

# **MONTGOMERY COLLEGE**



## **INFORMATION TECHNOLOGY STRATEGIC PLAN FY 2012 - 2014**

**Strategic Planning Requests  
December 23, 2010**

# INFORMATION TECHNOLOGY STRATEGIC PLAN

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# INFORMATION TECHNOLOGY STRATEGIC PLAN

## Strategic Planning Requests December 23, 2010 Update

### Executive Summary

Montgomery College is a successful, dynamic and diverse institution. There is diversity within its student and employee populations; within its academic, professional development and training programs; in its student services and community outreach offerings; and in its use of technology. The challenge facing the College and the Office of Information Technology (OIT) is to build, manage and maintain a robust, reliable and trusted technological environment that addresses a very broad and diverse set of requirements and expectations.

The Montgomery College Information Technology Strategic Plan (ITSP) is the mechanism employed by the College to describe and communicate the information technology goals and strategic outcomes needed to address that set of requirements and expectations. The ITSP is a dynamic document designed to be updated on a yearly basis as instructional and operational needs change. Portions of the Plan may be updated during the year to show additional requests, funding availability and adjustments if teaching, learning and operational technology-related requirements should change, expand and/or become more complex.

This is the tenth update to the Montgomery College Information Technology Strategic Plan. It is based on premises associated with the College's mission and the dynamic technologies that support teaching and learning. Emphasis continues to be on accountability, assessment, and the judicious allocation of resources to areas which impact learning outcomes, student success, and College administrative functions.

The Goals and Strategic Outcomes remain consistent with the last update to the Plan. The Strategies and Assessments have been updated to reflect current technology needs. The goals of the ITSP are:

Goal 1: The College will use information technology resources, where appropriate, to facilitate student success.

Goal 2: The College will use information technology resources and practices to effectively and efficiently operate the college.

Goal 3: The College will use information technology resources for development, growth and community initiatives.

Along with premises, and goals and strategic outcomes, this update identifies strategies, assessments, resources requirements and timeframes to meet the technology needs identified through the College's December 2010 strategic planning process. Individual requests have been summarized and grouped into initiatives. The detail and references used to determine the total resource need are contained in the Appendix.

This update was developed during a period of transition for the College and the Office of Information Technology. In the spring of 2010, the reporting structure for the College Libraries changed from OIT to the Senior Vice President for Academic and Student Services. It has also been a challenging economic period in which Montgomery College, Montgomery County and the State of Maryland are struggling with significant budget shortfalls. Historically, economic downturns have resulted in students seeking education and training opportunities. This period is no different. Nearly 60,000 students attend Montgomery College. These students come to Montgomery College looking to obtain new skills and make themselves more marketable through the College's broad array of credit and non-credit courses and programs. Montgomery College offers these students hope, with opportunities to upgrade career skills, prepare for transfer to four-year colleges or universities, and earn a college degree necessary to compete in tomorrow's workforce. Their success, in part, is due to the ability of the College's to provide the information technology resources necessary to efficiently, safely and effectively transact teaching, learning and business activities.

# INFORMATION TECHNOLOGY STRATEGIC PLAN

## Office of Information Technology Mission Statement

The mission of the Office of Information Technology (OIT) is to support student success at Montgomery College through the provision of a wide variety of information and resource technology services for instruction, student service and administrative functions. The unit provides leadership in planning for technology and information services, and supports the selection, acquisition, implementation and effective use of technology and information resources.

## Purpose of the Information Technology Strategic Plan

The Information Technology Strategic Plan (ITSP) is based on the premise that cost effective use of information technology is best achieved when all units of the College share a vision of how the College should use technology, teach technology and learn with technology. A focus on improving student outcomes and a focus on increasing productivity are inherent in the premises, goals and strategic outcomes of the plan. This is a necessary prerequisite for effective delivery of instruction, advising, electronic resource access and facility usage. It is also a prerequisite for effective and efficient College operations. The resulting organization is a centralized Office of Information Technology responsible for all College technologies.

Strategies, assessments and resource requirements have been developed for each goal. The strategies identify units responsible and timetables for achievement of the objectives. The assessments are both outcome and output based. These criteria form the basis for evaluating how well the College is meeting the goals of the plan and more importantly, meeting student needs.

The ITSP is the basis for information technology decision-making at the College. Capital and operating budget requests are reviewed for consistency with the plan as part of the approval process. Progress in achieving objectives is evaluated annually and the plan is modified as necessary based on the evaluation findings. The annual work plan of the Information Technology unit is determined by the priorities established in the ITSP.

## Planning Process

The development of the ITSP remains collaborative and rests on overall College planning processes. The Strategic Planning group of the Office of Information Technology (OIT) prepared this revision of the ITSP in cooperation with the Vice President/Chief Information Officer and in coordination with the collegewide planning process. Development of the plan is based on the many meetings of advisory groups, budget review and program/discipline review, and collegewide planning that have involved IT planning staff.

OIT has been in direct contact with campus Provosts and academic units to gather and record their requests, as well as including all IT requests from the unit strategic plans. The same activity and direct contact has taken place with Institutional Advancement and administrative units.

This strategic planning process is not only for the OIT unit needs, but includes how to provide for the priorities and requests gathered from academic and administrative units during the study and analysis phases. In this manner a complete plan that includes the unit requests with all IT resource components to achieve success can be shown in the ITSP.

