for noted philanthropist and local area developer Homer S. Gudelsky, was funded through a leadership contribution by the Homer and Martha Gudelsky Foundation and through private contributions from many area businesses, individuals, and foundations. The Montgomery County Government matched the contributions, so that GITE could be constructed at the Rockville campus. Adjacent to GITE is the Interim Technical Training Complex, which provides corporate training areas and other technical education laboratories. GITE also supports the Information Technology Institute. Other WDCE programs offered at the Rockville campus use other facilities. The Health Sciences Institute will be located in the new Health Sciences Center, opening in January 2004 on the Takoma Park campus. The planned Bioscience Education Center at the Germantown campus will also house WDCE Professional and Workforce Development efforts related to biotechnology, while other WDCE efforts will be located elsewhere on campus.

Many WDCE courses are delivered as a result of a customized training program developed for business and community organizations. Contract training partnerships align College education and training resources with the demands of the workplace and are tailored to each business partner's requirements. Employer-sponsored training programs have grown significantly in recent years and are frequently delivered at the business location.

### **5.1.3 Academic Programs**

More than 1,500 courses are offered each year through the five organizational units of WDCE and reflect more than 20 program areas, including information technology, small business and management, technical training, certification and licensure preparation, financial planning, real estate, child care, health sciences, personal development, career development, writing, American English, cultural diversity, customer service, quality management, and leadership development. They are offered during the day, in the evening, and on weekends to meet the needs of the students being served.

### **Community Education and Extended Learning**

Community Education and Extended Learning ("CEEL") offers programs in six areas:

Academic and Workplace Preparedness programs focus on assisting individuals to get ready for college and careers. The Pathways to Success program gives students who score below 52 on the College's entrance exam an opportunity to begin their education at Montgomery College by providing a fifteen week session in reading, writing, and life skills and career planning, including meeting with a Job Specialist to explore realistic career paths. The Graduate Transition Program, resulting from a partnership with Target Community and Educational Services and Potomac Community Resources, assists students with special needs who are exiting from high school to make the transition to greater independent living through functional education, residential, vocational, and life skills services. Similarly the Challenge Program provides unique courses for adults with

developmental disabilities to function more independently in their homes, at work, and in the community.

Career Development and Workskills has as its primary goal to help adults get a job, keep a job, or be promoted by providing a range of courses from career and financial planning to standardized test preparation to a continuum of reading, math, and writing classes. The Early Childhood Education programs offer classes designed for teachers, child care providers, and parents and award Continuing Education Units satisfying Maryland State annual staff training requirements. Developmental Disabilities Administration Training, which satisfies the Maryland State Developmental Disabilities Administration, provides up-to-date human services training through recertification training courses for employees who currently work with individuals with disabilities.

Diversity and Community Focus has three major foci. The Diversity Management Institute offers workshops, certificate programs, consulting services and events to help public and private sector organizations create and maintain work environments where all employees, customers, and clients are valued and respected. The Institute also helps employers understand the changing demographics of their workforce and their customers so they can maximize the potential of their employees, increase productivity, improve customer satisfaction, and stay competitive. The Center for Community Leadership Development and Public Policy initiates and strengthens citizen deliberation on vital local, regional, national, and global issues that affect the campus and community. The Outcomes Measurement Program provides training and technical assistance to non-profit and funding organizations for data collection and analysis that measures effectiveness, demonstrates accountability, and documents change.

Enrichment for All Ages incorporates special adult and youth programs and the College's extended learning options. The Lifelong Learning Institute offers many courses for County residents 50 years and older at campus and community locations and sponsors several Elderhostels each year with people from all over the United States. Montgomery College, in cooperation with Montgomery County Public Schools, many private schools, and community organizations, offers a large summer program, school-year enrichment programs, and after-school and weekend programs for students in grades 3-12. Extended Learning Services options include off-campus courses and Assessment of Prior Learning, whereby students may be able to obtain college credit for prior learning experiences.

Languages offers noncredit language training and education to residents, employees, and employers, including a full range of English as a Second Language, conversational Spanish, and TOFEL preparation, as well as American Sign Language.

### **Professional and Workforce Development**

Professional and Workforce Development offers courses and programs in Management Development, including project management, supervision, and team building, as well as courses leading to the AMA Certificate in Management; Sales and Marketing and Small Business, including customer service, sales success, marketing for managers, and selling and promoting products; and Biotechnology, assisting businesses in this expanding industry in Montgomery County with such courses as Cell Culture Basics, Essential DNA and RNA Technology, Good Laboratory Practice, and Teams and Team Building. The Professional

Licensure and Certification Program offers approved licensure and certification courses for insurance and real estate and training as a mortgage loan officer. Maryland Safety Program offers approved courses related to boating, food, and motorcycle safety, including Maryland Basic Boating, Basic Navigation, Food Service Certification and Recertification, and Motorcycle Safety. The Instituto Hispano de Negocios (Hispanic Business Institute) offers bilingual training and education for this business sector in such areas as small business development, food safety certification, OSHA safety, QuickBooks, and legal office assistant.

#### **Homer S. Gudelsky Institute for Technical Education**

The Homer S. Gudelsky Institute for Technical Education (“GITE”) is a public-private joint venture providing state-of-the-art technical education and training opportunities in automotive education, building and construction technology, computer publishing and printing technologies, and fabrication and manufacturing technology. Eight different instructional delivery options are available—customized contract training, distance education, apprenticeship-related instruction, on-site training, long- or short-term training, certificate programs, Associate of Applied Science degree programs, and credit and continuing education courses.

#### **Information Technology Institute**

The Information Technology Institute (“ITI”) specializes in information technology and responds to the rapidly expanding need for skilled workers in high technology companies. It offers cutting edge high technology courses at all three campuses, as well as at strategic off-campus sites, and provides customized training at business and government sites throughout the region. In addition to credit and noncredit courses, special programs include: Tech LEAP/Web LEAP, which is intended to retrain individuals for new careers in the information technology field, summer programs for high school students, and a program developed in partnership with Montgomery County Public Schools to train information technology teachers.

#### **Health Sciences Institute**

The Health Sciences Institute (“HSI”) is the newest addition to WDCE, consolidating and extending noncredit programs for adult education and workforce development in health related fields, including CPR and first aid, diagnostic imaging, gerontology, health careers and human services, health information, nursing, and wellness. It will be located in the new Health Sciences Center at the Takoma Park campus.

#### **5.1.4 Enrollment**

Growth in the program offerings of Workforce Development and Continuing Education has been significant. WDCE enrolled 27,358 students during FY 2003, a 16% increase over its FY 2000 enrollments, and it offered 2,667 sections of courses, a 51% increase over the number of sections offered in FY 2000. While annual FTE enrollments grew to 1,940 annual FTE, an increase of 17%, the growth in State funded FTE was even greater, 41% to 1,450 in FY 2003. The percentage of State funded FTE also grew significantly, from 62% in FY 2000 to 75% in FY 2003.

**Table 5.1.4-1  
Annual Workforce Development and Continuing Education Enrollment**

	FY 2000	FY 2001	FY 2002	FY 2003	3 yr % Chg
Annual Total Students	23,649	26,148	25,190	27,358	16%
Annual No. of Sections	1,761	2,300	2,549	2,667	51%
Annual Total FTE	1,653	1,885	1,988	1,940	17%
Annual State FTE	1,030	1,197	1,362	1,449	41%
% Annual State FTE	62%	64%	69%	75%	21%

Work Force Development/Continuing Education is also projecting substantial growth in its programs, with annual funded course FTE enrollments increasing 117% to 3,142 FTE in fall 2002. Not all of these enrollments will be delivered on-campus or at leased sites, although on-campus enrollments or those at the College’s leased sites are expected to increase at a higher rate than those offered off-campus or on-line. These enrollments translate into a projected fall term, on-campus/site enrollment of 937 FTE, an increase of 132% over the 2002 fall term and equivalent to 42% of the 2002 fall FTE enrollment at Germantown.

**Table 5.1.4-2  
WDCE Annual and Fall Term FTE Enrollment**

	2002	2012	10-yr % Chg
Annual State FTE	1,449	3,142	117%
Annual Off-campus/On-line FTE	552	1,068	93%
Annual On-campus/site FTE	892	2,069	132%
Fall On-campus/site FTE	404	937	132%

Focusing on WDCE’s fall term enrollment, consistent with credit enrollment projections, programs in Community Education and Extended Learning and the Gudelsky Institute of Technical Education are projected to increase, but their growth rates, while considerable, are expected to be the lowest of the WDCE areas, 77% and 85%. Both, however, are expected to continue to produce the largest shares of WDCE’s enrollment, although these relative enrollment shares will get smaller, from 37% and 36%, respectively, to 29%, as programs in the Health Sciences Institute (471%) and those in Professional and Workforce Development (213%) expand tremendously. Even though enrollments in the Information Technology Institute are expected to also grow substantially (184%), its relative share of the overall FTE enrollments is expected to increase only by 1% to 9% of the total fall term, on-campus/site FTE enrollment.

**Table 5.1.4-3**

2002 and 2012 Fall Term On-campus/Site FTE by WDCE Program Area

	2002	% Total	2012	% Total	10-yr % Chg
Community Ed & Ext Learning	151	37%	268	29%	77%
Professional & Workforce Dev	48	12%	150	16%	213%
Gudlesky Institute Technical Ed	145	36%	268	29%	85%
Information Technology Institute	32	8%	91	9%	184%
Health Sciences Institute	28	7%	160	17%	471%
Fall On-campus/site FTE (Total)	404	100%	937	100%	132%

Where the growth in WDCE enrollments will occur is also of importance to the College’s planning, especially for facilities. The largest growths in enrollment are expected on the Takoma Park campus (700%) consistent with the opening of the Health Sciences Building and related program expansion, at the Westfield Center (383%), at the Germantown campus (188%) with the planned emphasis on biotechnology and the new Bioscience Education Center, and at the Gaithersburg Center (131%). At the Rockville campus, FTE enrollments are expected to grow by 32%, significantly lower than at all other WDCE sites, and the relative share of enrollments on this campus is also expected to decrease from 66% to 38%. Takoma Park’s share of FTE enrollments is expected to increase from 8% to 27%, thereby representing the second largest share of enrollments.

**Table 5.1.4-4**

2002 and 2012 Fall Term On-campus/Site FTE Enrollment by Location

	2002	% Total	2012	% Total	10-yr % Chg
Germantown	24	6%	69	7%	188%
Rockville	267	66%	352	38%	32%
Takoma Park	32	8%	256	27%	700%
Gaithersburg Center	52	13%	120	13%	131%
Westfield Center	29	7%	140	15%	383%
Fall On-campus/site FTE (Total)	404	100%	937	100%	132%

**5.1.5 Faculty and Staff**

While the College projects that its overall number of FTE faculty will increase at a rate comparable to its overall increase in enrollment, from 672.50 to 807.75, an increase of 135.25 FTE faculty, faculty supporting WDCE will increase modestly, only by 4%, from 6.25 FTE faculty to 6.50 FTE faculty. The number of full-time faculty will remain at 4, while the number of part-time faculty will increase from 9 to 10. These modest changes in faculty recognize that most the growth in WDCE programs will not require support from traditional faculty sources, but rather will rely on professionals from the respective fields.

While the College expects its overall numbers of full-time, part-time, and FTE staff to increase 21% from fall 2002 to fall 2012, consistent with its overall projected increase in fall term FTE enrollment, WDCE is anticipating a substantial 45% increase in staff, reflecting the projected enrollment growth and expanded outreach, particularly in the health sciences at Takoma Park and biotechnology at Germantown. Overall, WDCE staff

is expected to increase by 31.50 FTE staff, with 31 additional full-time staff and 2 additional part-time staff.

The largest growth in positions, not unexpectedly, is planned for the Health Sciences Institute, an addition of 10.25 positions, or 925%. The remaining areas of WDCE are planned to increase by about one-third, while support from central administration staff will add one more full-time position, representing an increase of 20%.

Relative to WDCE locations, again not unexpectedly, Takoma Park will have the highest rate of growth, 375%, with an increase of 9.50 FTE staff positions, followed closely by the Westfield Center at 313%, representing an increase of 8.25 FTE positions. The Gaithersburg Center is planning for a modest 6% growth rate, adding 2.00 FTE positions. Staffing at the Germantown campus will grow by 1.75 FTE positions, or 21%, while at Rockville, 7.50 FTE positions will be added, an increase of 28%.

**Table 5.1.5-1  
2002 and 2012 Staff Positions by WDCE Area**

	2002 FT	2002 PT	2002 FTE	2012 FT	10 yr # (%) Chg	2012 PT	10 yr # (%) Chg	2012 FTE	10 yr # (%) Chg
Vice President	24	3	24.75	32	8 (33%)	3	0 (0%)	32.75	8.00 (32%)
CEEL	18	2	18.50	24	6 (33%)	2	0 (0%)	24.50	6.00 (32%)
PWD	9	1	9.25	12	3 (33%)	2	1 (100%)	12.50	3.25 (33%)
GITE	3	1	3.25	4	1 (33%)	1	0 (0%)	4.25	1.00 (31%)
ITI	9	0	9.00	12	3 (33%)	0	0 (0%)	12.00	3.00 (33%)
HSI	1	0	1.00	10	9 (800%)	1	1 (-)	10.25	10.25 (925%)
Cent Adm	5	0	5.00	6	1 (20%)	0	0 (0%)	6.00	1.00 (20%)
WDCE (Total)	69	7	70.75	100	31 (45%)	9	2 (29%)	102.25	31.50 (45%)

**Table 5.1.5-2  
2002 and 2012 Staff Positions by WDCE Location**

	2002 FT	2002 PT	2002 FTE	2012 FT	10 yr # (%) Chg	2012 PT	10 yr # (%) Chg	2012 FTE	10 yr # (%) Chg
Germantown	8	1	8.25	10	2 (25%)	0	-1 (-100%)	10.00	1.75 (21%)
Rockville	27	3	27.25	34	7 (26%)	3	1 (0%)	34.75	7.50 (28%)
Takoma	2	0	2.00	11	9 (350%)	2	2 (n/a)	11.50	9.50 (375%)
Gaithersburg	30	3	33.75	35	5 (17%)	3	0 (0%)	35.75	2.00 (6%)
Westfield	2	0	2.00	10	8 (300%)	1	1 (100%)	10.25	8.25 (313%)
WDCE (Total)	69	7	73.25	100	31	9	2	102.25	31.50

				(45%)		(29%)		(45%)
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**5.2 EXISTING CONDITIONS**

**5.2.1 Location**

Work Force Development/Continuing Education is spread among the three Montgomery College campuses. In addition to a physical presence on the Takoma Park, Germantown, and Rockville campuses, facilities are also located in leased space in Wheaton, Maryland at the Westfield Center, and in Gaithersburg, Maryland at the Gaithersburg Center.

**5.2.2 Campus Character and Image**

This section is not applicable for Work Force Development/Continuing Education.

**5.2.3 Adjacent Land Use**

This section is not applicable for Work Force Development/Continuing Education.

**5.2.4 Campus Entrance Experience**

This section is not applicable for Work Force Development/Continuing Education.

**5.2.5 Building Usage**

This section is not applicable for Work Force Development/Continuing Education.

**5.2.6 Functional Adequacy of Facilities**

Work Force Development/Continuing Education (WDCE) occupies space at each of the campuses, and also manages two off-campus leased locations, Gaithersburg Business Training Center in Gaithersburg, Maryland and Westfield Center in Wheaton, Maryland. Currently WDCE occupies 1,219 NASF on the Germantown campus, 13,435 NASF on the Rockville campus, and 423 NASF on the Takoma Park campus. Currently the space utilized at each of the campuses is dispersed which does not allow students, visitors, and the College community from benefiting from the ease, energy, and excitement generated by the synergy of proximity and consolidation of like functions.

Descriptions of the programs and functions at the Westfield and Gaithersburg Centers are included below. The general adequacy of each building to support these programs and functions is also presented.

**Westfield Center, Wheaton Plaza in Wheaton (7,811 NASF, 10,793 GSF)**, originally occupied in 1999 and expanded in 2000 is a five year lease that results in the College occupying a portion of the first two floors of the building. The space occupied includes 10 classrooms ranging in capacity from 15 to 25, reception areas, private offices and associated workspace, a small lounge, coat storage, and IT support space.

Except for being split between two floors which results in some inefficiencies and duplication of functions, the instructional space is adequate to meet the instructional needs. However, there is insufficient space for study and for informal meeting and relaxing.

Gaithersburg Business Training Center at 12 S. Summit Avenue, Gaithersburg, Maryland (11,294 NASF, 14,747 GSF), was leased in 2001 for a period of 10 years. Occupying the fourth floor of the building, the renovated space provides WDCE with four computer classrooms, four general purpose classrooms, the WDCE administrative suite, faculty and staff offices including space for the Office of Information Technology (OIT), a reception/registration area, testing area, and lounge.

The instructional space needs are adequate to meet the current programmatic needs; however, the offices are under sized, there is insufficient space for OIT staging and work areas, and there is no room to accommodate growth without leasing additional space. There is also insufficient space for study and for informal meeting and relaxing.

### **5.2.7 Building Conditions**

Montgomery College hired Vanderweil Facility Advisors (VFA) to perform a web enabled software-based facilities condition analysis of each of its three campuses which included its buildings and the site infrastructure components such as electrical utilities, storm sewer, sanitary sewer, parking lots, etc. The primary focus of this effort was to:

- Provide a baseline condition assessment of the College's facilities to include infrastructure components and building systems.
- Provide the College with budget estimates for funding required safety improvements and reducing the deterioration of campus buildings and infrastructure components.
- Assist the College with building code and accessibility compliance and to ensure that the facilities are operated as required.
- Utilize the assessment in the implementation of an ongoing process of the identification and prioritization of maintenance and capital repair projects.
- Provide decision support capabilities with VFA's facility management software solutions.

A Building Conditions analysis was not performed for the leased space at the Westfield and Gaithersburg Centers. Analysis of the spaces that are only partially occupied by Work Force Development/Continuing Education functions are included with the summaries for the Takoma Park, Germantown and Rockville Campuses, sections 2.2.7, 3.2.7, and 4.2.7.

### **5.2.8 Utilities**

This section is not applicable for Work Force Development/Continuing Education.