## PREMISES OF THE PLAN

- Local and national projections indicate increased student population growth based upon business, education, and training needs for the foreseeable future.
- Students will enter the College with a higher level of technology competency and therefore technology expectations.
- Information technology will impact the design and delivery of instruction.
- Students will demand more customized access to learning to meet their individual learning styles and physical, time and location constraints.
- The ubiquitous nature of information technology will impact how classrooms are designed.
- A transformation of traditional library environments will be necessary to support the changing teaching and learning environment.
- College libraries will continue to expand their roles as information resource centers.
- The increasing demand for technology to support a wide variety of needs and purposes, both academic and administrative, will increase the scope and complexity of the information technology environment and associated support requirements.
- The College community will demand levels of managed customer service that will necessitate review and enhancement of College support processes.
- The convergence of technologies and increasing need for mobile technology will impact the use, support and infrastructure of technology.
- Data security practices and technology standards must be developed and maintained to assure the confidentiality, integrity and availability of information.
- The increasing number of threats and attacks to information technology environments will continue to become more sophisticated worldwide.
- An increasingly dynamic technology environment will require continual professional development of information technology staff to maintain a skilled workforce.
- The demand and availability of electronic connectivity and bandwidth within the College and throughout the community will increase.
- The College will be required to meet emergency management and disaster recovery requirements.

# SUMMARY OF IT GOALS AND STRATEGIC OUTCOMES

## Goal 1

**THE COLLEGE WILL USE INFORMATION TECHNOLOGY RESOURCES, WHERE APPROPRIATE, TO FACILITATE STUDENT SUCCESS.**

### E-Learning

#### ***Strategic Outcome 1***

To continue providing the necessary infrastructure and support to deliver secure and relevant online learning and student resources to students and faculty, including web-based instruction, online admissions and registration, advising, online book purchases and other state-of-the-market technologies.

#### **Strategy:**

1. Implement future learning management systems to incorporate state-of-the-market functionality to support teaching and learning.
2. Support access to Internet2 from all main campus locations for online learning classrooms and connections to other institutions for sharing courses.
3. Support existing, new and improved classroom and learning technologies.

#### **Assessment:**

1. Implement identified replacement learning management system, if justified, based on faculty requirements.

**E-Learning Resource Requirements:** Additional resources needed.

Goal 1, e-Learning			
Description	FY12	FY13	FY14
TOTAL	\$214,000	\$118,000	\$104,000

### Instructional Support

#### ***Strategic Outcome 2***

To assure student success through technological support of academic and instructional programs.

#### **Strategy:**

1. Procure and support computer and other technology equipment to address academic needs in the instructional classrooms and labs collegewide.
2. Add equipment and software licenses for classrooms to address instructional changes.
3. Develop and implement a standard for computer virtualization (technology that supports students, faculty and/or staff users' remote access via the



- Internet to resources and software applications that are available on campus in computer labs).
4. Provide support for video conferencing and instructional programs between campuses and with agencies.
  5. Respond to technology requests resulting from expansion of academic programs.
  6. Respond to technology requests resulting from expansion of instructional grants and institutes.
  7. Adjust staff assignments to meet campus technology support requirements.

**Assessment:**

1. Procurement and implementation of the needed equipment will occur in the fiscal years indicated, providing appropriate funding is available.
2. Develop and implement an instructional software replacement strategy.
3. Work with faculty and academic staff to plan and implement video conferencing for teaching and learning.
4. Develop an academic staffing plan for support of new and changing academic support needs.

**Strategic Outcome 3**

To create a consistent and effective learning environment for all students by utilizing technology and academic support labs for student assessment and skill development.

**Strategy:**

1. Maintain same level of service for lab access and availability on all campuses.

**Assessment:**

1. Partner with campus academic teams to evaluate student computer lab availability, determining if expansion is required.

**Instructional Support Resource Requirements:** Projected enrollment increases may mean more OIT support staff and operating expenses. Grant matching funds add to operational and recurring maintenance including replacements in out-years.

Goal 1, Instructional Support			
Description	FY12	FY13	FY14
TOTAL	\$1,495,000	\$1,180,000	\$1,180,000

## Workforce Development /Continuing Education (WD/CE)

### **Strategic Outcome 4**

To provide technology support for students enrolled in non-credit and credit courses through the Workforce Development/Continuing Education unit.

#### **Strategy:**

1. Computer and classroom technology upgrades will be provided in accordance with established OIT standards.
2. Network upgrades and security enhancements will be provided in accordance with established OIT standards.

#### **Assessment:**

1. Network upgrades will be planned and executed in FY12-14. Results will be reported.
2. Network security enhancements will be planned and executed in FY12-14. Results will be reported.

**Workforce Development & Continuing Education Resource Requirements:** As determined by WD/CE budgets except for high speed lines included with OIT infrastructure and security needs.

Goal 1, Workforce Development & Continuing Education			
Description	FY12	FY13	FY14
TOTAL	\$50,000	\$50,000	\$50,000

## Learning Centers - Instructional Television and Media Production Services

### **Strategic Outcome 5**

To augment academic programs by providing video, audio and graphic services support. To augment skills development and job-readiness for College students working and volunteering at ITVMPS and enrolled in Television curriculum. To augment the College's community outreach programs through increased community programming efforts and partnerships with other County entities. To continue to increase number of original productions on the College cable station and related online outlets. To position ITVMPS as the leader in both mobile production and master control function and expertise among County PEG partners.

#### **Strategy:**

1. Conduct outreach to faculty to educate them about ITVMPS's ability to provide support for multi-media learning objects to complement curriculum. Support development of learning objects in various formats as requested by the College community.
2. Develop and implement structured inventory checklist of skills, goals and expected milestones for students who are ITVMPS student aids and volunteers.

3. Continue to expand cable offerings by growing client base and supporting additional coverage of College programs as requested by the College community.
4. Leverage FiberNet (MCFnet) to expand offerings and services of ITV for the College community, including on-demand and live video streaming.
5. Use internal and external resources to evaluate, design and execute path to high definition in the existing mobile production vehicle.
6. Use internal and external resources to evaluate and plan relocation of ITV media control center personnel and equipment to safe, environmentally appropriate College location while anticipating future growth and inclusion of additional PEG channels.

**Assessment:**

1. Implement new faculty, student and county initiatives and related outreach.
2. Implement streaming technology.
3. Complete upgrade for the mobile production vehicle to high definition.
4. Develop relocation plan for media control center.

**Learning Centers – Instructional Television and Media Production Services Resource Requirements:** Maintain current level of funding 2/3 by the County and 1/3 by the College. Additional initiatives will be determined and funded by the County Cable Office and College budget processes.

Goal 1, Learning Centers - Instructional Television and Media Production Services			
Description	FY12	FY13	FY14
TOTAL	\$100,000	\$100,000	\$100,000

**Student Affairs Support**

**Strategic Outcome 6**

Continue to provide students with disabilities uniform access to assistive technologies to enhance the instructional program access throughout the curriculum and across all campuses.

**Strategy:**

1. The College will equip each library and every new classroom and laboratory with a minimum of one ADA workstation to support instructional use when practical based on room size.
2. Investigate metering software to provide greater access to disability support service desktop applications.

**Assessment:**

1. The College will have a minimum of one assistive technology workstation in every classroom or lab on all campuses.
2. Report which rooms and labs have the assistive technology to the director of ADA compliance.

**Student Affairs Support Resource Requirements:** DSS needs are included in costs for new buildings and renovations.

Goal 1, Learning Centers - Student Affairs Support			
Description	FY12	FY13	FY14
TOTAL	\$60,000	\$60,000	\$60,000

## **Goal 2**

### **THE COLLEGE WILL USE INFORMATION TECHNOLOGY RESOURCES AND PRACTICES TO EFFECTIVELY AND EFFICIENTLY OPERATE THE COLLEGE.**

#### **Infrastructure and Systems Security**

##### ***Strategic Outcome 1***

To protect the users and assets on the College's network by providing diligent security measures and training.

##### **Strategy:**

1. Work with college units to develop and support the College's Continuity of Operations Plan (COOP).
2. Reevaluate and adjust disaster recovery to determine the areas where improvements are needed.
3. Implement or enhance, administer and monitor IT security systems and platforms: firewalls, intrusion detection/prevention systems, infrastructure change management system and miscellaneous inventory to track and alert of unscheduled changes in the technology infrastructure.
4. Develop and implement a strategy/process to communicate security-related issues, laws and regulations, and other developments to the College administration and community.
5. Develop pamphlets for the College community on security procedures and standards, and secure practices.
6. Coordinate/conduct training sessions for faculty, staff and students concerning the various aspects of IT security, including AUP/Student Code of Conduct and security procedures and standards, security threats and mechanisms for protection, requirements for information protection, appropriate/recommended practices.
7. Routinely produce communications to alert about security threats and vulnerabilities.
8. Implement Network and Information Security and Privacy Program (NISPP).
9. Comply with federal and state regulations.

##### **Assessment:**

1. Improvements and corrective actions for disaster recovery will be completed based on evaluation and available funding.
2. Identified projects will be implemented based on timelines and will meet success criteria.

**Infrastructure and Systems Security Resource Requirements:** Defined below in cost analysis; however, this is a new and changing area that could require ongoing funding if needed.

Goal 2, Infrastructure and Systems Security			
Description	FY12	FY13	FY14
TOTAL	\$760,000	\$760,000	\$760,000

### **Infrastructure (Support Systems)**

#### ***Strategic Outcome 2***

To update, maintain and increase the number of smart classrooms (AV and SIWS equipped classrooms), computerized classrooms and laboratories, including open laboratories, as required by the campus unit plans to create a learning rich environment for students and faculty.

[Note: in this case, “infrastructure” includes much more than network wiring that is “not in the walls”—which is frequently used in discussions of facilities.]

#### **Strategy:**

1. OIT will continue to work with the instructional groups in determining the technology requirements of individual curriculums and classes.
2. Smart Instructor Work Stations will be installed in all classrooms (as determined by classroom standards) for instructional delivery.
3. Audio visual systems will be available to support instructional activities.
4. Ensure that applicable classrooms have Internet availability.
5. OIT will enhance its utilization monitoring and reporting activities of the network infrastructure to be used:
  - i. To increase awareness of current instructional needs and possible future needs.
  - ii. As input for decisions on future investments in network infrastructure and new applications/activities relying on network infrastructure resources.

#### **Assessment:**

1. Smart Instructor Workstations will be installed in all classrooms (existing, new or renovated instructional facilities).
2. The annual goals for AV equipment replacements will be met each year.
3. Provide operating support required by instructional activities and delivery of adequate availability and capacity for instructional activities.
4. Utilization metrics and reporting cycles as input for OIT’s metric initiative will be determined and implemented.
5. Trend analysis and reports will be completed for each fiscal year.

#### ***Strategic Outcome 3***

To maintain a viable system backbone and infrastructure, with the flexibility and capacity to meet new technology needs of the College community.