### **5.2.9 Stormwater Management**

This section is not applicable for Work Force Development/Continuing Education.

### **5.2.10 Circulation and Parking**

This section is not applicable for Work Force Development/Continuing Education.

## **5.3 FACILITIES PROGRAM**

### 5.3.1 Needs Assessment

#### Current and Projected Facility Needs

Assessments of the current and projected facilities needs for Work Force Development/Continuing Education are generated by applying current and projected planning data related to enrollment, instructional delivery, library collections, faculty, and staff to the State of Maryland Guidelines for facilities at community colleges, as well as guidelines developed by the College specifically for Work Force Development/Continuing Education. Separate planning data and needs assessments are done for non-credit programs offered on-campus, whether at Germantown, Rockville, and Takoma Park, and for those offered off-campus, at either the Gaithersburg or Westfield Centers. Refer to Table 5.3.1-1 for the planning data for on-campus functions, and Table 5.3.1-2 for the planning data for off-campus functions.

Current and projected space needs for each type of space in the respective on-campus or off-campus inventories for which a guideline is available are then computed. Comparisons with the respective current inventories and the ones planned for 10 years later, given approved capital projects, are made, and surpluses or deficiencies relative to the respective space categories are identified.

Currently Work Force Development/Continuing Education shows an overall deficiency of -20,916 NASF for its on-campus delivery of programs at the College's Germantown, Rockville, and Takoma Park campuses. This is a significant amount of space representing 139% of the on-campus current inventory for Work Force Development. Work Force Development/Continuing Education has one approved facility project over planning period of 2002 to 2012; the provision of 11,672 NASF in the new Health Sciences Center at the Takoma Park campus. Also reflected in this needs assessment, however, is the addition of 2,650 NASF in the planned, but not yet approved, Bioscience Education Center at the Germantown campus. Despite the almost doubling of the amount of assignable space for Work Force Development/Continuing Education on the College's campuses, space projections for 2012 show a remaining overall deficiency of -59,789 NASF. Refer to Table 5.3.1-3 for the computation of space needs for on-campus delivery of programs.

Currently Work Force Development/Continuing Education for its off-campus delivery of programs at the Gaithersburg and Westfield Centers shows an excess of 6,651 NASF, representing 35% of the off-campus current inventory for Work Force Development. Work Force Development/Continuing Education has no approved facility projects over planning period of 2002 to 2012; the key decision will be whether to continue leasing space for off-campus program delivery or to construct or otherwise acquire permanent facilities. For Work Force Development/Continuing Education at off-campus sites, space projections for 2012 show a modest overall deficiency of -1.396 NASF. Refer to Table 5.3.1-4 for the computation of space needs for off-campus delivery of programs.

**Table 5.3.1-1  
Needs Assessment Planning Data for On-Campus Work Force Development/Continuing Education**

	Fall 2002	Fall 2012
FTDE-Credit	0	0
FTDE-Noncredit	<u>210</u>	<u>424</u>
FTDE-Joint	210	424
WSCH-Lecture-Credit	0	0
WSCH-Lecture-Noncredit	<u>1,553</u>	<u>3,173</u>
WSCH-Lecture-Joint	1,553	3,173
WSCH-Lab-Credit	0	0
WSCH-Lab-Noncredit	<u>1,598</u>	<u>3,188</u>
WSCH-Lab-Joint	1,598	3,188
FTE Students	323	677
Bound Volume Equivalents	0	0
FTE Faculty	6	7
FT-Faculty	4	4
FT-Staff	37	55
Planning Head Count	127	243
Student Headcount	0	0

**Table 5.3.1-2  
Needs Assessment Planning Data for Off-Campus Work Force Development/Continuing Education**

	Fall 2002	Fall 2012
FTDE-Credit	0	0
FTDE-Noncredit	<u>53</u>	<u>160</u>
FTDE-Joint	53	160
WSCH-Lecture-Credit	0	0
WSCH-Lecture-Noncredit	<u>533</u>	<u>1,643</u>
WSCH-Lecture-Joint	533	1,643
WSCH-Lab-Credit	0	0
WSCH-Lab-Noncredit	<u>263</u>	<u>758</u>
WSCH-Lab-Joint	263	758
FTE Students	81	260
Bound Volume Equivalents	0	0
FTE Faculty	0	0
FT-Faculty	0	0
FT-Staff	32	45
Planning Head Count	43	103
Student Headcount	0	0

**Table 5.3.1-3**  
**Computation of Space Needs for On-Campus Work Force Development/Continuing Education**

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
100	CLASSROOM	2,330	5,313	2,984	4,760	11,092	6,333
200	LABORATORY	19,268	4,461	(14,807)	36,172	5,911	(30,261)
210	Class Laboratory	18,386	3,185	(15,201)	34,391	4,635	(29,756)
220	Open Laboratory	882	1,276	394	1,781	1,276	(505)
250	<i>No Allowance</i>						
300	OFFICE	8,230	5,303	(2,927)	11,310	8,423	(2,887)
310	Office/ Conf. Room	7,180	4,596	(2,584)	10,209	7,793	(2,416)
320	Testing/Tutoring	1,050	707	(343)	1,101	630	(471)
350	<i>Included w/ 310</i>						
400	STUDY	1,200	0	(1,200)	1,200	0	(1,200)
410	Study	1,050	0	(1,050)	1,050	0	(1,050)
420-30	Stack/Study	0	0	0	0	0	0
440-55	Processing/Service	150	0	(150)	150	0	(150)
500	SPECIAL USE	0	0	0	0	0	0
520-23	Athletic	0	0	0	0	0	0
530	Media Production	0	0	0	0	0	0
580	Greenhouse	0	0	0	0	0	0
600	GENERAL USE	2,532	0	(2,532)	2,998	3,306	308
610	Assembly	0	0	0	0	0	0
620	Exhibition	600	0	(600)	600	0	(600)
630	Food Facility	633	0	(633)	962	304	(658)
640	<i>Child Care (N/A)</i>	0	0	0			0
650	Lounge	699	0	(699)	836	515	(321)
660	Merchandising	600	0	(600)	600	37	(563)
670	<i>Recreation(N/A)</i>			0			0
680	Meeting Room	0	0	0	0	2,450	2,450
700	SUPPORT	2,434	0	(2,434)	3,350	244	(3,106)
710	Data Processing	600	0	(600)	600	155	(445)
720	Shop/ Storage	1,384	0	(1,384)	2,300	89	(2,211)
730	<i>Included w/ 720</i>			0			0
740	<i>Included w/ 720</i>			0			0
750	Central Service	450	0	(450)	450	0	(450)
760	Hazmat Storage	0	0	0	0	0	0
800	HEALTH CARE	0	0	0	0	0	0
900	<i>No Allowance</i>	0	0	0	0	0	0
050	<i>No Allowance</i>	0	0	0	0	0	0
060	<i>No Allowance</i>	0	0	0	0	0	0
070	<i>No Allowance</i>	0	0	0	0	0	0
090	<i>No Allowance</i>	0	0	0	0	0	0
	<b>Total NASF:</b>	<b>35,993</b>	<b>15,077</b>	<b>(20,916)</b>	<b>59,789</b>	<b>28,976</b>	<b>(30,813)</b>

**Table 5.3.1-4**

**Computation of Space Needs for Off-Campus Work Force Development/Continuing Education**

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
100	CLASSROOM	800	9,898	9,099	2,465	9,898	7,434
200	LABORATORY	2,064	255	(1,809)	5,978	255	(5,723)
210	Class Laboratory	1,841	0	(1,841)	5,306	0	(5,306)
220	Open Laboratory	223	255	32	672	255	(417)
250	<i>No Allowance</i>						
300	OFFICE	6,012	8,616	2,604	8,170	8,616	446
310	Office/ Conf. Room	5,312	8,616	3,304	7,470	8,616	1,146
320	Testing/Tutoring	700	0	(700)	700	0	(700)
350	<i>Included w/ 310</i>						
400	STUDY	800	0	(800)	800	0	(800)
410	Study	700	0	(700)	700	0	(700)
420-30	Stack/Study	0	0	0	0	0	0
440-55	Processing/Service	100	0	(100)	100	0	(100)
500	SPECIAL USE	0	0	0	0	0	0
520-23	Athletic	0	0	0	0	0	0
530	Media Production	0	0	0	0	0	0
580	Greenhouse	0	0	0	0	0	0
600	GENERAL USE	1,600	188	(1,412)	1,600	188	(1,412)
610	Assembly	0	0	0	0	0	0
620	Exhibition	400	0	(400)	400	0	(400)
630	Food Facility	400	0	(400)	400	0	(400)
640	<i>Child Care (N/A)</i>	0	0	0	0	0	0
650	Lounge	400	188	(212)	400	188	(212)
660	Merchandising	400	0	(400)	400	0	(400)
670	<i>Recreation(N/A)</i>	0	0	0	0	0	0
680	Meeting Room	0	0	0	0	0	0
700	SUPPORT	1,179	148	(1,031)	1,489	148	(1,341)
710	Data Processing	400	148	(252)	400	148	(252)
720	Shop/ Storage	479	0	(479)	789	0	(789)
730	<i>Included w/ 720</i>						
740	<i>Included w/ 720</i>						
750	Central Service	300	0	(300)	300	0	(300)
760	Hazmat Storage	0	0	0	0	0	0
800	HEALTH CARE	0	0	0	0	0	0
900	<i>No Allowance</i>	0	0	0	0	0	0
050	<i>No Allowance</i>	0	0	0	0	0	0
060	<i>No Allowance</i>	0	0	0	0	0	0
070	<i>No Allowance</i>	0	0	0	0	0	0
090	<i>No Allowance</i>	0	0	0	0	0	0
	<b>Total NASF:</b>	<b>12,454</b>	<b>19,105</b>	<b>6,651</b>	<b>20,501</b>	<b>19,105</b>	<b>(1,396)</b>

**5.3.2 Proposed Facilities Programs**

One of the priorities for Workforce Development and Continuing Education is ensuring that sufficient and adequate space is available for the College's use. The vision for Work Force Development/Continuing Education seeks to extend and support the College's mission of meeting the multi-leveled educational, economic, and work force development needs of Montgomery County. The capital projects to support this vision are in addition to the effort already underway with Health Sciences project being completed at Takoma Park. Enrollments and the needs of the County relative to Work Force Development/Continuing Education programs should be monitored carefully over the planning period, and consideration given to the possible development of an east County site for program delivery. A description of the programs located within building projects follows. The physical aspects of these projects will be discussed in section 5.4, Master Plan.

**Consolidation of WDCE at Germantown Campus**

Planning for the Bioscience Education Center (69,410 NASF, 126,200 GSF) has included 2,650 NASF for WDCE support as it relates to biotechnology, including classrooms, class labs, and offices. Not included, however, is the consolidation of the remaining projected campus-based WDCE staff on the Germantown campus. These campus-based WDCE staff are to be accommodated in the renovated Social Science and Art Building.

**Alteration of Gudelsky Institute for Technical Education and Replacement of the Interim Technical Training Center**

With the relocation of the central administration functions from the Gudelsky Institute for Technical Education (GITE), the vacated space and that associated with the already vacated photography lab space should be renovated for classroom and class lab needs of the Institute. The Interim Technical Training Center (ITTC) should be replaced with a facility that is better integrated with the needs and functions of the Institute, including supplies storage for GITE.

**Reallocation of South Campus Instruction Building to Work Force Development/Continuing Education**

The South Campus Instruction Building should be reallocated for use by Work Force Development /Continuing Education activities at the Rockville campus that currently are housed at the Campus Center. Any residual space available in this building could be used for any campus or College activity.

**Acquisition/Renovation or Construction of Gaithersburg Center**

This project either acquires and renovates any needed additional space or constructs a new facility to support the Work Force Development/Continuing Education efforts at the Gaithersburg Center. While the College believes such facilities should continue to be leased over the duration of this planning period, an alternative would be to construct a facility to support the Gaithersburg Center.

**Acquisition/Renovation or Construction of Westfield Center**

This project either acquires and renovates any needed additional space or constructs a new facility to support the Work Force Development/Continuing Education efforts at the Westfield Center. While the College believes such facilities should continue to be leased

over the duration of this planning period, an alternative would be to construct a facility to support the Westfield Center.

## **5.4 MASTER PLAN**

### **5.4.1 Campus Structure and Character**

For the on-campus spaces used for program delivery of Work Force Development/Continuing Education, the campus structure and character has been incorporated into the Facilities Master Plan for the individual campuses on which the Work Force development space is housed. An analysis of the structure and character is not applicable for leased space.

### **5.4.2 Proposed Land and Building Use**

One of the goals of the Facilities Master Plan is to co-locate, to the extent possible, Work Force Development/Continuing Education facilities, faculty, and staff in off-campus and on-campus locations so that their identity is reinforced, and they can operate efficiently. The need to locate Work Force Development/Continuing Education facilities convenient to potential students precludes their be co-located in a single location.

Currently, Work Force Development occupies two leased spaces in addition to the College owned space they occupy on each campus. The lease at Westfield Plaza will expire in October of 2005. The lease at Gaithersburg Business Training Center will expire in July of 2011. The small amount of space required in each of these locations makes it more feasible to lease rather than build or acquire space.

A summary of proposed projects identified for Work Force Development/Continuing Education follows. Refer to Figure GT-F5 Proposed Site Plan (Germantown) and Figure RV-F5 Proposed Site Plan (Rockville) for illustration of the suggested locations, building footprints, and heights of the various projects.

#### **New Construction and Projects**

The Facilities Master Plan proposes inclusion of Biotechnology Work Force Development/Continuing Education in the new Bioscience Center proposed for the Germantown Campus. The Bioscience Center would include 2,650 net square feet and 4,800 gross square feet for this purpose. This space will house Work Force Development classrooms, classroom laboratories, and offices specifically associated with biotechnology in the new Bioscience Center.

The Facilities Master Plan also proposes an addition to the Gudelsky Institute for Technical Education on the Rockville Campus. The size of this addition would be 21,155 net square feet and 38,500 gross square feet.

In response to enrollment growth, programmatic requirements, and building condition, the Facilities Master Plan recommends the construction of new buildings and renovation, alteration, or demolition of existing buildings. For new buildings, and those recommended to be renovated or altered, the proposed building use is described below. All other buildings will continue in their current use.

These additions provide the College with opportunities to undertake smaller projects that add space to constrained programs and improve co-location of departments.

#### **5.4.3 Proposed Utilities**

This section is not applicable for Work Force Development/Continuing Education.

#### **5.4.4 Proposed Stormwater Management**

This section is not applicable for Work Force Development/Continuing Education.

#### **5.4.5 Proposed Circulation and Parking**

This section is not applicable for Work Force Development/Continuing Education.

#### **5.4.6 Implementation**

Based on the College's anticipated enrollment growth over the 2002 to 2012 period, and supported by the instructional and other needs identified during the master planning process, the College has identified a number of capital projects for the Workforce Development and Continuing Education (WDCE). Implementation of these projects will allow the College to provide for the physical space needs of WDCE over the ensuing 10-year period. Detailed facility programs will be prepared for each project as the College's capital funding requests are developed for submission to the State of Maryland and Montgomery County.

Throughout this section the term "new construction" is used to describe a completely new facility, while the term "renovation" is used to describe a complete interior and exterior reconstruction of an existing facility. An "alteration" is used to describe a lesser level of effort than a renovation that does not anticipate extensive program modifications to a facility and the term "addition" is used to describe "new construction" that provides for a major enlargement of an existing facility.

The following table lists the WDCE projects included in this 10-Year Facilities Master Plan, as well as project budget estimates. A brief description is provided of each project with emphasis on the major components of the scope of work for each project. With regard to timing, the WDCE projects are separated into a near-term need (2002 to 2007) and a long-term need (2008-2012). Based on current plans, the projects are presented in the recommended sequence for implementation; however, changes in program priorities may lead to changes in the implementation plan.

**Table 5.4.6-1  
Capital Projects for Workforce Development/Continuing Education**

<b>Project</b>	<b>Budget Estimate in Dollars (1/04)</b>
<b>Near-Term Capital Projects (FY 2004 - FY 2007)</b>	
Inclusion of Biotechnology Work Force Development/Continuing Education in Bioscience Center (Germantown Campus)	Refer to Germantown Campus Implementation Plan
Consolidation of Campus-Based Work Force Development Staff in Science and Applied Studies Renovation (Germantown Campus)	Refer to Germantown Campus Implementation Plan
<b>Subtotal</b>	N/A
<b>Long-Term Capital Projects (FY 2008 - FY 2012)</b>	
Alteration of Gudelsky Institute for Technical Education and Replacement of the Interim Technical Training Center (Rockville Campus)	11,590,000
Reallocation of South Campus Instruction Building for Work Force Development (Rockville Campus)	2,656,000
<b>Subtotal</b>	14,250,020

**WDCE Biotechnology in the Bioscience Education Center (New Construction):**

This project is dependent upon the completion of the Bioscience Education Center on the Germantown Campus. For detailed information see the Germantown Campus Facilities Master Plan.

**WDCE Consolidation in the Science and Applied Studies Building:**

This project is dependent upon the completion of the renovation of the Science and Applied Studies Building on the Germantown Campus. For detailed information see the Germantown Campus Facilities Master Plan.

**Gudelsky Institute for Technical Education Addition/Alterations:**

The addition to the Gudelsky Institute responds to the space needs of various technical education programs and will be located adjacent to the existing building. Modest alterations within the existing Gudelsky Institute are anticipated as various programs relocate to accommodate WDCE’s space needs. This project requires the demolition of the existing Interim Technical Training Center (a pre-engineered metal building that is at the end of its useful life) and will also include a realignment of the existing Campus entrance on MD-355.

**South Campus Instruction Building Alterations:**

This building currently provides surge space for on-going renovation projects on the Rockville Campus. As the overall Rockville Campus renovation effort nears completion, the South Campus Instruction Building will be reconfigured to provide a home for the relocation of the WDCE operations currently housed on the second floor of Campus Center.

**WDCE Gaithersburg Business Center:**

The lease for the Gaithersburg Business Center at 12 South Summit Avenue, Gaithersburg, Maryland, expires in July 2011. An evaluation of WDCE's space requirements in the mid-county area should be coordinated with the lease expiration date.

**WDCE Westfield South:**

The lease for Westfield South at 11160 Veirs Mill Road, Silver Spring, Maryland, expires in February 2009. An evaluation of WDCE's space requirements in the down-county area should be coordinated with the lease expiration date.

**WD-A1      Computation of  
Space Needs**

**FACILITIES INVENTORY BY BUILDING**

COLLEGE: Montgomery College-WDCE

FMP: October 20, 2003

Year Built:

HEGIS CODE	HEGIS CATEGORY	1	2	3	4	Total	1	2
		German-town	Rockville	Takoma Park		Permanent On Campus		
<b>100</b>	<b>CLASSROOM</b>		<b>5,313</b>			<b>5,313</b>		
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>4,461</b>	<b>0</b>	<b>0</b>	<b>4,461</b>	<b>0</b>	<b>0</b>
210	Class Laboratory		3,185			3,185		
220	Open Laboratory		1,276			1,276		
250	Research Lab.					0		
<b>300</b>	<b>OFFICE</b>	<b>1,219</b>	<b>3,661</b>	<b>423</b>	<b>0</b>	<b>5,303</b>	<b>0</b>	<b>0</b>
310	Office/ Conf. Room	1,219	3,031	346		4,596		
320	Testing/Tutoring		630	77		707		
350	Included w/ 310					0		
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
410	Study					0		
420-30	Stack/Study					0		
440-55	Processing/Service					0		
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
520-23	Athletic					0		
530	Media Production					0		
580	Greenhouse					0		
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
610	Assembly					0		
620	Exhibition					0		
630	Food Facility					0		
640	Day Care					0		
650	Lounge					0		
660	Merchandising					0		
670	Recreation					0		
680	Meeting Room					0		
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
710	Data Processing					0		
720	Shop					0		
730	Central Storage					0		
740	Vehicle Storage					0		
750	Central Service					0		
760	Hazmat Storage					0		
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>1,219</b>	<b>13,435</b>	<b>423</b>	<b>0</b>	<b>15,077</b>	<b>0</b>	<b>0</b>
	<b>Total GSF:</b>					<b>0</b>		
	<b>Efficiency (%):</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>

**FACILITIES INVENTORY BY BUILDING**

COLLEGE: Montgomery College-WDCE

FMP: October 20, 2003

Year Built:

HEGIS CODE	HEGIS CATEGORY	Total Temporary On Campus	Total All Space On Campus	1	2	Total Leased & Off Campus	Total All Space On & Off
				Westfield Leased	Gaithersb'g Leased		
<b>100</b>	<b>CLASSROOM</b>	<b>0</b>	<b>5,313</b>	<b>5,035</b>	<b>4,863</b>	<b>9,898</b>	<b>15,211</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>4,461</b>	<b>0</b>	<b>255</b>	<b>255</b>	<b>4,716</b>
210	Class Laboratory	0	3,185			0	3,185
220	Open Laboratory	0	1,276		255	255	1,531
250	Research Lab.	0	0			0	0
<b>300</b>	<b>OFFICE</b>	<b>0</b>	<b>5,303</b>	<b>2,628</b>	<b>5,988</b>	<b>8,616</b>	<b>13,919</b>
310	Office/ Conf. Room	0	4,596	2,628	5,988	8,616	13,212
320	Testing/Tutoring	0	707			0	707
350	Included w/ 310	0	0			0	0
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
410	Study	0	0			0	0
420-30	Stack/Study	0	0			0	0
440-55	Processing/Service	0	0			0	0
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
520-23	Athletic	0	0			0	0
530	Media Production	0	0			0	0
580	Greenhouse	0	0			0	0
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>188</b>	<b>188</b>	<b>188</b>
610	Assembly	0	0			0	0
620	Exhibition	0	0			0	0
630	Food Facility	0	0			0	0
640	Day Care	0	0			0	0
650	Lounge	0	0		188	188	188
660	Merchandising	0	0			0	0
670	Recreation	0	0			0	0
680	Meeting Room	0	0			0	0
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>0</b>	<b>148</b>	<b>0</b>	<b>148</b>	<b>148</b>
710	Data Processing	0	0	148		148	148
720	Shop	0	0			0	0
730	Central Storage	0	0			0	0
740	Vehicle Storage	0	0			0	0
750	Central Service	0	0			0	0
760	Hazmat Storage	0	0			0	0
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>0</b>	<b>15,077</b>	<b>7,811</b>	<b>11,294</b>	<b>19,105</b>	<b>34,182</b>
	<b>Total GSF:</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>
	<b>Efficiency (%):</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>

**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-WDCE, Germantown Campus

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Fall 2002 Before Gains/ (Losses)		Fall 2003 After Gains/ (Losses)		Fall 2004 After Gains/ (Losses)		Fall 2005 After Gains/ (Losses)
<b>100</b>	<b>CLASSROOM</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
210	Class Laboratory	0		0		0		0
220	Open Laboratory	0		0		0		0
250	Research Lab.	0		0		0		0
<b>300</b>	<b>OFFICE</b>	<b>1,219</b>	<b>0</b>	<b>1,219</b>	<b>0</b>	<b>1,219</b>	<b>0</b>	<b>1,219</b>
310	Office/ Conf. Room	1,219		1,219		1,219		1,219
320	Testing/Tutoring	0		0		0		0
350	<i>Included w/ 310</i>	0		0		0		0
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
410	Study	0		0		0		0
420-30	Stack/Study	0		0		0		0
440-55	Processing/Service	0		0		0		0
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
520-23	Athletic	0		0		0		0
530	Media Production	0		0		0		0
580	Greenhouse	0		0		0		0
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
610	Assembly	0		0		0		0
620	Exhibition	0		0		0		0
630	Food Facility	0		0		0		0
640	Day Care	0		0		0		0
650	Lounge	0		0		0		0
660	Merchandising	0		0		0		0
670	Recreation	0		0		0		0
680	Meeting Room	0		0		0		0
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
710	Data Processing	0		0		0		0
720	Shop	0		0		0		0
730	Central Storage	0		0		0		0
740	Vehicle Storage	0		0		0		0
750	Central Service	0		0		0		0
760	Hazmat Storage	0		0		0		0
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total NASF:</b>		<b>1,219</b>	<b>0</b>	<b>1,219</b>	<b>0</b>	<b>1,219</b>	<b>0</b>	<b>1,219</b>

ONLY PERMANENT  
ON CAMPUS SPACE IS  
INCLUDED ON THIS TABLE

THIS TABLE MUST BE  
TAILORED FOR COLLEGE-  
SPECIFIC PROGRAMS

**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-WDCI

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY		Fall 2012 After Gains/ (Losses)
<b>100</b>	<b>CLASSROOM</b>	<b>1,150</b>	<b>1,150</b>
<b>200</b>	<b>LABORATORY</b>	<b>660</b>	<b>660</b>
210	Class Laboratory	660	660
220	Open Laboratory		0
250	Research Lab.		0
<b>300</b>	<b>OFFICE</b>	<b>840</b>	<b>2,059</b>
310	Office/ Conf. Room	840	2,059
320	Testing/Tutoring		0
350	<i>Included w/ 310</i>		0
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>
410	Study		0
420-30	Stack/Study		0
440-55	Processing/Service		0
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>
520-23	Athletic		0
530	Media Production		0
580	Greenhouse		0
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>0</b>
610	Assembly		0
620	Exhibition		0
630	Food Facility		0
640	Day Care		0
650	Lounge		0
660	Merchandising		0
670	Recreation		0
680	Meeting Room		0
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>0</b>
710	Data Processing		0
720	Shop		0
730	Central Storage		0
740	Vehicle Storage		0
750	Central Service		0
760	Hazmat Storage		0
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>
<b>Total NASF:</b>		<b>2,650</b>	<b>3,869</b>

ONLY PERMANENT  
ON CAMPUS SPACE IS  
INCLUDED ON THIS TABLE

THIS TABLE MUST BE  
TAILORED FOR COLLEGE-  
SPECIFIC PROGRAMS

**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-WDCE, Rockville Campus

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Fall 2002 Before Gains/ (Losses)		Fall 2003 After Gains/ (Losses)		Fall 2004 After Gains/ (Losses)		Fall 2005 After Gains/ (Losses)
<b>100</b>	<b>CLASSROOM</b>	<b>5,313</b>	<b>0</b>	<b>5,313</b>	<b>0</b>	<b>5,313</b>	<b>0</b>	<b>5,313</b>
<b>200</b>	<b>LABORATORY</b>	<b>4,461</b>	<b>0</b>	<b>4,461</b>	<b>0</b>	<b>4,461</b>	<b>0</b>	<b>4,461</b>
210	Class Laboratory	3,185		3,185		3,185		3,185
220	Open Laboratory	1,276		1,276		1,276		1,276
250	Research Lab.	0		0		0		0
<b>300</b>	<b>OFFICE</b>	<b>3,661</b>	<b>0</b>	<b>3,661</b>	<b>0</b>	<b>3,661</b>	<b>0</b>	<b>3,661</b>
310	Office/ Conf. Room	3,031		3,031		3,031		3,031
320	Testing/Tutoring	630		630		630		630
350	<i>Included w/ 310</i>	0		0		0		0
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
410	Study	0		0		0		0
420-30	Stack/Study	0		0		0		0
440-55	Processing/Service	0		0		0		0
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
520-23	Athletic	0		0		0		0
530	Media Production	0		0		0		0
580	Greenhouse	0		0		0		0
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
610	Assembly	0		0		0		0
620	Exhibition	0		0		0		0
630	Food Facility	0		0		0		0
640	Day Care	0		0		0		0
650	Lounge	0		0		0		0
660	Merchandising	0		0		0		0
670	Recreation	0		0		0		0
680	Meeting Room	0		0		0		0
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
710	Data Processing	0		0		0		0
720	Shop	0		0		0		0
730	Central Storage	0		0		0		0
740	Vehicle Storage	0		0		0		0
750	Central Service	0		0		0		0
760	Hazmat Storage	0		0		0		0
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total NASF:</b>		<b>13,435</b>	<b>0</b>	<b>13,435</b>	<b>0</b>	<b>13,435</b>	<b>0</b>	<b>13,435</b>

ONLY PERMANENT  
ON CAMPUS SPACE IS  
INCLUDED ON THIS TABLE

THIS TABLE MUST BE  
TAILORED FOR COLLEGE-  
SPECIFIC PROGRAMS

**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-WDCE,

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY		Fall 2012 After Gains/ (Losses)
<b>100</b>	<b>CLASSROOM</b>	<b>0</b>	<b>5,313</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>4,461</b>
210	Class Laboratory		3,185
220	Open Laboratory		1,276
250	Research Lab.		0
<b>300</b>	<b>OFFICE</b>	<b>0</b>	<b>3,661</b>
310	Office/ Conf. Room		3,031
320	Testing/Tutoring		630
350	<i>Included w/ 310</i>		0
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>
410	Study		0
420-30	Stack/Study		0
440-55	Processing/Service		0
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>
520-23	Athletic		0
530	Media Production		0
580	Greenhouse		0
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>0</b>
610	Assembly		0
620	Exhibition		0
630	Food Facility		0
640	Day Care		0
650	Lounge		0
660	Merchandising		0
670	Recreation		0
680	Meeting Room		0
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>0</b>
710	Data Processing		0
720	Shop		0
730	Central Storage		0
740	Vehicle Storage		0
750	Central Service		0
760	Hazmat Storage		0
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>0</b>	<b>13,435</b>

ONLY PERMANENT  
ON CAMPUS SPACE IS  
INCLUDED ON THIS TABLE

THIS TABLE MUST BE  
TAILORED FOR COLLEGE-  
SPECIFIC PROGRAMS

**COMPUTATION OF SPACE NEEDS**

COLLEGE: Montgomery College-WDCE, Germantown Campus

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
<b>100</b>	<b>CLASSROOM</b>	<b>293</b>	<b>0</b>	<b>(293)</b>	<b>743</b>	<b>1,150</b>	<b>408</b>
<b>200</b>	<b>LABORATORY</b>	<b>382</b>	<b>0</b>	<b>(382)</b>	<b>685</b>	<b>660</b>	<b>(25)</b>
210	Class Laboratory	315	0	(315)	525	660	135
220	Open Laboratory	67	0	(67)	160	0	(160)
250	No Allowance						
<b>300</b>	<b>OFFICE</b>	<b>1,678</b>	<b>1,219</b>	<b>(459)</b>	<b>2,010</b>	<b>2,059</b>	<b>49</b>
310	Office/ Conf. Room	1,328	1,219	(109)	1,660	2,059	399
320	Testing/Tutoring	350	0	(350)	350	0	(350)
350	Included w/ 310						
<b>400</b>	<b>STUDY</b>	<b>400</b>	<b>0</b>	<b>(400)</b>	<b>400</b>	<b>0</b>	<b>(400)</b>
410	Study	350	0	(350)	350	0	(350)
420-30	Stack/Study	0	0	0	0	0	0
440-55	Processing/Service	50	0	(50)	50	0	(50)
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
520-23	Athletic	0	0	0	0	0	0
530	Media Production	0	0	0	0	0	0
580	Greenhouse	0	0	0	0	0	0
<b>600</b>	<b>GENERAL USE</b>	<b>800</b>	<b>0</b>	<b>(800)</b>	<b>800</b>	<b>0</b>	<b>(800)</b>
610	Assembly	0	0	0	0	0	0
620	Exhibition	200	0	(200)	200	0	(200)
630	Food Facility	200	0	(200)	200	0	(200)
640	Child Care (N/A)	0	0	0	0	0	0
650	Lounge	200	0	(200)	200	0	(200)
660	Merchandising	200	0	(200)	200	0	(200)
670	Recreation(N/A)	0	0	0	0	0	0
680	Meeting Room	0	0	0	0	0	0
<b>700</b>	<b>SUPPORT</b>	<b>506</b>	<b>0</b>	<b>(506)</b>	<b>549</b>	<b>0</b>	<b>(549)</b>
710	Data Processing	200	0	(200)	200	0	(200)
720	Shop/ Storage	156	0	(156)	199	0	(199)
730	Included w/ 720						
740	Included w/ 720						
750	Central Service	150	0	(150)	150	0	(150)
760	Hazmat Storage	0	0	0	0	0	0
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>No Allowance</b>						
<b>050</b>	<b>No Allowance</b>						
<b>060</b>	<b>No Allowance</b>						
<b>070</b>	<b>No Allowance</b>						
<b>090</b>	<b>No Allowance</b>						
<b>Total NASF:</b>		<b>4,059</b>	<b>1,219</b>	<b>(2,840)</b>	<b>5,187</b>	<b>3,869</b>	<b>(1,318)</b>

ONLY PERMANENT ON CAMPUS SPACE IS INCLUDED ON THIS TABLE

USE HARD DATA RATHER THAN FORMULAS FOR THE 10-YEAR PROJECTIONS WHEN AVAILABLE; WHEN NOT AVAILABLE, THE FORMULAS WILL PROVIDE REASONABLE ESTIMATES

SEE "SPACE ALLOCATION GUIDELINES" SHEET FOR FORMULAS AND DEFINITIONS

ENROLLMENT STATISTICS		Fall 2002	Fall 2012
FTDE-C			
FTDE-N		16	38
FTDE-J		16	38
WSCH-Lec-C			
WSCH-Lec-N		195	495
WSCH-Lec-J		195	495
WSCH-Lab-C			
WSCH-Lab-N		45	75
WSCH-Lab-J		45	75
FTE		24	69
BVE			
FTEF		0	0
Ft-Fac		0	0
FT-Staff		8	10
PHC		12	24
Hard Data = <span style="border: 1px solid black; display: inline-block; width: 50px; height: 15px; background-color: #f0f0f0;"></span>			
Formulas = <span style="border: 1px dashed black; display: inline-block; width: 50px; height: 15px;"></span>			
Headcount			

**COMPUTATION OF SPACE NEEDS**

COLLEGE: Montgomery College-WDCE, Rockville Campus

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
100	<b>CLASSROOM</b>	1,733	5,313	3,581	1,530	5,313	3,783
200	<b>LABORATORY</b>	18,007	4,461	(13,546)	29,942	4,461	(25,481)
210	Class Laboratory	17,280	3,185	(14,095)	28,980	3,185	(25,795)
220	Open Laboratory	727	1,276	549	962	1,276	314
250	No Allowance						
300	<b>OFFICE</b>	5,870	3,661	(2,209)	7,124	3,661	(3,463)
310	Office/ Conf. Room	5,520	3,031	(2,489)	6,723	3,031	(3,692)
320	Testing/Tutoring	350	630	280	401	630	229
350	Included w/ 310						
400	<b>STUDY</b>	400	0	(400)	400	0	(400)
410	Study	350	0	(350)	350	0	(350)
420-30	Stack/Study	0	0	0	0	0	0
440-55	Processing/Service	50	0	(50)	50	0	(50)
500	<b>SPECIAL USE</b>	0	0	0	0	0	0
520-23	Athletic	0	0	0	0	0	0
530	Media Production	0	0	0	0	0	0
580	Greenhouse	0	0	0	0	0	0
600	<b>GENERAL USE</b>	932	0	(932)	1,356	0	(1,356)
610	Assembly	0	0	0	0	0	0
620	Exhibition	200	0	(200)	200	0	(200)
630	Food Facility	233	0	(233)	562	0	(562)
640	Child Care (N/A)	0	0	0	0	0	0
650	Lounge	299	0	(299)	394	0	(394)
660	Merchandising	200	0	(200)	200	0	(200)
670	Recreation(N/A)	0	0	0	0	0	0
680	Meeting Room	0	0	0	0	0	0
700	<b>SUPPORT</b>	1,442	0	(1,442)	1,978	0	(1,978)
710	Data Processing	200	0	(200)	200	0	(200)
720	Shop/ Storage	1,092	0	(1,092)	1,628	0	(1,628)
730	Included w/ 720						
740	Included w/ 720						
750	Central Service	150	0	(150)	150	0	(150)
760	Hazmat Storage	0	0	0	0	0	0
800	<b>HEALTH CARE</b>	0	0	0	0	0	0
900	No Allowance						
050	No Allowance						
060	No Allowance						
070	No Allowance						
090	No Allowance						
<b>Total NASF:</b>		<b>28,382</b>	<b>13,435</b>	<b>(14,947)</b>	<b>42,330</b>	<b>13,435</b>	<b>(28,895)</b>