**Strategy:**

1. Utilizing the IT Infrastructure Strategic Plan 2010 – 2012 created in FY2009, OIT will improve Montgomery College’s telecommunications systems and network infrastructure over the coming years as resources permit.
2. The College will update desktop operating systems and office suites based on approved schedules and as industry directions are established and justified.
3. Monitor and increase infrastructure resources (bandwidths and services).
4. Consider the facilities available from the University of Maryland to link campuses and sites and to provide Internet services as a potential cost reduction effort.
5. Investigate Cross Agency Operations Centers Consolidation (CARS).

**Assessment:**

1. Infrastructure will have at least 20% headroom as averaged over a year.
2. Desktop operating systems and office suites update and/or fix schedules will be published on OIT’s web site after consultation with appropriate faculty and administrative staff.

**Infrastructure (Support Systems) Resource Requirements:** Current levels plus additional operating, current capital, grants and outside resources obtained through requests.

Goal 2, Infrastructure (Support Systems)			
Description	FY12	FY13	FY14
TOTAL	\$982,500	\$947,500	\$942,500

**Asset Management**

**Strategic Outcome 4**

To continue implementation of policies, guidelines and processes for the use and management of information technology assets which enhance the efficiency, quality and ease of use of all services for students and employees.

**Strategy:**

1. Surveys will continue to be sent to random clients targeted at improving efficiency, performance and quality control.
2. Identify print management strategies and technology.
3. Implement business processes to assure the transparent and cost efficient acquisition of technology.
4. Investigate Cross Agency Mobile Data/Voice Contract Consolidation (CARS).
5. Investigate Cross Agency IT Help Desk Services Consolidation (CARS)

**Assessment:**

1. Survey results will be used to provide increased performance management for information technology assets.

2. Work with stakeholders to conduct a study identifying current print costs at MC. Based on this study, work with stakeholders to develop a print management strategy at Montgomery College.
3. Survey results demonstrate technology acquisition processes support the needs of the user community.

**Asset Management Resource Requirements:** Current resources and additional requests if determined by survey and performance.

Goal 2, Asset Management			
Description	FY12	FY13	FY14
TOTAL	\$610,000	\$610,000	\$610,000

## Replacement

### **Strategic Outcome 5**

To utilize budget resources effectively to address replacement and refreshment of resources with current technology.

#### **Strategy:**

1. Achieve stable levels of replacement for desktops and laptops. Replace servers, scanners and printers according to the business use of the devices and changes required from industry improvements.
2. Achieve replacement of new additions to workstation inventories as the College brings new labs, classrooms, buildings and offices into operation.
3. Provide faculty with the choice of a workstation or laptop with docking station when their workstation equipment is due to be replaced.
4. Replace audio/visual equipment in accordance with established replacement schedules.
5. Increase time between workstation and laptop replacement cycles to four (4) years.
6. Determine which equipment should be replaced “on failure” and warranties terminated.
7. Multi-function printers should be considered replacement only on failure of the device and when repair is not financially viable.

#### **Assessment:**

1. Execute replacement strategy to minimize disruption of service for replace “on failure” equipment.

**Replacement Resource Requirements:** Replacements are included in County IT capital requests based on workstations, servers, printers and infrastructure.

Goal 2, Replacement			
Description	FY12	FY13	FY14
TOTAL	\$10,795,000	\$9,577,000	\$8,500,000



## **Planning, Assessment, Initiatives and Analysis**

### ***Strategic Outcome 6***

To fully integrate the creation, update and assessment of the Information Technology Strategic Plan (ITSP) into Montgomery College's institutional planning and governance processes.

#### **Strategy:**

1. The ITSP process will be updated to include appropriate stakeholders and governance groups and will be documented and communicated across the College.
2. OIT will coordinate with and support the collegewide planning facilitated by the Office of Planning and Institutional Effectiveness and other units.
3. OIT will perform regular assessments of the ITSP achievements against the plans and report to appropriate OIT management and the College administration.
4. OIT will develop metrics to guide performance improvement.
5. OIT strategic planning is operationalized through the development of an annual action plan.

#### **Assessment:**

1. OIT will coordinate the development of the ITSP and the annual action plan with appropriate stakeholders and in alignment with established governance models and processes.
2. OIT will document process improvements based on appropriate data and continuous improvement best practices.
3. Each fiscal year OIT's annual action plan will be developed within two months after the end of the fiscal year and is based on available funding.

### ***Strategic Outcome 7***

To document current best practices in Information Technology.

#### **Strategy:**

1. OIT will request updates to the IT best practices.
2. OIT managers and supervisors will document and/or update their office practices as appropriate.
3. College IT best practices and infrastructure standards will be communicated widely using website information postings.

#### **Assessment:**

1. College IT best practices will be updated using the approved processes.
2. A website of best practices will be operated and updated continuously for FY12-14.

### **Strategic Outcome 8**

To continually assess project quality and performance to gain insight into efficiencies, improvements in operations and quantitative assessments.

#### **Strategy:**

1. OIT will continue to update service level definitions and communicate them to the College community.
2. Assessments will be performed on project quality and performance.
3. Improvements in operational quality and economy will be sought through studies and benchmarking with other higher education institutions.

#### **Assessment:**

1. IT service level definition updates will be placed on the College intranet.
2. A knowledge base of “lessons learned” and improvements will be maintained and IT managers will have access to this information for project management.

### **Strategic Outcome 9**

To effectively utilize the information gained in quality and best practice reviews.

#### **Strategy:**

1. Each year Service Level Expectations (SLEs), Problem Analysis Reviews (PARs) and Lessons Learned will be used for continuous improvement.
2. Each year OIT work accomplishments will be reported to the College administration.