ONLY PERMANENT ON CAMPUS SPACE IS INCLUDED ON THIS TABLE

USE HARD DATA RATHER THAN FORMULAS FOR THE 10-YEAR PROJECTIONS WHEN AVAILABLE; WHEN NOT AVAILABLE, THE FORMULAS WILL PROVIDE REASONABLE ESTIMATES

SEE "SPACE ALLOCATION GUIDELINES" SHEET FOR FORMULAS AND DEFINITIONS

ENROLLMENT STATISTICS		Fall 2002	Fall 2012
FTDE-C			
FTDE-N		173	229
FTDE-J		173	229
WSCH-Lec-C			
WSCH-Lec-N		1,155	1,020
WSCH-Lec-J		1,155	1,020
WSCH-Lab-C			
WSCH-Lab-N		1,440	2,415
WSCH-Lab-J		1,440	2,415
FTE		267	352
BVE			
FTEF		6	7
Hard Data =		Ft-Fac	4
Formulas =		FT-Staff	27
		PHC	103
			135

Headcount

**COMPUTATION OF SPACE NEEDS**

COLLEGE: Montgomery College-WDCE, Takoma/Silver Spring Center

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
<b>100</b>	<b>CLASSROOM</b>	<b>305</b>	<b>0</b>	<b>(305)</b>	<b>2,487</b>	<b>4,629</b>	<b>2,142</b>
<b>200</b>	<b>LABORATORY</b>	<b>879</b>	<b>0</b>	<b>(879)</b>	<b>5,545</b>	<b>4,461</b>	<b>(4,755)</b>
210	Class Laboratory	791	0	(791)	4,886	790	(4,096)
220	Open Laboratory	88	0	(88)	659	0	(659)
250	No Allowance						
<b>300</b>	<b>OFFICE</b>	<b>682</b>	<b>423</b>	<b>(259)</b>	<b>2,176</b>	<b>3,661</b>	<b>527</b>
310	Office/ Conf. Room	332	346	14	1,826	2,703	877
320	Testing/Tutoring	350	77	(273)	350	0	(350)
350	Included w/ 310						
<b>400</b>	<b>STUDY</b>	<b>400</b>	<b>0</b>	<b>(400)</b>	<b>400</b>	<b>0</b>	<b>(400)</b>
410	Study	350	0	(350)	350	0	(350)
420-30	Stack/Study	0	0	0	0	0	0
440-55	Processing/Service	50	0	(50)	50	0	(50)
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
520-23	Athletic	0	0	0	0	0	0
530	Media Production	0	0	0	0	0	0
580	Greenhouse	0	0	0	0	0	0
<b>600</b>	<b>GENERAL USE</b>	<b>800</b>	<b>0</b>	<b>(800)</b>	<b>842</b>	<b>0</b>	<b>2,464</b>
610	Assembly	0	0	0	0	0	0
620	Exhibition	200	0	(200)	200	0	(200)
630	Food Facility	200	0	(200)	200	304	104
640	Child Care (N/A)	0	0	0	0	0	0
650	Lounge	200	0	(200)	242	515	273
660	Merchandising	200	0	(200)	200	37	(163)
670	Recreation(N/A)	0	0	0	0	0	0
680	Meeting Room	0	0	0	0	2,450	2,450
<b>700</b>	<b>SUPPORT</b>	<b>487</b>	<b>0</b>	<b>(487)</b>	<b>822</b>	<b>0</b>	<b>(578)</b>
710	Data Processing	200	0	(200)	200	155	(45)
720	Shop/ Storage	137	0	(137)	472	89	(383)
730	Included w/ 720						
740	Included w/ 720						
750	Central Service	150	0	(150)	150	0	(150)
760	Hazmat Storage	0	0	0	0	0	0
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>No Allowance</b>						
<b>050</b>	<b>No Allowance</b>						
<b>060</b>	<b>No Allowance</b>						
<b>070</b>	<b>No Allowance</b>						
<b>090</b>	<b>No Allowance</b>						
<b>Total NASF:</b>		<b>3,552</b>	<b>423</b>	<b>(3,129)</b>	<b>12,272</b>	<b>12,751</b>	<b>(600)</b>

ONLY PERMANENT ON CAMPUS SPACE IS INCLUDED ON THIS TABLE

USE HARD DATA RATHER THAN FORMULAS FOR THE 10-YEAR PROJECTIONS WHEN AVAILABLE; WHEN NOT AVAILABLE, THE FORMULAS WILL PROVIDE REASONABLE ESTIMATES

SEE "SPACE ALLOCATION GUIDELINES" SHEET FOR FORMULAS AND DEFINITIONS

ENROLLMENT STATISTICS		Fall 2002	Fall 2012
FTDE-C			
FTDE-N		21	157
FTDE-J		21	157
WSCH-Lec-C			
WSCH-Lec-N		203	1,658
WSCH-Lec-J		203	1,658
WSCH-Lab-C			
WSCH-Lab-N		113	698
WSCH-Lab-J		113	698
FTE		32	256
BVE			
FTEF		0	0
Ft-Fac		0	0
FT-Staff		2	11
PHC		12	84

Hard Data =

Formulas =

Headcount

**COMPUTATION OF SPACE NEEDS**

COLLEGE: Montgomery College-WDCE, Gaithersburg Center

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
<b>100</b>	<b>CLASSROOM</b>	<b>563</b>	<b>4,863</b>	<b>4,301</b>	<b>1,103</b>	<b>4,863</b>	<b>3,761</b>
<b>200</b>	<b>LABORATORY</b>	<b>1,088</b>	<b>255</b>	<b>(833)</b>	<b>2,390</b>	<b>255</b>	<b>(2,135)</b>
210	Class Laboratory	945	0	(945)	2,100	0	(2,100)
220	Open Laboratory	143	255	112	290	255	(35)
250	No Allowance						
<b>300</b>	<b>OFFICE</b>	<b>5,330</b>	<b>5,988</b>	<b>658</b>	<b>6,160</b>	<b>5,988</b>	<b>(172)</b>
310	Office/ Conf. Room	4,980	5,988	1,008	5,810	5,988	178
320	Testing/Tutoring	350	0	(350)	350	0	(350)
350	Included w/ 310						
<b>400</b>	<b>STUDY</b>	<b>400</b>	<b>0</b>	<b>(400)</b>	<b>400</b>	<b>0</b>	<b>(400)</b>
410	Study	350	0	(350)	350	0	(350)
420-30	Stack/Study	0	0	0	0	0	0
440-55	Processing/Service	50	0	(50)	50	0	(50)
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
520-23	Athletic	0	0	0	0	0	0
530	Media Production	0	0	0	0	0	0
580	Greenhouse	0	0	0	0	0	0
<b>600</b>	<b>GENERAL USE</b>	<b>800</b>	<b>188</b>	<b>(612)</b>	<b>800</b>	<b>188</b>	<b>(612)</b>
610	Assembly	0	0	0	0	0	0
620	Exhibition	200	0	(200)	200	0	(200)
630	Food Facility	200	0	(200)	200	0	(200)
640	Child Care (N/A)	0	0	0	0	0	0
650	Lounge	200	188	(12)	200	188	(12)
660	Merchandising	200	0	(200)	200	0	(200)
670	Recreation(N/A)	0	0	0	0	0	0
680	Meeting Room	0	0	0	0	0	0
<b>700</b>	<b>SUPPORT</b>	<b>691</b>	<b>0</b>	<b>(691)</b>	<b>798</b>	<b>0</b>	<b>(798)</b>
710	Data Processing	200	0	(200)	200	0	(200)
720	Shop/ Storage	341	0	(341)	448	0	(448)
730	Included w/ 720						
740	Included w/ 720						
750	Central Service	150	0	(150)	150	0	(150)
760	Hazmat Storage	0	0	0	0	0	0
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>No Allowance</b>						
<b>050</b>	<b>No Allowance</b>						
<b>060</b>	<b>No Allowance</b>						
<b>070</b>	<b>No Allowance</b>						
<b>090</b>	<b>No Allowance</b>						
<b>Total NASF:</b>		<b>8,872</b>	<b>11,294</b>	<b>2,422</b>	<b>11,650</b>	<b>11,294</b>	<b>(356)</b>

ONLY PERMANENT ON CAMPUS SPACE IS INCLUDED ON THIS TABLE

USE HARD DATA RATHER THAN FORMULAS FOR THE 10-YEAR PROJECTIONS WHEN AVAILABLE; WHEN NOT AVAILABLE, THE FORMULAS WILL PROVIDE REASONABLE ESTIMATES

SEE "SPACE ALLOCATION GUIDELINES" SHEET FOR FORMULAS AND DEFINITIONS

ENROLLMENT STATISTICS		Fall 2002	Fall 2012
FTDE-C			
FTDE-N		34	69
FTDE-J		34	69
WSCH-Lec-C			
WSCH-Lec-N		375	735
WSCH-Lec-J		375	735
WSCH-Lab-C			
WSCH-Lab-N		135	300
WSCH-Lab-J		135	300
FTE		52	120
BVE			
FTEF		0	0
Hard Data =		0	0
Ft-Fac		0	0
Formulas =		30	35
FT-Staff		30	35
PHC		32	52

Headcount

**COMPUTATION OF SPACE NEEDS**

COLLEGE: Montgomery College-WDCE, Westfield Center

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
<b>100</b>	<b>CLASSROOM</b>	<b>237</b>	<b>5,035</b>	<b>4,798</b>	<b>1,362</b>	<b>5,035</b>	<b>3,673</b>
<b>200</b>	<b>LABORATORY</b>	<b>976</b>	<b>0</b>	<b>(976)</b>	<b>3,588</b>	<b>0</b>	<b>(3,588)</b>
210	Class Laboratory	896	0	(896)	3,206	0	(3,206)
220	Open Laboratory	80	0	(80)	382	0	(382)
250	No Allowance						
<b>300</b>	<b>OFFICE</b>	<b>682</b>	<b>2,628</b>	<b>1,946</b>	<b>2,010</b>	<b>2,628</b>	<b>618</b>
310	Office/ Conf. Room	332	2,628	2,296	1,660	2,628	968
320	Testing/Tutoring	350	0	(350)	350	0	(350)
350	Included w/ 310						
<b>400</b>	<b>STUDY</b>	<b>400</b>	<b>0</b>	<b>(400)</b>	<b>400</b>	<b>0</b>	<b>(400)</b>
410	Study	350	0	(350)	350	0	(350)
420-30	Stack/Study	0	0	0	0	0	0
440-55	Processing/Service	50	0	(50)	50	0	(50)
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
520-23	Athletic	0	0	0	0	0	0
530	Media Production	0	0	0	0	0	0
580	Greenhouse	0	0	0	0	0	0
<b>600</b>	<b>GENERAL USE</b>	<b>800</b>	<b>0</b>	<b>(800)</b>	<b>800</b>	<b>0</b>	<b>(800)</b>
610	Assembly	0	0	0	0	0	0
620	Exhibition	200	0	(200)	200	0	(200)
630	Food Facility	200	0	(200)	200	0	(200)
640	Child Care (N/A)	0	0	0	0	0	0
650	Lounge	200	0	(200)	200	0	(200)
660	Merchandising	200	0	(200)	200	0	(200)
670	Recreation(N/A)	0	0	0	0	0	0
680	Meeting Room	0	0	0	0	0	0
<b>700</b>	<b>SUPPORT</b>	<b>488</b>	<b>148</b>	<b>(340)</b>	<b>690</b>	<b>148</b>	<b>(542)</b>
710	Data Processing	200	148	(52)	200	148	(52)
720	Shop/ Storage	138	0	(138)	340	0	(340)
730	Included w/ 720						
740	Included w/ 720						
750	Central Service	150	0	(150)	150	0	(150)
760	Hazmat Storage	0	0	0	0	0	0
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>No Allowance</b>						
<b>050</b>	<b>No Allowance</b>						
<b>060</b>	<b>No Allowance</b>						
<b>070</b>	<b>No Allowance</b>						
<b>090</b>	<b>No Allowance</b>						
<b>Total NASF:</b>		<b>3,583</b>	<b>7,811</b>	<b>4,228</b>	<b>8,851</b>	<b>7,811</b>	<b>(1,040)</b>

ONLY PERMANENT ON CAMPUS SPACE IS INCLUDED ON THIS TABLE

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SEE "SPACE ALLOCATION GUIDELINES" SHEET FOR FORMULAS AND DEFINITIONS

ENROLLMENT STATISTICS		Fall 2002	Fall 2012
FTDE-C			
FTDE-N		19	91
FTDE-J		19	91
WSCH-Lec-C			
WSCH-Lec-N		158	908
WSCH-Lec-J		158	908
WSCH-Lab-C			
WSCH-Lab-N		128	458
WSCH-Lab-J		128	458
FTE		29	140
BVE			
FTEF		0	0
Ft-Fac		0	0
FT-Staff		2	10
PHC		11	51

Hard Data =

Formulas =

Headcount

**COMPUTATION OF PARKING NEEDS**  
 COLLEGE: Montgomery College-WDCE  
 FMP: October 20, 2003

PARKING CATEGORY	FACTOR	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
FTDE-J	0.75	12			29		
FTEF and FT-Staff	0.75	6			8		
<b>SUBTOTAL</b>		<b>18</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>0</b>	<b>0</b>
Visitors	0.02	0			1		
<b>REGULAR SPACES</b>		<b>18</b>	<b>1,163</b>	<b>1,145</b>	<b>37</b>	<b>1,163</b>	<b>1,126</b>
Reserved Accessible*		22	24	2	22	24	2
<b>ALL SPACES</b>		<b>40</b>	<b>1,187</b>	<b>1,147</b>	<b>59</b>	<b>1,187</b>	<b>1,128</b>

\* In addition to the regular parking spaces, the Americans with Disabilities Act requires reserved spaces for disabled individuals. Reserved accessible spaces shall conform to the requirements in the space allocation guidelines:

TOTAL SPACES	REQUIRED ADA	TOTAL SPACES	REQUIRED ADA
<= 25	1	201 - 300	7
26 - 50	2	310 - 400	8
51 - 75	3	410 - 500	9
76 - 100	4	501 - 1,000	2% of total
101 - 150	5	> 1,000	20 plus 1 for each
151 - 200	6		100 beyond 1,000

Note: Calculation of need for reserved accessible spaces (22) is based on number of current and 10 year regular parking spaces (1163) at MC-G.

ONLY PARKING FOR  
 ON CAMPUS SPACE IS  
 INCLUDED ON THIS TABLE

"NEED" DATA FOR RESERVED  
 ACCESSIBLE SPACES MUST  
 ENTERED MANUALLY USING  
 THE ABOVE ADA GUIDELINES

"NEED" DATA FOR ALL OTHER  
 CATEGORIES ARE ENTERED  
 AUTOMATICALLY FROM THE  
 ENROLLMENT/EMPLOYMENT  
 STATISTICS ON TABLE 3

**SPACE ALLOCATION GUIDELINES**  
 COLLEGE: Montgomery College-WDCE  
 FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	FACTOR FOR FTDE-N		FORMULA
		≤ 3,000	> 3,000	
<b>100</b>	<b>CLASSROOM</b>	1.50	1.11	Factor x WSCH-Lec-J
<b>200</b>	<b>LABORATORY</b>			<b>Total</b>
210	Class Laboratory	7.00	5.83	Factor x WSCH-Lab-J; except for RV = 12.00/10.00
220	Open Laboratory			4.2 x FTDE-N
250	<i>No Allowance</i>			
<b>300</b>	<b>OFFICE</b>			<b>Total</b>
310	Office/ Conf. Room			(166 x (FTEF + FT-Staff))
320	Testing/Tutoring			Core of 350 + 1.75 x FTDE-N beyond 200
350	<i>Included w/ 310</i>			
<b>400</b>	<b>STUDY</b>			<b>Total</b>
410	Study			Core of 350
420-30	Stack/Study			None
440-55	Processing/Service			Core of 50
<b>500</b>	<b>SPECIAL USE</b>			<b>Total</b>
520-23	Athletic			None
530	Media Production	0.80	2.00	None
580	Greenhouse			None
<b>600</b>	<b>GENERAL USE</b>			<b>Total</b>
610	Assembly			None
620	Exhibition			Core of 200
630	Food Facility	10.20	8.40	Core of 200 + (Factor x PHC beyond 100)
640	<i>No Allowance</i>			
650	Lounge			Core of 200 + (3.0 x PHC beyond 70)
660	Merchandising			Core of 200
670	<i>No Allowance</i>			
680	Meeting Room			None
<b>700</b>	<b>SUPPORT</b>			<b>Total</b>
710	Data Processing			Core of 200
720	Shop/ Storage			0.04 x (All categories less 720-40 and 760)
730	<i>Included w/ 720</i>			
740	<i>Included w/ 720</i>			
750	Central Service			Core of 150
760	Hazmat Storage			None
<b>800</b>	<b>HEALTH CARE</b>			None
<b>900</b>	<b>No Allowance</b>			
<b>050</b>	<b>No Allowance</b>			
<b>060</b>	<b>No Allowance</b>			
<b>070</b>	<b>No Allowance</b>			
<b>090</b>	<b>No Allowance</b>			
<b>Total NASF:</b>				

- FTDE: Full-time day equivalent students. Fall credit and/or eligible non-credit hours taught between 8 am and 5 pm divided by 15.  
 -C = credit only; -N = non-credit only; -J = joint credit and non-credit.
- WSCH-Lec: Weekly student contact hours for on-campus day students in credit and/or eligible non-credit courses where instruction is primarily lecture.  
 -C = credit only; -N = non-credit only; -J = joint credit and non-credit.
- WSCH-Lab: Weekly student contact hours for on-campus day students in credit and/or eligible non-credit course where instruction is primarily lab.  
 -C = credit only; -N = non-credit only; -J = joint credit and non-credit.
- FTE: Full-time equivalent students. Fall credit hours divided by 15.  
 BVE: Bound volume equivalent. 20,000 BVE for the first 1,000 FTE and 1,000 BVE for every 100 FTE above 1,000.  
 FTEF: Full-time equivalent faculty. Full-time faculty, including librarians, plus 25% of part-time faculty.  
 FT-Fac: Full-time faculty.  
 FT-Staff: Full-time staff.  
 PHC: Planning head count. 50% of the sum of FTDE for on-campus credit and eligible non-credit courses and FTEF and FT-Staff, and includes space for seating, preparation, and storage.

## **6.0 CENTRAL ADMINISTRATION**

### **6.1 BACKGROUND INFORMATION**

#### **6.1.1 Facilities Master Plan**

Montgomery College began this Collegewide Facilities Master Plan effort in 2001. The major components of the Master Plan are the Rockville, Germantown and Takoma Park Campuses, Workforce Development/Continuing Education, and Central Administration. The time frame for the Facilities Master Plan is ten years, 2002 to 2012, and the time frame for twenty-year Land Use Plan extends out to 2022. The overarching goal of the Facilities Master Plan is to establish a framework for the development of capital projects to support the role, mission, and academic vision of Montgomery College.

This is the first Facilities Master Plan undertaken by the College that looks at Central Administration as a unique function distinct from the individual campuses. To support the College's administration activities and establish a coherent, logical framework for development of capital projects, the Facilities Master Plan has established goals and priorities. This Master Plan for Central Administration focuses on:

- relocating, as appropriate, central administration offices and functions from core campus facilities to facilities supporting central administration;
- co-locating central administration departments and functions rationally so that students, visitors, and the College community itself benefit from the ease, energy, and excitement generated by the synergy of proximity; and
- providing sufficient and adequate space—offices, meeting rooms, and support facilities—based on existing and projected needs, so that each and every area can contribute creatively and productively every day to supporting the College as it helps students change their lives.

#### **6.1.2 Institutional Characteristics**

Montgomery College is one of the largest community colleges in the State of Maryland, with three campuses at Germantown, Rockville, and Takoma Park. Workforce Development and Continuing Education ("WDCE") efforts take place on all three campuses, two leased sites at the Gaithersburg and Westfield Centers, and several other sites, including the National Institutes of Health, the County Detention Center, local high schools, and Walter Reed Army Medical Center. These credit and non-credit programs support the College's mission of changing student lives through associate degrees, certificates, transfer to baccalaureate institutions, or the acquisition or enhancement of occupational skills. Montgomery College recognizes the importance of the elements contributing to student success—the learner's assumptions and perspectives, faculty responsibilities, the curriculum, and teaching methodology.

As the College in its 55-year history has served the Montgomery County community and surrounding areas, each of these student success elements has undergone considerable transformation due to changing demographics, technology, pedagogy, political circumstances, and other societal factors. The College's administrative reorganization in

2001 and the emergence of college-wide access to electronic communications have enabled the College community to think and act college-wide, rather than campus-wide.

Top-level administrators on each campus have college-wide responsibilities. All full-time College employees have email and the College intranet is used to post information, facilitate discussion, and collect feedback. Student services ranging from web registration and grade posting to in-depth advising and abundant transfer information to distance learning courses are making the virtual campus a reality. Through a partnership with the University System of Maryland, College students can continue their education and earn a bachelor's degree in the County. The College Institute affords qualified high school students the opportunity to take College classes and earn college credit. Montgomery Scholars study at Cambridge University in England. Almost 2,000 students take on-line courses. The College not only provides a variety of programs and support services that foster the personal and professional growth of its students but also continually strives to meet the ever-changing needs and interests of the community.

The foundations for Montgomery College's effectiveness as "the community's college" rest with outstanding programs, effective partnerships, and sound practices and policies. Central Administration as a unit of the College incorporates all of those institutional support offices and departments that function to support these four "P's" and the efforts of the three campuses and WDCE. Four major organizational components comprise Central Administration:

- Office of the President, including Diversity and Equity, Government Relations, and General Counsel
- Office of the Executive Vice President for Academic and Student Services, including Academic and Student Services, Admissions, Records, Registration, and Student Financial Aid
- Office of the Executive Vice President for Administrative and Fiscal Services, including Business, Facilities, Human Resources, Information Technology, Auxiliary Services, Budgets and Audits, Institutional Research and Analysis, Planning and Institutional Projects, and Policy Development
- Office of the Vice President for Institutional Advancement, including Annual Gift Giving and Foundation Relations, Communications, Development, and Grants

While Central Administration has a strong visible presence on the Rockville campus, the College's approach to organization and management has been to weave some of this institutional support into the campus fabrics as well.

### **6.1.3 Academic Programs**

Montgomery College is authorized by the Maryland Higher Education Commission to offer four degrees: the Associate of Arts (A.A.), the Associate of Science (A.S.), and the Associate of Arts in Teaching (A.A.T.) for students wanting to transfer to baccalaureate programs and the Associate of Applied Science (A.A.S.) for those seeking immediate employment. The College also awards certificates ("Cert") that focus on the development of technical skills, as well as letters of recognition ("L of R") for non-degree seeking students who satisfactorily complete certain courses. In summary the College offers 75

different degree programs, 52 certificate programs, and 7 letter of recognition programs. Rockville has the highest concentration of programs offered, although each campus has or is developing unique program offerings. Not included here are the programs offered by WDCE.

**Table 6.1.3-1  
Summary of 2002 Academic Programs Offered**

	Degree	Cert	L of R
Total	75	52	7
Germantown	37 (49%)	18 (34%)	5 (71%)
Rockville	62 (83%)	42 (81%)	5 (71%)
Takoma Park	28 (37%)	11 (14%)	5 (71%)

**Table 6.1.3-2  
Number of 2002 Academic Programs and Location by Program Area**

Program Area	AA	AS	AAT	AAS	Cert	L of R
Advertising Art				2 R	2 R	
Accounting				1 GR	1 GR	
Art	1 GT; 3 R				2 GRT	
Automotive Technology				1 R	5 R	
Business Administration	2 GRT					
Biological/Life Sciences		1 GRT				
Biological Technologies				1 G	1 G	
Building Trades Technology				1 R	1 R	
Computer Application				1 GRT	3 GRT; 1 R	1 R; 1 GRT
Chemistry/Life Sciences		inc				
Criminal Justice				1 R		
Computer Science/Technologies	1 R; 1 GRT				1 GRT	1 GRT
Architectural/Construction Tech				2 R	2 R	
Dance	1 R					
Education			1 GRT	1 R	1 R	
Electrical Engineering				1 GRT		
English/Technical Writing					1 G	
Engineering Science				9 GRT		
Engineering Technology				1 G		
Food/Beverage Management				1 R	1 R	
Fire Science				1 R	1 R	
Geography				1 R	2 R	
Health	5 R				1 R	
Health Information Technology				1 T	2 T	

Hotel/Motel Management				1 R	1 R	
Interior Design	1 R			1 R		
Paralegal Studies				1 GT	1 GT	1 GT
Landscape Technology				1 G	1 G	
Mathematics		1 GRT				
Management				1 GRT; 2 R;1 GR	1 GRT; 2 GR; 1R	2 GRT
Mental Health				1 T		
Diagnostic Medical Sonography				1 T	1 T	
Microcomputer Technician				1 G	1 G	1 G
Music	1 R				1 R	
Nursing		1 T				
Networking				1 G	2 G	
Physical Education	inc				inc	
Photography				1 R	5 R	
Physics		1 GRT				
Printing Technology				1 R	2 R	
Physical Therapist Assistant				1 T		
Radiologic Technology				1 T		
Surgical Technologist				1 T		
American Sign Language				1 GRT	1 GRT	
Theatre	2 R					
Television/Radio				2 R	4 R	
General Studies	1 GRT					
Liberal Arts	3 GRT					
Pre-Professional	5 GRT					

GRT: Germantown, Rockville, Takoma Park  
 G: Germantown only  
 R: Rockville only  
 T: Takoma Park only  
 Inc: included

General Education requirements are a part of all degree programs, with courses providing students with a common, well-grounded educational experience to support and complement the courses in their majors. In addition to specific course content, General Education requirements assist students in the development of critical literacy, respect for others, creative expression, effective oral and written communication, and respect for the intellectual community tempered with skepticism about unchallenged “truths.” Providing foundation and distribution course requirements, the College’s General Education Program conforms to the Maryland Higher Education Commission Academic Regulations on General Education and Transfer.

In addition to courses supporting the General Education curriculum, the campuses offer courses supporting student development, addressing study habits, college survival, and memory skills, building confidence in math, and developing a portfolio. Students are also

taught how to plan, establish, or change a career. International students are provided a specific orientation course to American higher education customs, typically taken in conjunction with American language development courses. These courses support the College's philosophy and approach to building student success and changing lives.

To serve students with high academic ability and motivation, the College maintains an Honors Program offering advanced level, highly stimulating learning experiences both inside and outside the classroom through a variety of seminars, independent studies, tutorials, and honors modules of existing courses. Students who engage in honors activities and programming have completed 12 hours of college-level work with a GPA of 3.2 or higher. The Honors Program implements the Montgomery Scholars Program, which is designed for high school graduates planning to transfer to baccalaureate programs, and the Millennium Scholars Program, which is designed primarily for adult, part-time students at the Germantown and Takoma Park campuses.

The College's mission is to meet the needs of not only those students who come well equipped academically but also those who come under-prepared. The Appropriate Course Placement Policy of the College mandates required placement based on scores from the College admissions test. Traditionally about two-thirds of the students evaluated are recommended for remediation in mathematics, one-fourth for remediation in English, and one-half for remediation in reading. The developmental education program is comprised of two, non-credit bearing courses in Mathematics, English, and Reading. Movement through the sequences varies by discipline; however, developmental courses have entry and exit level testing procedures.

The American English Language Program ("AELP") at Montgomery College is a multi-level, cross-cultural, highly structured program designed to meet the language needs of non-native speakers of American English. AELP supports students with intermediate to advanced English-speaking skills and allows them to earn institutional credit as they prepare for college-level courses. Students with entry level English speaking skills begin their work under Continuing Education in a separate sequence of courses. The AELP Program is a dynamic and flexible program that strives to meet the needs of the ever growing and extraordinarily diverse student population.

Delivery of all these programs is expected to change substantially over the coming decade. The College has made significant and substantial investments in its classroom environments to incorporate smart instructional technology and to provide and support technology-based learning centers that help students learn effectively and efficiently. The forthcoming challenges will be to keep current in computer technology, develop and implement alternative course delivery, assess student technology readiness, and train faculty and staff in the use of new technologies. Working as a team, the Office of Information Technology, the Center for Teaching and Learning, and the Office of Human Resources Professional Development hold in high priority the development and implementation of strategies and programs that address these continuing technology challenges.

Students can now complete many of the College's General Education and degree requirements by enrolling in distance learning course sections, and the number of on-

campus courses with a distance learning component continues to increase. A number of non-credit distance learning courses are also available for students through such third party vendors as Ed to Go. The educational community can also take advantage of other alternative instructional delivery modes. Channel 10, the College's county-wide television station, broadcasts television courses, and some limited interactive television capability supports two-way instruction, meetings, and demonstration courses.

Apart from technology, the College must prepare to address other changes in pedagogy. Mathematics instruction, for example, is transforming from a traditional classroom chalk talk to an interactive lab environment. Professions such as engineering, education, nursing, and the health sciences, are increasing their requirements for professionally based learning early in the college experience, and the specialized learning environments which had been typically associated with upper-level baccalaureate education are now present during the first two college years. Community colleges generally and Montgomery College specifically can be expected to decrease its reliance on classroom environments, even smart ones, and shift to more "lab-like" teaching and learning environments. In addition, instruction, especially in those disciplines with heavy emphasis on specialized learning environments can be expected to require more scheduled time in the lab. Finally, the emphasis on collaborative learning will continue to require flexible instructional environments that allow seating and equipment to be rearranged and study and work spaces that support small groups of students engaged in projects.

These instructional delivery changes, together with the increases projected for enrollment, can be expected to impact the College's contact hour productions. The ratio of contact hours (WSCH) to credit hours (SCH) shows the extent to which time scheduled in class is greater than the credit hours earned. In most classroom courses, WSCH equals SCH, and the ratio is 1.00. For more "lab" environments, whether science, physical education, art, or music, this ratio gets larger because of the lab component. For example, the course Illustration I is offered for 3 SCH, but has 2 hours of lecture and 3 hours of lab per week, with a WSCH/SCH ratio of 1.67. In fall 2002 the College's average WSCH to SCH ratio was 1.18, and by 2012 the College believes this will increase to 1.23 primarily because of increased availability of labs and lab courses at Germantown and Takoma Park. The majority, 71%, of the College's contact hours are expected to be generated during the day (from 8:00 a.m. to 5:00 p.m., Monday through Friday), much like in fall 2002. Finally, the relative percentage of contact hours in lab environments is projected to increase from 27% in 2002 to 38% in 2012, reflecting increased availability of lab environments and changes in pedagogy in disciplines such as Mathematics.

**Table 6.1.3-3  
2002 and 2012 Credit and Contact Hours**

**Contact Hour (WSCH) to Credit Hour (SCH) Ratio**

	2002 WSCH	2002 SCH	2002 WSCH/ SCH
Germantown	36,929	33,356	1.11
Rockville	141,830	120,748	1.17
Takoma Park	43,960	35,367	1.24
College (Total)	222,719	189,471	1.18

2012 WSCH	10 yr % Chg	2012 SCH	10 yr % Chg	2012 WSCH/ SCH	10 yr % Chg
53,355	44%	45,144	35%	1.19	6%
152,786	8%	128,991	7%	1.18	1%
73,969	68%	54,527	54%	1.36	10%
280,110	26%	228,662	21%	1.23	7%

**Day and Evening Contact Hour**

	2002 Day WSCH	2002 Evening WSCH	2002 Total WSCH	2002 % Day WSCH
Germantown	24,785	12,144	36,929	67%
Rockville	105,961	35,869	141,830	74%
Takoma Park	30,935	13,025	43,960	70%
College (Total)	161,681	61,038	222,719	73%

2012 Day WSCH	10 yr % Chg	2012 Evening WSCH	10 yr % Chg	2012 Total WSCH	10 yr % Chg	2012 % Day WSCH
34,132	38%	19,223	58%	53,355	44%	64%
113,175	7%	39,611	10%	152,786	8%	74%
51,121	65%	22,848	75%	73,969	68%	69%
198,428	23%	81,682	34%	280,110	26%	71%

**Day Lecture and Lab Contact Hour**

	2002 Day Lecture WSCH	2002 Day Lab WSCH	2002 Day Total WSCH	2002 Day % Lab WSCH
Germantown	18,442	6,343	24,785	26%
Rockville	76,829	29,132	105,961	27%
Takoma Park	22,775	8,160	30,935	26%
College (Total)	118,046	43,635	161,681	27%

2012 Day Lecture WSCH	10 yr % Chg	2012 Day Lab WSCH	10 yr % Chg	2012 Day Total WSCH	10 yr % Chg	2012 Day % Lab WSCH
20,688	12%	13,444	112%	34,132	38%	39%
68,696	-11%	44,479	53%	113,175	7%	39%
33,744	48%	17,377	113%	51,121	65%	34%
123,128	4%	75,300	73%	198,428	23%	38%

**6.1.4 Student Development and Other Services**

On all three campuses, the Student Development Division provides a broad spectrum of student services, including:

- assessment to ensure appropriate course placement of students given their skills, advising and counseling to assist students, in groups and individually, in making educational, career, and personal decisions and in planning and progressing toward their academic and career goals,
- academic support skill development, including study and test-taking skill development, strategies for overcoming math anxiety, and time management,
- disability support services, in accordance with the provisions of the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 and from the framework of student self-determination and self-advocacy, which determine and facilitate appropriate academic and technological accommodations, act as liaisons with College resources and external agencies and consultants, and provide referral services for students with disabilities,
- international and multicultural student services for students from diverse cultures and language backgrounds,

- career and transfer assistance, offering information and assistance on choosing majors and exploring career fields, job opportunities, and educational programs at four-year colleges and universities,
- student employment services, including employment skills training, matching students with employment openings, and placing students in cooperative education and internship experiences, and
- a wide variety of educational, social, cultural, leadership, and recreational activities that enhance student life.

In addition to these student development programs, the College further supports campus life for students by operating bookstores, child care centers, and food services on each campus. Safety and Security Offices on each campus are responsible for the protection of students, personnel, and visitors and their property and provide first aid response, emergency assistance, escort services, and lost and found services. They also issue vehicle registration and parking permits and enforce campus parking regulations.

Finally, each campus library provides a wide variety of information resources and services to support the curricula of the College. The Rockville campus library has the largest and broadest collection and has longer hours of operation than the other libraries. The Takoma Park campus library has special collections to support the health sciences, multiculturalism, and American English language programs. The Germantown campus library emphasizes business, computing, high technology, biotechnology, and multicultural programs. The College archives, located on the Rockville campus includes student government records, student newspapers, accreditation documents, and other historical records of interest. Except for the archive materials, these materials can be located through the College's on-line catalog. Each library also provides access to numerous on-line indexes and full-text databases, as well as internet stations for student and community use and an interlibrary loan system for acquiring resources not available at the College.

#### **6.1.5 Enrollment**

The accomplished faculty, staff, and administrators of the College work to serve the needs of an increasingly diverse student body and community. The College enrolls more than 42,000 students annually in credit and non-credit courses. One out of every four graduates from Montgomery County public high schools comes directly to Montgomery College; approximately 40% of these graduates are enrolled at the College within two years of their high school graduation. The average age of students is about 28 years of age, with most being between 18 and 23 years old. Women account for 57% of the student population. Minority students make up 54% of the student body, including 27% Black, 16% Asian, and 12% Hispanic.

Relative to fall term credit enrollments, the College has been experiencing growth in the total number of students enrolling at any one of its campuses, a 5% three-year change. These students have also been taking more credits, on the average, with the impact that the number of full-time equivalent students ("FTE") have increased at an even greater rate, 7%. As the College looks to 2012, it expects that both the number of headcount students and the average credit hour load will increase, with the result that FTE enrollments will increase 21% from their 2002 level. These enrollment projections are based on

conservative expectations of population growth in the county and transition rates from high school to college, as well as a trend toward younger student enrollments. Other studies suggest that enrollments may well exceed the current projections, especially in areas surrounding Washington D.C. Careful monitoring by the College of its enrollments will be critical, particularly given the significant constrained facilities available to support the current campuses and programs.