#### **Assessment:**

1. An Annual Report documenting OIT work accomplishments will be provided to the College community.

**Planning, Assessment, Initiatives and Analysis Resource Requirements:**  
Current resources plus consultant contracts.

<b>Goal 2, Planning, Assessment, Initiatives and Analysis</b>			
<b>Description</b>	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>
<b>TOTAL</b>	<b>\$155,000</b>	<b>\$85,000</b>	<b>\$85,000</b>

## **Communications Systems (Telecommunications)**

### **Strategic Outcome 10**

OIT will reassess and upgrade as necessary, the functional requirements of the network infrastructure architecture, including e-mail, voice mail, wireless and other telephony applications, and ensure scalability and compatibility to accommodate increased use of resources, growth of the campuses and student populations.

**Strategy:**

1. Utilizing the IT Infrastructure Strategic Plan, OIT will improve Montgomery College’s telecommunications systems and network infrastructure over the coming years as resources permit.
2. OIT will introduce new telecommunications technologies, as they are efficient and cost-effective for the College.
3. OIT will work to provide wireless connectivity for all College locations and facilities.
4. OIT will perform an analysis of the options and ramifications for the best use of the currently available operating systems (Novell, Microsoft, etc.) to support Montgomery College’s network infrastructure systems.
5. OIT will complete an in-depth plan regarding Montgomery College’s telephone/voice networked systems.
6. Continue to implement emergency messaging and notification systems.

**Assessment:**

1. OIT will implement a VoIP pilot.
2. OIT will update the IT Infrastructure Strategic Plan each year to keep objectives and goals current.
3. Wireless public access locations to the Internet will be established for all campus locations and labeled to support the College community.
4. An OIT telephone/voice standard will be completed and presented to OIT management.
5. OIT will initiate increases of communications systems resources as required, and funded, from FY12-FY14.
6. Conduct an infrastructure audit of all campuses to determine pockets of equipment needing upgrade in order to maintain adequate service.

**Communications Systems (Telecommunications) Resource Requirements:**  
Current resources plus current capital, grants and operating requests.

Goal 2, Communications Systems (Telecommunications)			
Description	FY12	FY13	FY14
TOTAL	\$9,155,000	\$4,970,000	\$4,995,000

**Applications – Systems**

**Strategic Outcome 11**

To furnish appropriate solutions and support for enterprise applications utilized by the College community to ensure technical currency through software updates and enhancements.

**Strategy:**

1. OIT will leverage current enterprise application functionality.
2. In coordination with the College’s Web governance body, OIT will develop and implement Web standards for the College’s Internet and intranet sites.
3. Improve data warehouse and reporting capabilities.

4. Support and upgrade new or current operating system releases.
5. Continuation of Web Content Management project.
6. Implement space inventory and utilization as funded by prior CIP.

**Assessment:**

1. Develop practice for review of new technology requests which include examining existing technology and systems before initiating new technology or systems.
2. Completion of phase one for tracking of student lab use and counseling visit accounting by the end of FY12.
3. Implementation of student check-in and tracking, student e-mail support, office document imaging.
4. Reduction in web sites not compliant with the Web Standards.

**Applications Systems Resource Requirements:** Current plus capital requests for hardware and software.

Goal 2, Applications Systems			
Description	FY12	FY13	FY14
TOTAL	\$2,715,000	\$1,811,800	\$1,531,800

### **Goal 3**

## **THE COLLEGE WILL USE INFORMATION TECHNOLOGY RESOURCES FOR DEVELOPMENT, GROWTH, AND COMMUNITY INITIATIVES.**

### **Campus Remodeling, Renovation and Expansion**

#### ***Strategic Outcome 1***

To provide effective information technology resources for the College's expansion within budgets.

#### **Strategy:**

1. Ensure that appropriate technology is planned and provided into the early stages for all labs, classrooms and offices of Rockville, Takoma Park, Germantown and remote site expansion initiatives.
2. Provide telecommunications upgrades, work with IT services to prepare and support IT project specifications for the following campus initiatives:
  - Takoma Park Campus, including Health Science WDCE renovation and relocation to Cafritz, and Health Sciences Center during remodeling and temporary use in the transition period of campus expansion.
  - Germantown Campus including the Germantown Science and Applied Studies Building, Bio-Education Building, Child Care Center and Resource Center.
  - Rockville Campus including the Student Services Building, Science East and West Building renovations and Campus cable distribution system expansion.
3. OIT will continue to participate in the Bio-Education and Science East development projects to assure adequate facilities are made available to accommodate the required OIT services.
4. The IT Facilities and Network Planning group, will work the with IT Services groups to prepare IT building specifications to support the following building related projects:
  - Rockville Science Building, Student Services Building and Science East and West Building to support the residents
  - Germantown Bio-Education Building and Child Care Center to support the residents
5. Execute the tactical project plans to accomplish the relocation of personnel for the following projects:
  - The Rockville Science Center and Science East and West Buildings
  - The Germantown Bio-Education Center and Child Care Buildings
  - The Takoma Park Commons Building, Health Sciences WDCE renovation and relocation.

**Assessment:**

1. Successful establishment of telecommunications functions (AV, data, and telephone) on the new campus expansion areas as required by operational dates.
2. Implementation/installation of telecommunications systems infrastructure and IT support equipment (network and desktop (AV, data and telephone) in Rockville Science Building and Science East and West Buildings as required by operational dates.
3. Implementation/installation of telecommunications systems infrastructure and IT support equipment (network and desktop (AV, data and telephone) in Germantown Bio-Education Center and Child Care Buildings as required by operational dates.

**Strategic Outcome 2**

To become an active participant in the planning for campus remodeling, renovation and expansion in order to effectively and responsibly meet the technology needs in these new environments.

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The following is a list of Facilities expansion projects as outlined in the FMP (Facilities Master Plan) proposed for FY2010 – FY2016. (This list does not include all general renovation projects.):

**Takoma Park Campus**

HS WDCE renovation and relocation to CF

**Rockville Campus**

Parking structure #1

Science Center

Science East and Science West Renovations – in two phases

Campus Student Services Center

Rockville Computer Science Building (New RV NOC)

Campus Center Renovation

**Germantown Campus**

Child Care Center

Bioscience Education Center – including extension of Observation Drive and parking

Science & Applied Studies Building second floor renovation for Campus security area

Student Resource Center

**WDCE**

GT Campus - Inclusion of Biotechnology Work Force Development/Continuing Education in Bioscience Center

GT Campus - Consolidation of Campus-Based Work Force Development Staff

Rockville – Consolidation of Campus-Based Work Force Development functions in the SCIB.

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**Strategy:**

1. OIT will continue to be an active participant in the planning of campus remodeling, renovation and expansion in order to effectively and responsibly meet the technology needs in these new environments.
2. The College will provide IT staff to support the new campus facilities and growth in workloads in support, applications, and networking.

- OIT will reassess and upgrade as necessary, the functional requirements of the network infrastructure architecture, including e-mail, voice mail, wireless and other telephony applications, and ensure scalability and compatibility to accommodate growth of the campuses and student populations.

**Assessment:**

- Network infrastructure renovation work will be completed as required for each of the renovations and new constructions.
- OIT will successfully establish a network infrastructure support and operational functions for the new campus expansion areas.
- OIT will continue to update network architecture standards and designs to strategically support systems to meet the enterprise-wide security needs, bandwidth needs and service needs of Montgomery College for future years to ensure OIT's preparedness and responsiveness to the projects related to these renovations and new constructions.

**Campus Remodeling, Renovation and Expansion Resource Requirements:** Capital requests, College operational, one-time operating and continuing requests. OIT costs in new facilities under capital requests are not shown in this plan.

Goal 3, Campus Remodeling, Renovation and Expansion			
Description	FY12	FY13	FY14
Subtotal Compensation	\$719,559	\$1,094,933	\$1,094,933
Subtotal Other Expenses	\$1,525,643	\$3,070,611	\$3,070,611
Total Operating Budget New Buildings	\$2,245,202	\$4,165,544	\$4,165,544
Projected CIP Appropriations (not included in IT SP totals)	\$18,395,000	\$15,377,000	\$14,100,000

**Institutional Advancement and Marketing**

**Strategic Outcome 3**

To demonstrate Montgomery College's role as a community leader and resource through the information exchange and dissemination on the Montgomery College Internet and intranet pages, providing information for students, alumni, community members and businesses.

**Strategy:**

- Publish and improve the interactivity of the online college information.
- Review and update if necessary the Web sites 'Privacy Statement'.

**Assessment:**

- The web redesign will be completed by FY13.
- The College administration will have reviewed and suggested changes to the posted Privacy Statement.

#### Strategic Outcome 4

To promote the College as a community leader by using technology to reaffirm our position as a source of cultural opportunities, community information, support and education.

#### Strategy:

1. Meet the Office of Communications needs for multi-media presentations, videos and compilations of college/student events, and shared commitment/capability on the part of ITV&MPS.
2. Maintain state-of-the-market technology in online, multi-media and print publications.
3. Carry out effective, efficient, current and timely communications to multiple mass audiences.
4. Implement and maintain state of the art, high quality virtual access, appropriate telephone access and other marketing concerns for prospective and current students and visitors.
5. Investigate Cross Agency Language Translation Services Cooperative (CARS).

#### Assessment:

1. Produce high-quality video blogs for the President's Office.

**Institutional Advancement and Marketing Resource Requirements:** Additional operating requests.

Goal 3, Institutional Advancement and Marketing			
Description	FY12	FY13	FY14
TOTAL	\$35,000	\$35,000	\$35,000



## RESOURCE REQUIREMENTS BY GOAL/INITIATIVE

The following table summarizes the expenditures by initiatives within the goals of the plan:

<b>ITSP 2012-2014 Totals</b>				
<b>Goal</b>	<b>Initiative</b>	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>
Goal 1	e-Learning	\$214,000	\$118,000	\$104,000
Goal 1	Instructional Support	\$1,495,000	\$1,180,000	\$1,180,000
Goal 1	Workforce Development & Continuing Education	\$50,000	\$50,000	\$50,000
Goal 1	Learning Centers - ITV & MPS	\$100,000	\$100,000	\$100,000
Goal 1	Student Affairs Support	\$60,000	\$60,000	\$60,000
Goal 2	Infrastructure and Systems Security	\$760,000	\$760,000	\$760,000
Goal 2	Infrastructure (Support Systems)	\$982,500	\$947,500	\$942,500
Goal 2	Asset Management	\$610,000	\$610,000	\$610,000
Goal 2	Replacement	\$10,795,000	\$9,577,000	\$8,500,000
Goal 2	Planning, Assessment, Initiatives & Analysis	\$155,000	\$85,000	\$85,000
Goal 2	Communications Systems (Telecommunications)	\$9,155,000	\$4,970,000	\$4,995,000
Goal 2	Applications Systems	\$2,715,000	\$1,811,800	\$1,531,800
Goal 3	Campus Remodeling, Renovation and Expansion	\$2,245,202	\$4,165,544	\$4,165,544
Goal 3	Inst. Advancement and Marketing	\$35,000	\$35,000	\$35,000
<b>ITSP 2012-2014 Totals</b>		<b>\$29,371,702</b>	<b>\$24,469,844</b>	<b>\$23,118,844</b>