**Table 6.1.5-1  
Fall Term College-wide Enrollment Statistics**

	1999	2000	2001	2002	3 yr % Chg	2012	10 yr % Chg
*Headcount	*20,847	*20,923	*21,347	*21,805	5%	*25,485	17%
*Credit Load	*8.5	*8.5	*8.7	*8.7	2%	*9.0	3%
FTE Students	11,809	11,897	12,443	12,632	7%	15,244	21%

\* unduplicated count

Relative to campus fall term enrollment, Rockville is the largest campus, with 14,817 headcount and 8,050 FTE students enrolled in fall 2002. Germantown, with 4,948 headcount and 2,224 FTE students, and Takoma Park, with 4,821 headcount and 2,358 FTE students, are of comparable enrollment size. Projections to fall 2012, however, show very different growth for these campuses. Focusing on FTE enrollments, the College is expecting dramatic growth at Takoma Park, with a 54% increase, resulting from a number of factors, including expansion of programs and facilities in the health sciences, new facilities supporting the arts and student services, and space constraints at the Rockville campus. Germantown is also planning for substantial growth of 35%, with expanded programs and new facilities supporting the biosciences developed in conjunction with the County’s plans for a contiguous biotechnology industry park, as well as space constraints at Rockville. Enrollment growth at Rockville is anticipated to be maintained at the past three-year growth rate of 7% over the next ten years; significant campus space constraints is the principal factor.

**Table 6.1.5-2  
Fall Term Credit FTE Students by Campus**

	1999	2000	2001	2002	3 yr % Chg	2012	10 yr % Chg
Germantown	1,942	1,980	2,168	2,224	15%	3,010	35%
Rockville	7,512	7,597	7,908	8,050	7%	8,599	7%
Takoma Park	2,355	2,320	2,367	2,358	0%	3,635	54%
College (Total)	11,809	11,897	12,443	12,632	7%	15,244	21%

Work Force Development and Continuing Education is also expecting substantial growth in its programs, with annual funded course FTE enrollments increasing 117% to 3,142 FTE. These enrollments translate into a fall term, on-campus enrollment of 937 FTE, an increase of 132% over the 2002 fall term and equivalent to 42% of the 2002 fall FTE enrollment at Germantown.

**Table 6.1.5-3  
WDCE Annual and Fall Term FTE Enrollment**

	2002	2012	10-yr % Chg
Annual Funded Course FTE	1,449	3,142	117%
Annual Off-campus/On-line FTE	552	1,068	93%
Annual On-campus FTE	892	2,069	132%
Fall On-campus FTE	404	937	132%

**6.1.6 Faculty and Staff**

The College remains committed to developing a diverse workforce that reflects the demographics of the County and the student body. Black employees comprise 22% of all employees; Asians, 9%, and Hispanics, 5%. Just over 56% of the College’s employees are female. The average faculty member is 51 years old and has been at the College for 12 years. Slightly more than 26% hold a doctorate, and about 19% hold tenure. The College recruits faculty both nationally and locally.

The College projects that its number of FTE faculty will increase at a rate comparable to its overall increase in enrollment, from 672.50 to 807.75, an increase of 135.25 FTE faculty. Full-time faculty, however, are expected to increase more than part-time, as the College seeks to achieve and maintain its goal of having two-thirds of its instruction delivered by full-time faculty. Faculty supporting WDCE will increase modestly, only by 4%. Campus projections of faculty seek to reduce and/or equalize the credit hours loads of faculty and therefore do not necessarily parallel enrollment growth rates.

**Table 6.1.6-1  
2002 and 2012 College Faculty Positions**

	2002 FT	2002 PT	2002 FTE	2012 FT	10 yr # (%) Chg	2012 PT	10 yr # (%) Chg	2012 FTE	10 yr # (%) Chg
Germantown	69	171	111.75	101	32 (46%)	211	40 (23%)	153.75	42.00 (38%)
Rockville	280	529	412.25	311	31 (11%)	539	10 (2%)	445.75	33.50 (8%)
Takoma Park	97	181	142.25	146	49 (51%)	223	42 (23%)	201.75	59.75 (42%)
WDCE	4	9	6.25	4	0 (0%)	10	1 (10%)	6.50	0.25 (4%)
<b>College (Total)</b>	<b>450</b>	<b>890</b>	<b>672.50</b>	<b>562</b>	<b>112 (25%)</b>	<b>983</b>	<b>93 (10%)</b>	<b>807.75</b>	<b>135.25 (20%)</b>

Overall, the College expects its numbers of full-time, part-time, and FTE staff to increase 21% from fall 2002 to fall 2012, consistent with its overall projected increase in fall term FTE enrollment. Campus and division projections, however, are not across the board. The

number of Central Administration FTE staff is projected to grow only by 9% over the next 10 years, capitalizing on the human resource investments made recently in Information Technology and Institutional Advancement, especially, and on economies of scale. WDCE is anticipating a substantial 45% increase in staff, reflecting the projected enrollment growth and expanded outreach, particularly in the health sciences at Takoma Park and biotechnology at Germantown. Campus projections of staff seek to reduce and/or equalize the ratios of student and of faculty to staff and therefore do not necessarily mirror enrollment growth rates.

**Table 6.1.6-2  
2002 and 2012 College Staff Positions**

	2002 FT	2002 PT	2002 FTE	2012 FT	10 yr # (%) Chg	2012 PT	10 yr # (%) Chg	2012 FTE	10 yr # (%) Chg
Central Adm	393	27	399.75	426	26 (4%)	33	6 (22%)	434.25	34.50 (9%)
Germantown	145	20	150.00	192	47 (32%)	24	4 (20%)	198.00	48.00 (32%)
Rockville	369	39	378.75	444	82 (22%)	47	8 (21%)	455.75	77.00 (20%)
Takoma Park	150	14	153.50	198	48 (32%)	16	2 (14%)	202.00	48.50 (32%)
WDCE	69	7	70.75	100	31 (45%)	9	2 (29%)	102.25	31.50 (45%)
College (Total)	1,126	107	1,152.75	1,360	234 (21%)	129	22 (21%)	1,392.25	239.50 (21%)

With 393 full-time staff, Central Administration functions at Montgomery College account for about 36% of the College’s total fall 2002 full-time staff, and given the modest projected growth for this division, this share of the College’s staff will decrease to about 32% by fall 2012.

**Table 6.1.6-3  
2002 and 2012 Central Administration Staff Positions**

	2002 FT	2002 PT	2002 FTE	2012 FT	10 yr # (%) Chg	2012 PT	10 yr # (%) Chg	2012 FTE	10 yr # (%) Chg
President	18	2	18.50	19	1 (6%)	2	0 (0%)	19.50	1.00 (5%)
EVP-Acad & Stud't Serv	24	9	26.25	31	7 (29%)	11	2 (22%)	33.75	7.50 (29%)
EVP-Admin	324	13	327.25	347	23 (7%)	16	3 (23%)	351.00	23.75 (7%)
EVP-IA	27	3	27.75	29	2 (7%)	4	1 (33%)	30.00	2.25 (8%)
Central Adm	393	27	399.75	426	33(8%)	33	6 (22%)	434.75	34.50 (9%)

**6.2 EXISTING CONDITIONS**

**6.2.1 Location**

Central Administration functions are primarily housed in the Mannakee Building on the Rockville Campus and in the off-campus leased space for the Office of Information Technology. The Rockville campus of Montgomery College is located approximately 14 miles northwest of the District of Columbia and is within commuting distance from the Metropolitan Washington area. The Mannakee Building is situated at the corner of MD 355 (Hungerford Drive) and Mannakee Street.

**6.2.2 Campus Character and Image**

This section is not applicable for Central Administration.

**6.2.3 Adjacent Land Use**

This section is not applicable for Central Administration.

**6.2.4 Campus Entrance Experience**

This section is not applicable for Central Administration.

**6.2.5 Building Usage**

This section is not applicable for Central Administration.

**6.2.6 Functional Adequacy of Facilities**

In addition to the space Central Administration occupies on the Rockville campus, primarily in the Campus Center and the Student Services Building, it also occupies all of the Mannakee Building, located at the intersection of Frederick Road and Mannakee Street and leased space for the Office of Information Technology (OIT) at 7362 Calhoun Place in Rockville, MD.

Descriptions of the programs and functions in each building are included below. The general adequacy of each building to support these programs and functions is also presented.

**Mannakee Building (32,737 NASF, 42,102 GSF)**, constructed in 1985 and subsequently purchased by the College, this three story office building accommodates a majority of the College's Central Administration functions: Offices of the President including executive conference room; General Counsel; Board of Trustees (BOT) staff; Executive Vice President for Administrative and Fiscal Services; Executive Vice President for Academic and Student Services; Vice President for Institutional Advancement; and the offices of the Chief Facilities Officer, Chief Business Officer, Chief Human Resource Officer, Director of Budget and Audit, Director of Institutional Research and Analysis, and Director of Planning and Institutional Projects; and Central Administration OIT support staff. In addition, the building houses a BOT conference room for 40, four conference rooms for 6, 10 (two rooms), and 15 occupants, a central mail/copy room, and a kitchen and staff lounge for 25.

In addition to Mannakee, Central Administration leases space for OIT (see below), and houses the Office of the Director of Auxiliary Services and Procurement's Property Control

and Central Receiving along with its operations staff, in the Campus Center; and Offices of the Director of Admissions, Records, and Registration and Student Financial Aid in the Student Services Center; both on the Rockville campus.

Although the Property Control and Central Receiving functions can be separate and located at an off-campus location, co-locating the central administration departments and functions in one location would result in students, visitors, and the College Community benefiting from the ease, energy, and excitement generated by the synergy of proximity. In addition, there is a need to provide sufficient and adequate space - offices, meeting rooms, and support facilities - so that each and every area can contribute creatively and productively every day to support the College as it helps students develop and change their lives. The need to occupy space on the Rockville campus further impacts the campus' ability to provide and carry out the necessary services to the faculty, staff, and students.

**Office of Information Technology Building (19,827 NASF, 27,826 GSF)**, leased in 2001 for a ten year period, facilities include a reception/waiting area, office for the Chief Information Officer, 24 private offices for directors, managers, and senior staff, 112, systems workstations, three conference rooms (one for 8, one for 12, and one for 20), a teleconferencing room for approximately 40, a training room for approximately 18, combination pantry and multi-purpose lounge and lunch room, a workroom with supply storage, computer testing room, a call center, computer staging area, workroom, storage, the network room, and receiving area.

Functional issues include limited space for growth in staff and staff support, insufficient workspace for Applications, Network, and Computer support including storage, and right-sizing the capacity of the Training Room and the Teleconferencing Room.

### **6.2.7 Building Conditions**

Montgomery College hired Vanderweil Facility Advisors (VFA) to perform a web enabled software-based facilities condition analysis of each of its three campuses which included buildings and site infrastructure components such as electrical utilities, storm sewer, sanitary sewer, parking lots, etc. The primary focus of this effort was to:

- Provide a baseline condition assessment of the College's facilities to include infrastructure components and building systems.
- Provide the College with budget estimates for funding required safety improvements and reducing the deterioration of campus buildings and infrastructure components.
- Assist the College with building code and accessibility compliance and to ensure that the facilities are operated as required.
- Utilize the assessment in the implementation of an ongoing process of the identification and prioritization of maintenance and capital repair projects.
- Provide decision support capabilities with VFA's facility management software solutions.

The facilities analyses include the following:

- Current Condition Analyses – existing facility deficiencies including deferred maintenance, deferred renewal, near-term anticipated renewal, recommended discretionary improvements, and code, non-compliance issues.
- Anticipated capital renewal analyses – projections of ongoing degradation of facilities’ components and costs associated with renewal or replacement of these components as they reach the end of their useful life.
- Capital funding analyses – scenario comparisons showing various funding levels and the effect of each on the condition and value of the building.

### **Assessment Methodology**

The deficiencies were classified in several different ways. In addition to detailed specific descriptions, each deficiency was assigned a category, priority, and primary system association. This parallel differentiation allows for multiple queries of the database, facilitating analysis of the data. It is possible, for instance, to query the database for all Priority 1 deficiencies in the electrical systems or all Priority 5 accessibility code issues. The criteria used to determine the priorities, categories, primary systems, and cost estimating are as follows:

- Priority One - Concerns: Should be undertaken immediately including violations of life safety, building, and electric codes.
- Priority Two - Short Term Concerns (1-2 years): Should be corrected in the near future to maintain the integrity of the building, including systems, which are functioning improperly or not at all, and problems that, if not addressed will cause additional deterioration.
- Priority Three – Long Term Concerns (3-5 years): Should be corrected in the more distant future to maintain the integrity of the building, including systems, that have exceeded their expected useful life, but are still functioning.
- Priority Four – Improvements: Required or desirable to bring the facility to perform as it should, including systems upgrades and aesthetic issues.
- Priority Five – New Code Requirements: Do not conform to codes instituted since the construction of the building, therefore, they are grandfathered in their existing condition. These should be addressed in any major renovation effort, if not before.

### Deficiency Categories:

- Code Compliance (violation of the 2000 International Building Code or conditions which pose a hazard to building occupants)
- Building Integrity (components or systems which are broken or in poor condition)
- Functionality (conditions which inhibit current use of space and do not necessarily affect the integrity of the building’s systems such as poor temperature control, insufficient electrical service, etc.
- Aesthetics (problems with the building’s appearance which are not functional in nature)
- Energy (conditions which adversely affect energy usage)
- Air/Water Quality (conditions which affect the environmental quality of the water or air)

- Hazardous Materials (Visible observations or client-supplied reporting indicating probable presence of hazardous materials)
- Life Safety (violations of the Life Safety Code, NFPA, 101)
- Building Code Accessibility (Compliance with the accessibility requirements of 28 CFR part 36, ADAAG and the Maryland Accessibility Code of COMAR 05.;02.02 dated February 1, 1995).

**Facility Condition Index**

An automated standard process for assessing the relative condition of buildings and site infrastructure components, facilitating comparison both within and among the campuses was established. For each building or site component, the Facility Condition Index (FCI) was developed which measures the relative amount of current deficiencies in the building including recommended improvements and grandfathered issues. The total value of recommended corrections is divided by current replacement value for the building or site component resulting in the FCI. The higher the FCI, the poorer the condition of the facility of system component. The FCI ranges for the standard of services for each building or site component are:

- Good: .00 to .05
- Fair: .05 to .10
- Poor: Greater than .10

FCI is a standard measure used throughout the country; it is recommended by both the National Association of College Business Officers (NACUBO) and the Association of Higher Education Facility Officers (APPA). In the attached tables, this is represented by a Deficiency % which takes the FCI and converts it to a percentage of replacement. For example, an FCI of .10 translates into a Deficiency percentage of 10%.

Referencing the following table, the results of VFA’s survey clearly show that the Mannakee Building, including infrastructure, is in fair to poor condition. It should be further noted that this does not reflect “true functional” needs involving general purpose, as well as programmatic or departmental needs such as inadequacy of space to accommodate changes in, or current teaching methodology and technology, proper sizing of instructional space and office space, student support services, etc.

**Table 6.2.7-1  
Total Replacement Value and Current Deficiency Cost**

One structure, Mannakee Building, which houses the College’s Central Administration functions.

	Replacement Value	Current Deficiency	Deficiency as % of Replacement*
Priority One - Five Building Systems	\$6,084,160	\$1,603,017	26%
Infrastructure	in Rockville	in Rockville	in Rockville
<b>TOTAL</b>	<b>\$6,084,160</b>	<b>\$1,603,017</b>	<b>26</b>

<b>Priority One-Three Only</b>			
Building Systems	\$6,084,160	\$1,282,000	21%
Infrastructure	in Rockville	in Rockville	in Rockville
<b>TOTAL</b>	<b>\$6,084,160</b>	<b>\$1,282,000</b>	<b>21%</b>

\*FCI equivalent is derived by dividing Deficiency as a % of Replacement by 100.

**Table 6.2.7-2  
Age of Buildings, GSF, and % of total**

1980's (1 Building)	42,102	GSF	100%
<b>TOTAL (1 Building)</b>	<b>818,749</b>	<b>GSF</b>	<b>100%</b>

**Table 6.2.7-3  
Size of Buildings and % of total**

25,001- 50,000 (1 building)	42,102	GSF	100%
<b>TOTAL (1 Building)</b>	<b>42,102</b>	<b>GSF</b>	<b>100%</b>

**Table 6.2.7-4  
Building Deficiency Category Amount (1-5) and (% of Replacement)**

26% to 50% (1 building)	\$1,603,017	100%
<b>TOTAL</b>	<b>\$1,603,017</b>	<b>100%</b>

**6.2.8 Utilities**

This section is not applicable for Central Administration.

**6.2.9 Stormwater Management**

This section is not applicable for Central Administration.

**6.2.10 Circulation and Parking**

This section is not applicable for Central Administration.

**6.3 FACILITIES PROGRAM**

**6.3.1 Needs Assessment**

Assessments of the current and projected facilities needs for Central Administration are generated by applying current and projected planning data to the State of Maryland Guidelines for facilities at community colleges.

Current and projected space needs for each type of space in the Central Administration inventory for which a guideline is available are then computed. For Central

Administration, a current inventory was developed by combining all central administrative space into a single inventory regardless of location and including leased space. The projected Central Administration inventory assumes that existing 19,827 NASF of leased space supported the Office of Information Technology would be terminated. Comparisons with the current inventory and the one planned for 10 years later, given approved capital projects, are made, and surpluses or deficiencies relative to the respective space categories are identified. Central Administration has no approved facility projects over the planning period of 2002 to 2012.

Currently Central Administration shows an overall deficiency of -13,488 NASF, a substantial amount of space representing 23% of its current inventory. Even with projected modest growth in Central Administration staffing of 9%, this overall deficiency is projected to increase to -39,239 NASF in ten years. This overall facility deficiency represents 100% of the projected Central Administration inventory, a doubling of the current inventory, but without the leased space.

**Table 6.3.1-1  
Needs Assessment Planning Data for Central Administration**

	Fall 2002	Fall 2012
FTDE-Credit	0	0
FTDE-Noncredit	<u>0</u>	<u>0</u>
FTDE-Joint	0	0
WSCH-Lecture-Credit	0	0
WSCH-Lecture-Noncredit	<u>0</u>	<u>0</u>
WSCH-Lecture-Joint	0	0
WSCH-Lab-Credit	0	0
WSCH-Lab-Noncredit	<u>0</u>	<u>0</u>
WSCH-Lab-Joint	0	0
FTE Students	0	0
Bound Volume Equivalents	0	0
FTE Faculty	0	0
FT-Faculty	0	0
FT-Staff	398	431
Planning Head Count	199	0
Student Headcount	0	0

**Table 6.3.1-2  
Computation of Space Needs for Central Administration**

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
100	CLASSROOM	0	0	0	0	0	0
200	LABORATORY	0	0	0	0	0	0
210	Class Laboratory	0	0	0	0	0	0
220	Open Laboratory	0	0	0	0	0	0
250	<i>No Allowance</i>						
300	OFFICE	67,188	52,823	(14,365)	72,666	35,296	(37,370)
310	Office/ Conf. Room	67,188	52,823	(14,365)	72,666	35,296	(37,370)
320	Testing/Tutoring	0	0	0	0	0	0
350	<i>Included w/ 310</i>						
400	STUDY	0	0	0	0	0	0
410	Study	0	0	0	0	0	0
420-30	Stack/Study	0	0	0	0	0	0
440-55	Processing/Service	0	0	0	0	0	0
500	SPECIAL USE	0	0	0	0	0	0
520-23	Athletic	0	0	0	0	0	0
530	Media Production	0	0	0	0	0	0
580	Greenhouse	0	0	0	0	0	0
600	GENERAL USE	2,627	1,087	(1,540)	2,845	592	(2,253)
610	Assembly	0	0	0	0	0	0
620	Exhibition	0	0	0	0	0	0
630	Food Facility	2,030	33	(1,997)	2,198	0	(2,198)
640	<i>Child Care (N/A)</i>	0	0	0	0	0	0
650	Lounge	597	1,054	457	647	592	(55)
660	Merchandising	0	0	0	0	0	0
670	<i>No Allowance</i>						
680	Meeting Room	0	0	0	0	0	0
700	SUPPORT	2,793	5,209	2,416	3,020	3,404	384
710	Data Processing	0	402	402	0	0	0
720	Shop/ Storage	2,793	4,807	2,014	3,020	3,404	384
730	<i>Included w/ 720</i>						
740	<i>Included w/ 720</i>						
750	Central Service	0	0	0	0	0	0
760	Hazmat Storage	0	0	0	0	0	0
800	HEALTH CARE	0	0	0	0	0	0
900	<i>No Allowance</i>						
050	<i>No Allowance</i>						
060	<i>No Allowance</i>						
070	<i>No Allowance</i>						
090	<i>No Allowance</i>						
	<b>Total NASF:</b>	<b>72,607</b>	<b>59,119</b>	<b>(13,488)</b>	<b>78,531</b>	<b>39,292</b>	<b>(39,239)</b>

### **6.3.2 PROPOSED FACILITIES PROGRAMS**

The College does not believe that the central administration functions must be housed at the Rockville campus nor necessarily at the Mannekee Building. Over the ten-year planning period, Mannakee will remain as the key facility supporting central administration functions. Beyond that time horizon, however, planning should consider the construction of a central administration facility combining all central administration functions at a single location either central to the county or at the Germantown campus.

One of the goals of the College's Facilities Master Plan is to relocate central administration staff from campus facilities to central administration facilities. The Mannakee Building, with about 32,570 NASF, will not be able to accommodate the 2012 projected 178 full-time and 7 part-time staff associated with the College's central administration functions. This staff loading would require 41,670 NASF of office space, which is not possible to accomplish in Mannakee. Certain central administrative offices will be retained in their entirety in Mannakee—the Office of the President, the Office of the Executive Vice President for Academic and Student Services, and Institutional Advancement. Offices under the Executive Vice President for Administrative and Fiscal Services will also be retained, including the Office of the Executive Vice President, Business, Human Resources, Budgets and Audits, Institutional Research and Analysis, Planning and Institutional Projects, and Policy Development. The Offices of Information Technology, Auxiliary Services, Facilities, and Procurement and the central receiving functions, which also report to this Executive Vice President, will be located elsewhere. A summary of the proposed Central Administration facility programs follows.

#### **Lease, Construction, or Acquisition of OIT Center and Administrative Services Building or Lease, Construction, or Acquisition of OIT Center/Administrative Services Building**

One alternative to meeting the Central Administration planning goal is to lease, construct, or acquire two properties—one for the Office of Information Technology Center and one for the Administrative Services. These projects would replace the 19,827 NASF of leased space now being provided for the OIT with a facility that has sufficient space and provide a second facility to house the Offices of Auxiliary Services, Facilities, and Procurement. The current 5 full-time Facilities staff located at Germantown will continue to be located there. The complementary alternative to meeting these needs through two projects would be to lease, construct, or acquire a single building to accommodate both these groups.

#### **Alteration of the Mannakee Building**

Assuming that space is vacated as a result of relocating the Administrative Services units to another facility, this reallocation and alteration project allows the much needed expansion of the Office of the Executive Vice President for Academic and Student Services, as well as the modest growth anticipated for most central administration functions. It also allows those units with undersized office resources to “right-size,” as well as to provide individual offices as appropriate. Relocations within Mannakee should be planned to maximize desired productive and functional relationships. As space is vacated by those units moving elsewhere, alterations should be made to accommodate unit needs.

## **6.4 MASTER PLAN**

**6.4.1 Campus Structure and Character**

This section is not applicable for Central Administration.

**6.4.2 Proposed Land and Building Use**

One of the goals of the Facilities Master Plan is to co-locate central administration functions so that individuals engaged in these functions can benefit from the convenience of proximity, as well as opportunities for collaboration and exchange of ideas. With each campus short of space, consideration has been given to locating central administration functions that are not required to be on campus, in off-campus facilities. A summary of proposed projects identified for Central Administration follows. Refer to Figure RV-F5 Proposed Site Plan for illustration of the locations of the Mannakee Building on Rockville's campus.

**New Construction, Acquisitions, and Renovations**

Several options are available for consolidating central administration functions in off-site facilities. Facilities could be leased, built to suit, or acquired. Currently, the Office of Information Technology is located in an off-campus facility. The lease for that facility expires in July of 2008. This function could be co-located with other central administration facilities at the end of that lease, or could continue to be located independently.

The Facilities Master Plan recommends that the Mannakee Building continue to house the Office of the President, the Office of the Executive Vice President for Academic and Student Services, Institutional Advancement, and the Office of the Executive Vice President for Administrative and Fiscal Services.

The Central Administration master plan also includes a roof replacement project for aging buildings on all the three campuses. A roof condition survey was conducted in 2000, and it detailed the need for extensive roof repairs College-wide.

**6.4.3 Proposed Utilities**

This section is not applicable for Central Administration.

**6.4.4 Proposed Stormwater Management**

This section is not applicable for Central Administration.

**6.4.5 Proposed Circulation and Parking**

This section is not applicable for Central Administration.

**6.4.6 Implementation**

Based on the College's anticipated enrollment growth over the 2002 to 2012 period, and supported by the instructional and other needs identified during the master planning process, the College has identified a number of capital projects for Central Administration. Implementation of these projects will allow the College to provide for the physical space needs of Central Administration over the ensuing 10-year period. Detailed facility

programs will be prepared for each project as the College’s capital funding requests are developed for submission to the State of Maryland and Montgomery County.

Throughout this section the term “new construction” is used to describe a completely new facility, while the term “renovation” is used to describe a complete interior and exterior reconstruction of an existing facility. An “alteration” is used to describe a lesser level of effort than a renovation that does not anticipate extensive program modifications to a facility and the term “addition” is used to describe “new construction” that provides for a major enlargement of an existing facility.

The following table lists the Central Administration projects included in this 10-Year Facilities Master Plan, as well as project budget estimates. A brief description is provided of each project with emphasis on the major components of the scope of work for each project. With regard to timing, the Central Administration projects are separated into a near-term need (2002 to 2007) and a long-term need (2008-2012). Based on current plans, the projects are presented in the recommended sequence for implementation; however, changes in program priorities may lead to changes in the implementation plan.

**Table 6.4.6-1  
Capital Projects for Central Administration**

<b>Project</b>	<b>Budget Estimate in Dollars (1/04)</b>
<b>Near-Term Capital Projects (FY 2004 – FY 2007)</b>	
None	N/A
<b>Near Term Capital Projects (FY 2008 –FY 2012)</b>	
Lease, Construction or Acquisition of Office of Information Technology (OIT) Building	18,015,000
Central Administration Building	14,125,000
Mannakee Building Alterations	Included in Central Administration Building
Roof Replacements	2,361,000
<b>Subtotal</b>	<b>34,501,000</b>

**Lease, Acquisition, or Construction of Office of Information Technology (OIT) Building:**

The lease for the OIT building at 7362 Calhoun Place, Rockville, Maryland, expires in July 2008. A review of the options available to the College should be started in 2005 so that decisions about acceptable facility solution(s) to the space needs of the OIT unit can be coordinated with the lease expiration date. The budget estimate included in this plan assumes construction of a new facility for the OIT unit.

**Central Administration Building:**

Either in conjunction with decisions made regarding the space needs of the OIT unit or separately, the College will evaluate lease, acquisition, or construction options for new central administration office space. One possible new construction option to be further explored is a new building located on the Germantown Campus.

**Mannakee Building Renovation:**

This project is dependent upon lease, acquisition, or construction of a new Central Administration building so that functions that will not remain in the building can be relocated prior to the building’s renovation. The renovation of the Mannakee Building will respond to College requirements identified in the Master Plan.

**Roof Replacements:**

All of the replacements are developed as one project, however, construction on the buildings will not be concurrent. The roof replacements and associated surveys will take place from 2005- 2011. For a full description of this project, please refer to the Roof Condition Survey prepared by Dedicated Technologies, LLC.

**Table 6.4.6-2  
Roof Replacement Program**

<b>Year</b>	<b>Project Description</b>	<b>Budget Estimate</b>
2005	Rockville - Campus Tower - Low Roof - Sec. B&C (1)	\$ 235,000
	Rockville - CAB - Sec. A	\$ 88,000
	Germantown - PE - Middle - Sec. B,D & E	\$ 111,000
	<b>Subtotal</b>	<b>\$ 434,000</b>
2006	Rockville - Theatre Arts - Sec. A,C & D	\$ 209,000
	Takoma Park - Science North - Sec. A,B,C & D	\$ 162,000
	Rockville - Student Services - Sec. A&B (Project needs to be reviewed.)	\$ 132,000
	<b>Subtotal</b>	<b>\$ 503,000</b>
2007	Rockville - PE - Sec. A, D, E & F	\$ 424,000
	Rockville - Computer Science - Sec. A&B (Project needs to be reviewed.)	\$ 137,000
	<b>Subtotal</b>	<b>\$ 561,000</b>
2008	All campuses- Roof Surveys	\$ 44,000
	All campuses- Major Roof Repairs	\$ 108,000
	Rockville - Mannakee - Sec. A	\$ 178,000
	<b>Subtotal</b>	<b>\$ 330,000</b>
2009	Rockville - Campus Center - Sec. B, C & D	\$ 261,000
	<b>Subtotal</b>	<b>\$ 261,000</b>
2010	Rockville - Science East - Sec. A (Sec. B and Greenhouse to be demolished)	\$ 198,000

	during SE building renovation.)	
	<b>Subtotal</b>	\$ 198,000
2011	Takoma Park - Pav. Of Fine Arts - Sec. A	\$ 74,000
	<b>Subtotal</b>	\$ 74,000

Note: (1) Description of roof sections from Roof Condition Survey prepared by Dedicated Technologies, LLC (Takoma Park, Maryland) (September 21, 2000).

**CA-A1      Zoning Analysis**

**ZONING ANALYSIS**

**Applicable Codes:** Rockville City Code, February 1990  
 City of Rockville Comprehensive Master Plan, November 2002

Property Address	Property at the corner of Mannakee Street and Hungerford Drive across from Montgomery College	
Zone	R-S (Suburban Residential)	Section 25-273
Lot Size	20,000 sq. ft. minimum	Section 25-311
Proposed Use(s)	<p>The purpose of all residential zones is to promote a suitable environment for family life through the provision of recreational, religious and educational facilities as basic elements of a balanced neighborhood, to stabilize and protect the essential characteristics of existing residential development, and to foster development compatible with the topography and other natural characteristics of the area.</p> <p>There is very little housing in the R-S zoning category. The majority of land zoned R-S is for parkland or institutional uses (such as the Montgomery College campus).</p> <p>The Carver Educational Service Center is zoned R-S. Development for this site as an educational facility, which may include the Montgomery County Board of Education administrative offices, Montgomery College facilities, or other education-related or public safety purpose is preferred.</p>	
Coverage Limitations	A suitable location for new construction should respect significant views of the original Carver structure.	City of Rockville Comprehensive Master Plan Chapter 2, Critical Area 3

Maximum Density of Development (FAR)	0.4 for the entire property	City of Rockville Comprehensive Master Plan Chapter 2, Critical Area 3
Max. Building Height	40 feet	Section 25-311 Table I
Setbacks	<ol style="list-style-type: none"> <li>1. From right-of-way of limited access, major or arterial highway – 50'</li> <li>2. Front Setbacks  Normal Minimum – 35'  Where established setback exceeds normal – Established setback up to 100' In cases where the majority of lots located on one side of a street between two (2) intersecting streets are occupied by buildings having a front setback different from the normal specified, any building hereafter shall conform to the setback line up to the maximum specified.</li> <li>3. Side Setbacks  Side Street Abutting – 25'  Land Abutting – 13'</li> <li>4. Rear Setbacks Minimum Depth – 35'</li> </ol>	<p>Section 25-311 Table I</p> <p>Section 25-311 Table I</p> <p>Note 6</p> <p>Section 25-311 Table I</p> <p>Section 25-311 Table I</p>
Landscaping and Screening Requirements	<p>All air conditioning equipment, transformers, elevator equipment or similar mechanical equipment on any roof, ground or building shall be screened from public view. Such screening shall be done in a manner and with such materials as may be reasonably required by the Planning Commission.</p> <p>It is the policy of the City to have all electric, telephone and other utility lines, cables, transformers and equipment lockers placed underground in all zones. Except</p>	<p>Section 25-436, Laws of Rockville, Ch. 6, § 3-506</p> <p>Section 25-437, Laws of Rockville, Ch. 6, § 3-507; Ord. No. 2-96, § 2, 1-22-96</p>

as set forth in (a) and (b) below, whenever an extension or relocation of any electric, telephone or other utility line, cable, transformer, or equipment locker is required in connection with the development or redevelopment of any land, any such extension or relocation shall be installed underground.

(a) In all zones, for good cause shown, the Planning Commission may approve the extension and/or relocation above ground of electric utility lines not providing direct permanent service in connection with the development or redevelopment of any land within a comprehensive planned development, provided that any such extension and/or relocation may be approved by the Chief of Planning for any applications filed prior to December 1, 1995. Conditions may be attached to any such approval in order to insure that health, safety, and welfare of persons and property in the neighborhood.

(b) For good cause shown, the Planning Commission may allow aboveground installation of transformers and equipment lockers subject to the provision of such screening as may reasonably be required by the Planning Commission

Off-Street Loading	Off-street parking and loading facilities that make it necessary for vehicles to back out directly into a public road are prohibited.	Section 25-391b
	No zoning guidelines have been established for the quantity of loading spaces in residential zones. For commercial and industrial zones, adequate off-street space for the loading and unloading of goods and materials shall be provided, taking into consideration	Section 25-414

	<p>the size of building and the lawful uses in such zone. Each loading space provided shall have a minimum width of twelve (12) feet, clearance height of at least fourteen (14) feet, and a depth sufficient to accommodate the maximum length of delivery trucks reasonably likely to serve the building. In the event that tractor-trailer loading or unloading is reasonably likely, a depth of fifty (50) feet shall be provided. Each loading space provided shall have a minimum width of twelve (12) feet, clearance height of at least fourteen (14) feet, and a depth sufficient to accommodate the maximum length of delivery trucks reasonably likely to serve the building. In the event that tractor-trailer loading or unloading is reasonably likely, a depth of fifty (50) feet shall be provided.</p>	
<p>Off-Street Parking</p>	<p>1. Off-street parking of motor vehicles shall be limited to passenger vehicles, not more than one (1) delivery-type commercial vehicle not exceeding three-quarter ton capacity or one (1) truck that has been issued a special permit pursuant to section 23-27 and one (1) trailer which shall not be used for dwelling purposes or any accessory use, provided such trailer is parked behind the front</p> <p>2. Parking facilities shall be provided for the physically handicapped and aged as specified in the Maryland Building Code for the Handicapped and Aged.</p> <p>(Laws of Rockville, Ch. 6, § 3-401(o))</p> <p>State law references: Maryland Building Code for the Handicapped, Anno. Code of Md., Art. 41, § 257JK.                  building line.</p> <p>3. Requirements for the provision of parking facilities may be satisfied</p>	<p>Section 25-389</p> <p>Section 25-388</p> <p>Section 25-391 (c)</p>

on a separate lot from the use served by a permanent automobile parking structure. An automobile parking structure so established must be located so that a major point of pedestrian access to such structure is within a five hundred (500) foot walking distance of the entrance to the use serviced thereby. The Planning Commission may attach such conditions to the approval of an automobile parking structure as may be reasonable and necessary to assure that the use will be consistent with the purpose and intent of this chapter.

4. Quantity of spaces for educational institutions: One (1) parking space for each two (2) employees, including teachers and administrators, plus sufficient off-street space for the safe and convenient loading and unloading of students, plus additional facilities for student parking, taking into consideration the total number of students, the percentage of students driving automobiles, and the requirements for stadium, gymnasium and auditorium use as reasonably determined by the Planning Commission. The number of employees for a use shall be computed on the basis of the maximum number of persons to be employed at any one (1) time other than at changes of shifts.