## APPENDIX

Goal 1, e-Learning			
Description	FY12	FY13	FY14
Teleconferencing Expenses	\$180,000	\$80,000	\$60,000
Migration from WebCT to Blackboard	\$34,000	\$38,000	\$44,000
<b>TOTAL</b>	<b>\$214,000</b>	<b>\$118,000</b>	<b>\$104,000</b>

Goal 1, Instructional Support			
Description	FY12	FY13	FY14
Instructional Support Staff (Labs)-Increased Enrollment	\$240,000	\$240,000	\$240,000
Matching Funds (OIT Suppt)-Instr. Grants and Replacements	\$130,000	\$130,000	\$130,000
Instructional Innovation Software	\$10,000	\$10,000	\$10,000
New Innovation	\$20,000	\$20,000	\$20,000
Collegewide Developmental Math Labs	\$175,000	\$10,000	\$10,000
Collegewide Developmental Math Labs - Software	\$100,000	\$100,000	\$100,000
Collegewide World Language Labs	\$100,000	\$100,000	\$100,000
Staff to support new student learning support appls.	\$70,000	\$70,000	\$70,000
Staff for expanded coverage incl. weekends	\$150,000	\$150,000	\$150,000
Support for Distance Lrng/Teleconf/Podcasting: HW/SW	\$200,000	\$50,000	\$50,000
Virtual Computer Labs	\$300,000	\$300,000	\$300,000
<b>TOTAL</b>	<b>\$1,495,000</b>	<b>\$1,180,000</b>	<b>\$1,180,000</b>

Goal 1, Workforce Development & Continuing Education			
Description	FY12	FY13	FY14
Increased support and maintenance	\$50,000	\$50,000	\$50,000
<b>TOTAL</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>

Goal 1, Learning Centers - Instructional Television and Media Production Services			
Description	FY12	FY13	FY14
ITV - Improvement Level	\$100,000	\$100,000	\$100,000
<b>TOTAL</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>

Goal 1, Learning Centers - Student Affairs Support			
Description	FY12	FY13	FY14
DSS Technology Upgrades	\$60,000	\$60,000	\$60,000
<b>TOTAL</b>	<b>\$60,000</b>	<b>\$60,000</b>	<b>\$60,000</b>

Goal 2, Infrastructure and Systems Security			
Description	FY12	FY13	FY14
Firewalls, Borders/Internal	\$50,000	\$50,000	\$50,000
IT Security Policy and Technology (i.e., eMail Archiving, Records Management)	\$50,000	\$50,000	\$50,000
Audits	\$100,000	\$100,000	\$100,000
Security Training Programs	\$20,000	\$20,000	\$20,000
Cybersecurity & privacy policies, process.& compliance	\$40,000	\$40,000	\$40,000
Disaster Recovery and Business Continuity	\$500,000	\$500,000	\$500,000
<b>TOTAL</b>	<b>\$760,000</b>	<b>\$760,000</b>	<b>\$760,000</b>

<b>Goal 2, Infrastructure (Support Systems)</b>			
<b>Description</b>	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>
Instructional System Monitoring/Active Directory	\$45,000	\$45,000	
Network Mapping - Updates	\$35,000	\$35,000	\$35,000
Instructional Technology	\$120,000	\$160,000	\$200,000
Support services contract increases	\$60,000	\$60,000	\$60,000
Network infr. & support systems/planned lifecycle repl & upg: Consult.	\$100,000	\$100,000	\$100,000
Netwk infr. & suppt syst/plnd lifecyc repl&upg:Telcom Infr. Design/Cost	\$250,000	\$250,000	\$250,000
Wireless	\$200,000	\$125,000	\$125,000
Systems Architecture	\$150,000	\$150,000	\$150,000
Desktop Backups - Ongoing	\$22,500	\$22,500	\$22,500
<b>TOTAL</b>	<b>\$982,500</b>	<b>\$947,500</b>	<b>\$942,500</b>

<b>Goal 2, Asset Management</b>			
<b>Description</b>	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>
Asset Mgmt-Helpdesk Consulting and Upgrades	\$10,000	\$10,000	\$10,000
New software for academic programs	\$300,000	\$300,000	\$300,000
Increase in software licensing costs	\$50,000	\$50,000	\$50,000
Unanticipated requests for software	\$250,000	\$250,000	\$250,000
<b>TOTAL</b>	<b>\$610,000</b>	<b>\$610,000</b>	<b>\$610,000</b>

<b>Goal 2, Replacement</b>			
<b>Description</b>	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>
Information Technology (Replacements - all IT Equipment)	\$10,795,000	\$9,577,000	\$8,500,000
<b>TOTAL</b>	<b>\$10,795,000</b>	<b>\$9,577,000</b>	<b>\$8,500,000</b>

<b>Goal 2, Planning, Assessment, Initiatives and Analysis</b>			
<b>Description</b>	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>
New Technology Studies	\$40,000	\$40,000	\$40,000
Emerging Technology Test Equipment	\$20,000	\$20,000	\$20,000
Contract Management: 1 FTE	\$70,000		
Professional Development and Training	\$25,000	\$25,000	\$25,000
<b>TOTAL</b>	<b>\$155,000</b>	<b>\$85,000</b>	<b>\$85,000</b>

<b>Goal 2, Communications Systems (Telecommunications)</b>			
<b>Description</b>	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>
Campus to Campus Redundant Links	\$100,000		
FiberNet & Video Conferencing	\$50,000	\$50,000	\$50,000
Video Conferencing	\$200,000	\$200,000	\$200,000
Network Infrastructure	\$3,000,000	\$2,000,000	\$2,000,000
Network Operating Center	\$3,000,000	\$2,000,000	\$2,000,000
Network MD	\$20,000	\$10,000	\$10,000
UMATS	\$75,000	\$100,000	\$125,000
Internet2 and MAX	\$10,000	\$10,000	\$10,000
Contracted Svcs- maintain svc levels, install assist.	\$100,000	\$100,000	\$100,000
Telephony, messaging & notification: HW/SW, VoIP (Unified Communication)	\$2,500,000	\$400,000	\$400,000
Mobile Initiative	\$100,000	\$100,000	\$100,000
<b>TOTAL</b>	<b>\$9,155,000</b>	<b>\$4,970,000</b>	<b>\$4,995,000</b>

Goal 2, Applications Systems			
Description	FY12	FY13	FY14
Portfolio Management (Webfolio)	\$150,000	\$30,000	
Facilities Parking Management Software System (Maintenance)	\$150,000	\$150,000	\$150,000
Initiate implementation of student tracking systems: 2 FTE (CIP)	\$70,000	\$70,000	
Install/upgrade/repl.-student tracking hw/sw for intake process & lab	\$350,000	\$350,000	\$350,000
Document imaging-hardware/consulting/2 FTE	\$200,000	\$200,000	\$200,000
Implement new procurement system: .3 FTE	\$25,000		
Implement new procurement system: hardware/software/consulting	\$250,000	\$160,000	\$130,000
HW and SW to improve datawarehouse & reporting capabilities	\$750,000	\$112,500	\$112,500
Implement Enrollment Management system: hardware and software	\$300,000	\$350,000	\$200,000
Student Learning Support Systems (Student Email): HW & SW (Funding: CIP)	\$250,000	\$250,000	\$250,000
Student Learning Support Systems (Student Email): 2 FTE (Funding: CIP)	\$50,000	\$50,000	\$50,000
Room and Event Scheduling (Maintenance)	\$60,000	\$60,000	\$60,000
Collaboration Software	\$50,000	\$7,500	\$7,500
SQL Server (Ongoing)	\$15,000	\$15,000	\$15,000
Touchnet Cashiering	\$45,000	\$6,800	\$6,800
<b>TOTAL</b>	<b>\$2,715,000</b>	<b>\$1,811,800</b>	<b>\$1,531,800</b>

Goal 3, Campus Remodeling, Renovation and Expansion			
Description	FY12	FY13	FY14
<b>New Buildings (Compensation)</b>			
Rockville Science Center (7)	\$404,000	\$404,000	\$404,000
Benefits - FICA	\$30,906	\$30,906	\$30,906
Benefits - Group Insurance	\$44,800	\$44,800	\$44,800
Rockville SE/Renovation (2)		\$114,000	\$114,000
Benefits - FICA		\$8,721	\$8,721
Benefits - Group Insurance		\$12,800	\$12,800
Germantown Bioscience (7) (1/2 year FY12)	\$202,000	\$404,000	\$404,000
Benefits - FICA	\$15,453	\$30,906	\$30,906
Benefits - Group Insurance	\$22,400	\$44,800	\$44,800
<b>Subtotal Compensation</b>	<b>\$719,559</b>	<b>\$1,094,933</b>	<b>\$1,094,933</b>
<b>Operating Expenses</b>			
Rockville Science Center: Contracted Services	\$895,000	\$895,000	\$895,000
Science East Renovation: Contracted Services		\$512,290	\$512,290
Science West Renovation: Contracted Services		\$538,804	\$538,804
Germantown Bioscience (1/2 in FY12): Contracted Services	\$484,128	\$968,252	\$968,252
Germantown Child Care Center: Contracted Services		\$9,750	\$9,750
Takoma Park WDCE Renovation in Cafritz Foundation Arts Center: Contracted Svcs.	\$146,515	\$146,515	\$146,515
<b>Subtotal Other Expenses</b>	<b>\$1,525,643</b>	<b>\$3,070,611</b>	<b>\$3,070,611</b>
<b>Total Operating Budget New Buildings</b>	<b>\$2,245,202</b>	<b>\$4,165,544</b>	<b>\$4,165,544</b>
<b>Capital Projects Non-Salary</b>			
Network Operations Center TP	\$3,000,000	\$2,000,000	\$2,000,000
Network Infrastructure & Support Systems	\$3,000,000	\$2,000,000	\$2,000,000
Information Technology (Replacements - all IT Equipment)	\$10,795,000	\$9,577,000	\$8,500,000
Student Learning Support Systems	\$1,600,000	\$1,800,000	\$1,600,000
<b>Projected CIP Appropriations (not included in IT SP totals)</b>	<b>\$18,395,000</b>	<b>\$15,377,000</b>	<b>\$14,100,000</b>

Goal 3, Institutional Advancement and Marketing			
Description	FY12	FY13	FY14
Language Translation Services (Ref.: ITPCC CARS)	\$10,000	\$10,000	\$10,000
Foundation Board Portal	\$25,000	\$25,000	\$25,000
<b>TOTAL</b>	<b>\$35,000</b>	<b>\$35,000</b>	<b>\$35,000</b>