Section 25-395 (14)

Section 25-393

Quantity of spaces for office, general or professional (except medical or dental): One (1) parking space for each three hundred (300) square feet of gross floor area, which area shall include cellars or basements designed and available for tenant use or occupancy, but shall not include floor area used for off-street parking

Section 25-395 (25)

**CA-A2      Computation of  
Space Needs**

**FACILITIES INVENTORY BY BUILDING**

COLLEGE: Montgomery College-Central Administration

FMP: October 20, 2003

Year Built:

HEGIS CODE	HEGIS CATEGORY	1	2	3	4	Total	1	2
		German-town	Rockville	Takoma Park		Permanent On Campus		
<b>100</b>	<b>CLASSROOM</b>					<b>0</b>		
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
210	Class Laboratory					0		
220	Open Laboratory					0		
250	Research Lab.					0		
<b>300</b>	<b>OFFICE</b>	<b>0</b>	<b>35,296</b>	<b>0</b>	<b>0</b>	<b>35,296</b>	<b>0</b>	<b>0</b>
310	Office/ Conf. Room		35,296			35,296		
320	Testing/Tutoring					0		
350	Included w/ 310					0		
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
410	Study					0		
420-30	Stack/Study					0		
440-55	Processing/Service					0		
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
520-23	Athletic					0		
530	Media Production					0		
580	Greenhouse					0		
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>592</b>	<b>0</b>	<b>0</b>	<b>592</b>	<b>0</b>	<b>0</b>
610	Assembly					0		
620	Exhibition					0		
630	Food Facility					0		
640	Day Care					0		
650	Lounge		592			592		
660	Merchandising					0		
670	Recreation					0		
680	Meeting Room					0		
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>3,404</b>	<b>0</b>	<b>0</b>	<b>3,404</b>	<b>0</b>	<b>0</b>
710	Data Processing					0		
720	Shop					0		
730	Central Storage		3,404			3,404		
740	Vehicle Storage					0		
750	Central Service					0		
760	Hazmat Storage					0		
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>0</b>	<b>39,292</b>	<b>0</b>	<b>0</b>	<b>39,292</b>	<b>0</b>	<b>0</b>

**FACILITIES INVENTORY BY BUILDING**

COLLEGE: Montgomery College-Central

FMP: October 20, 2003

Year Built:

HEGIS CODE	HEGIS CATEGORY	Total Temporary On Campus	Total All Space On Campus	1 OIT Leased	2	Total Leased & Off Campus	Total All Space On & Off
<b>100</b>	<b>CLASSROOM</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
210	Class Laboratory	0	0			0	0
220	Open Laboratory	0	0			0	0
250	Research Lab.	0	0			0	0
<b>300</b>	<b>OFFICE</b>	<b>0</b>	<b>35,296</b>	<b>17,527</b>	<b>0</b>	<b>17,527</b>	<b>52,823</b>
310	Office/ Conf. Room	0	35,296	17,527		17,527	52,823
320	Testing/Tutoring	0	0			0	0
350	Included w/ 310	0	0			0	0
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
410	Study	0	0			0	0
420-30	Stack/Study	0	0			0	0
440-55	Processing/Service	0	0			0	0
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
520-23	Athletic	0	0			0	0
530	Media Production	0	0			0	0
580	Greenhouse	0	0			0	0
<b>600</b>	<b>GENERAL USE</b>	<b>0</b>	<b>592</b>	<b>495</b>	<b>0</b>	<b>495</b>	<b>1,087</b>
610	Assembly	0	0			0	0
620	Exhibition	0	0			0	0
630	Food Facility	0	0	33		33	33
640	Day Care	0	0			0	0
650	Lounge	0	592	462		462	1,054
660	Merchandising	0	0			0	0
670	Recreation	0	0			0	0
680	Meeting Room	0	0			0	0
<b>700</b>	<b>SUPPORT</b>	<b>0</b>	<b>3,404</b>	<b>1,805</b>	<b>0</b>	<b>1,805</b>	<b>5,209</b>
710	Data Processing	0	0	402		402	402
720	Shop	0	0	1,403		1,403	1,403
730	Central Storage	0	3,404			0	3,404
740	Vehicle Storage	0	0			0	0
750	Central Service	0	0			0	0
760	Hazmat Storage	0	0			0	0
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>0</b>	<b>39,292</b>	<b>19,827</b>	<b>0</b>	<b>19,827</b>	<b>59,119</b>

**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-Central Administration

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Fall 2002 Before Gains/ (Losses)		Fall 2003 After Gains/ (Losses)		Fall 2004 After Gains/ (Losses)		Fall 2005 After Gains/ (Losses)
<b>100</b>	<b>CLASSROOM</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
210	Class Laboratory	0		0		0		0
220	Open Laboratory	0		0		0		0
250	Research Lab.	0		0		0		0
<b>300</b>	<b>OFFICE</b>	<b>52,823</b>	<b>0</b>	<b>52,823</b>	<b>0</b>	<b>52,823</b>	<b>0</b>	<b>52,823</b>
310	Office/ Conf. Room	52,823		52,823		52,823		52,823
320	Testing/Tutoring	0		0		0		0
350	Included w/ 310	0		0		0		0
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
410	Study	0		0		0		0
420-30	Stack/Study	0		0		0		0
440-55	Processing/Service	0		0		0		0
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
520-23	Athletic	0		0		0		0
530	Media Production	0		0		0		0
580	Greenhouse	0		0		0		0
<b>600</b>	<b>GENERAL USE</b>	<b>1,087</b>	<b>0</b>	<b>1,087</b>	<b>0</b>	<b>1,087</b>	<b>0</b>	<b>1,087</b>
610	Assembly	0		0		0		0
620	Exhibition	0		0		0		0
630	Food Facility	33		33		33		33
640	Day Care	0		0		0		0
650	Lounge	1,054		1,054		1,054		1,054
660	Merchandising	0		0		0		0
670	Recreation	0		0		0		0
680	Meeting Room	0		0		0		0
<b>700</b>	<b>SUPPORT</b>	<b>5,209</b>	<b>0</b>	<b>5,209</b>	<b>0</b>	<b>5,209</b>	<b>0</b>	<b>5,209</b>
710	Data Processing	402		402		402		402
720	Shop	1,403		1,403		1,403		1,403
730	Central Storage	3,404		3,404		3,404		3,404
740	Vehicle Storage	0		0		0		0
750	Central Service	0		0		0		0
760	Hazmat Storage	0		0		0		0
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total NASF:</b>		<b>59,119</b>	<b>0</b>	<b>59,119</b>	<b>0</b>	<b>59,119</b>	<b>0</b>	<b>59,119</b>

ONLY PERMANENT  
ON CAMPUS SPACE IS  
INCLUDED ON THIS TABLE

THIS TABLE MUST BE  
TAILORED FOR COLLEGE-  
SPECIFIC PROGRAMS

**FACILITIES INVENTORY CHANGES**

COLLEGE: Montgomery College-Centr:

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Remove OIT Bldg			Fall 2012 After Gains/ (Losses)
<b>100</b>	<b>CLASSROOM</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
210	Class Laboratory				0
220	Open Laboratory				0
250	Research Lab.				0
<b>300</b>	<b>OFFICE</b>	<b>(17,527)</b>	<b>0</b>	<b>0</b>	<b>35,296</b>
310	Office/ Conf. Room	(17,527)			35,296
320	Testing/Tutoring				0
350	Included w/ 310				0
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
410	Study				0
420-30	Stack/Study				0
440-55	Processing/Service				0
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
520-23	Athletic				0
530	Media Production				0
580	Greenhouse				0
<b>600</b>	<b>GENERAL USE</b>	<b>(495)</b>	<b>0</b>	<b>0</b>	<b>592</b>
610	Assembly				0
620	Exhibition				0
630	Food Facility	(33)			0
640	Day Care				0
650	Lounge	(462)			592
660	Merchandising				0
670	Recreation				0
680	Meeting Room				0
<b>700</b>	<b>SUPPORT</b>	<b>(1,805)</b>	<b>0</b>	<b>0</b>	<b>3,404</b>
710	Data Processing	(402)			0
720	Shop	(1,403)			0
730	Central Storage				3,404
740	Vehicle Storage				0
750	Central Service				0
760	Hazmat Storage				0
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>RESIDENTIAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>050</b>	<b>INACTIVE AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>060</b>	<b>ALTER. OR CONV.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>070</b>	<b>UNFINISHED AREA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>090</b>	<b>OTHER ORG. USAGE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total NASF:</b>	<b>(19,827)</b>	<b>0</b>	<b>0</b>	<b>39,292</b>

ONLY PERMANENT  
ON CAMPUS SPACE IS  
INCLUDED ON THIS TABLE

THIS TABLE MUST BE  
TAILORED FOR COLLEGE-  
SPECIFIC PROGRAMS

**COMPUTATION OF SPACE NEEDS**

COLLEGE: Montgomery College-Central Administration

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
<b>100</b>	<b>CLASSROOM</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>200</b>	<b>LABORATORY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
210	Class Laboratory	0	0	0	0	0	0
220	Open Laboratory	0	0	0	0	0	0
250	No Allowance						
<b>300</b>	<b>OFFICE</b>	<b>67,188</b>	<b>52,823</b>	<b>(14,365)</b>	<b>72,666</b>	<b>35,296</b>	<b>(37,370)</b>
310	Office/ Conf. Room	67,188	52,823	(14,365)	72,666	35,296	(37,370)
320	Testing/Tutoring	0	0	0	0	0	0
350	Included w/ 310						
<b>400</b>	<b>STUDY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
410	Study	0	0	0	0	0	0
420-30	Stack/Study	0	0	0	0	0	0
440-55	Processing/Service	0	0	0	0	0	0
<b>500</b>	<b>SPECIAL USE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
520-23	Athletic	0	0	0	0	0	0
530	Media Production	0	0	0	0	0	0
580	Greenhouse	0	0	0	0	0	0
<b>600</b>	<b>GENERAL USE</b>	<b>2,627</b>	<b>1,087</b>	<b>(1,540)</b>	<b>2,845</b>	<b>592</b>	<b>(2,253)</b>
610	Assembly	0	0	0	0	0	0
620	Exhibition	0	0	0	0	0	0
630	Food Facility	2,030	33	(1,997)	2,198	0	(2,198)
640	Child Care (N/A)	0	0	0	0	0	0
650	Lounge	597	1,054	457	647	592	(55)
660	Merchandising	0	0	0	0	0	0
670	No Allowance						
680	Meeting Room	0	0	0	0	0	0
<b>700</b>	<b>SUPPORT</b>	<b>2,793</b>	<b>5,209</b>	<b>2,416</b>	<b>3,020</b>	<b>3,404</b>	<b>384</b>
710	Data Processing	0	402	402	0	0	0
720	Shop/ Storage	2,793	4,807	2,014	3,020	3,404	384
730	Included w/ 720						
740	Included w/ 720						
750	Central Service	0	0	0	0	0	0
760	Hazmat Storage	0	0	0	0	0	0
<b>800</b>	<b>HEALTH CARE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>900</b>	<b>No Allowance</b>						
<b>050</b>	<b>No Allowance</b>						
<b>060</b>	<b>No Allowance</b>						
<b>070</b>	<b>No Allowance</b>						
<b>090</b>	<b>No Allowance</b>						
<b>Total NASF:</b>		<b>72,607</b>	<b>59,119</b>	<b>(13,488)</b>	<b>78,531</b>	<b>39,292</b>	<b>(39,239)</b>

ONLY PERMANENT ON CAMPUS SPACE IS INCLUDED ON THIS TABLE

USE HARD DATA RATHER THAN FORMULAS FOR THE 10-YEAR PROJECTIONS WHEN AVAILABLE; WHEN NOT AVAILABLE, THE FORMULAS WILL PROVIDE REASONABLE ESTIMATES

SEE "SPACE ALLOCATION GUIDELINES" SHEET FOR FORMULAS AND DEFINITIONS

ENROLLMENT STATISTICS		Fall 2002	Fall 2012
	FTDE-C		
	FTDE-N		0
	FTDE-J	0	0
	WSCH-Lec-C		
	WSCH-Lec-N		0
	WSCH-Lec-J	0	0
	WSCH-Lab-C		
	WSCH-Lab-N		0
	WSCH-Lab-J	0	0
	FTE		
	BVE		
	FTEF		
Hard Data =	FT-Fac		
	FT-Staff	398	431
Formulas =	PHC	199	216
	Headcount		

**COMPUTATION OF PARKING NEEDS**

COLLEGE: Montgomery College-Central Administration

FMP: October 20, 2003

PARKING CATEGORY	FACTOR	Need Current	Inventory Current	Surplus/ (Deficit)	Need 10 Years	Inventory 10 Years	Surplus/ (Deficit)
FTDE-J	0.75	0			0		
FT-Faculty & FT-Staff	0.75	299			323		
<b>SUBTOTAL</b>		<b>299</b>	<b>0</b>	<b>0</b>	<b>323</b>	<b>0</b>	<b>0</b>
Visitors	0.02	6			6		
<b>REGULAR SPACES</b>		<b>304</b>	<b>1,163</b>	<b>859</b>	<b>330</b>	<b>1,163</b>	<b>833</b>
Reserved Accessible*		22	24	2	22	24	2
<b>ALL SPACES</b>		<b>326</b>	<b>1,187</b>	<b>861</b>	<b>352</b>	<b>1,187</b>	<b>835</b>

\* In addition to the regular parking spaces, the Americans with Disabilities Act requires reserved spaces for disabled individuals. Reserved accessible spaces shall conform to the requirements in the space allocation guidelines:

TOTAL SPACES	REQUIRED ADA	TOTAL SPACES	REQUIRED ADA
<= 25	1	201 - 300	7
26 - 50	2	310 - 400	8
51 - 75	3	410 - 500	9
76 - 100	4	501 - 1,000	2% of total
101 - 150	5	> 1,000	20 plus 1 for each
151 - 200	6		100 beyond 1,000

Note: Calculation of need for reserved accessible spaces (22) is based on number of current and 10 year regular parking spaces (1163) at MC-G.

ONLY PARKING FOR  
ON CAMPUS SPACE IS  
INCLUDED ON THIS TABLE

"NEED" DATA FOR RESERVED  
ACCESSIBLE SPACES MUST  
ENTERED MANUALLY USING  
THE ABOVE ADA GUIDELINES

"NEED" DATA FOR ALL OTHER  
CATEGORIES ARE ENTERED  
AUTOMATICALLY FROM THE  
ENROLLMENT/EMPLOYMENT  
STATISTICS ON TABLE 3

**SPACE ALLOCATION GUIDELINES**

COLLEGE: Montgomery College-Central Administration

FMP: October 20, 2003

HEGIS CODE	HEGIS CATEGORY	FACTOR FOR FTDE-C		FORMULA
		<= 3,000	> 3,000	
<b>100</b>	<b>CLASSROOM</b>	1.50	1.11	Factor x WSCH-Lec-J
<b>200</b>	<b>LABORATORY</b>			<b>Total</b>
210	Class Laboratory	7.00	5.83	Factor x WSCH-Lab-J
220	Open Laboratory			4.2 x FTDE-C
250	No Allowance			
<b>300</b>	<b>OFFICE</b>			<b>Total</b>
310	Office/ Conf. Room			Core of 1,120 + (166 x (FTEF + FT-Staff))
320	Testing/Tutoring			Core of 1,500 + (0.5 x (FTDE-C beyond 1,500))
350	Included w/ 310			
<b>400</b>	<b>STUDY</b>			<b>Total</b>
410	Study			6.25 x FTDE-C
420-30	Stack/Study			0.1 x BVE
440-55	Processing/Service			Core of 1,200 + (0.4 x (Category-420-30 beyond 1,200))
<b>500</b>	<b>SPECIAL USE</b>			<b>Total</b>
520-23	Athletic			Core of 34,000 + (10 x ( FTDE-C beyond 1,500))
530	Media Production	0.80	2.00	Core of 1,600 + ( Factor x ( FTDE-C beyond 1,500 ))
580	Greenhouse			Core of 1,000
<b>600</b>	<b>GENERAL USE</b>			<b>Total</b>
610	Assembly			Core of 12,000 + (2.0 x (FTDE-C beyond 1,500))
620	Exhibition			Core of 1,500 + (0.5 x (FTDE-C beyond 1,500))
630	Food Facility	10.20	8.40	Factor x PHC
640	No Allowance			
650	Lounge			3.0 x PHC
660	Merchandising			Core of 1,600 + (0.5 x (FTDE-C beyond 1,500))
670	No Allowance			
680	Meeting Room	6,000	8,000	Factor x 1
<b>700</b>	<b>SUPPORT</b>			<b>Total</b>
710	Data Processing			Core of 2,500 + (0.75 x ( FTDE-J beyond 4,000))
720	Shop/ Storage			0.04 x (All categories less 720-40 and 760)
730	Included w/ 720			
740	Included w/ 720			
750	Central Service			Core of 4,000 + (FTDE-C beyond 4,000)
760	Hazmat Storage			0.02 x Categories-720-40
<b>800</b>	<b>HEALTH CARE</b>			Core of 500 + (0.2 x (FTDE-C beyond 1,500))
<b>900</b>	<b>No Allowance</b>			
<b>050</b>	<b>No Allowance</b>			
<b>060</b>	<b>No Allowance</b>			
<b>070</b>	<b>No Allowance</b>			
<b>090</b>	<b>No Allowance</b>			
<b>Total NASF:</b>				

FTDE: Full-time day equivalent students. Fall credit and/or eligible non-credit hours taught between 8 am and 5 pm divided by 15.

-C = credit only; -N = non-credit only; -J = joint credit and non-credit.

WSCH-Lec: Weekly student contact hours for on-campus day students in credit and/or eligible non-credit courses where instruction is primarily lecture. -C = credit only;

-C = credit only; -N = non-credit only; -J = joint credit and non-credit.

WSCH-Lab: Weekly student contact hours for on-campus day students in credit and/or eligible non-credit course where instruction is primarily lab.

-C = credit only; -N = non-credit only; -J = joint credit and non-credit.

FTE: Full-time equivalent students. Fall credit hours divided by 15.

BVE: Bound volume equivalent. 20,000 BVE for the first 1,000 FTE and 1,000 BVE for every 100 FTE above 1,000.

FTEF: Full-time equivalent faculty. Full-time faculty, including librarians, plus 25% of part-time faculty.

FT-Fac: Full-time faculty.

FT-Staff: Full-time staff.

PHC: Planning head count. 50% of the sum of FTDE for on-campus credit and eligible non-credit courses and FTEF and FT-Staff, and includes space for seating, preparation, and storage.