

MONTGOMERY COLLEGE



INFORMATION TECHNOLOGY STRATEGIC PLAN FY 2011 - 2013

**Strategic Planning Requests
October 6, 2009**

INFORMATION TECHNOLOGY STRATEGIC PLAN

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
INFORMATION TECHNOLOGY STRATEGIC PLAN	5
PREMISES OF THE PLAN	7
SUMMARY OF IT GOALS AND STRATEGIC OUTCOMES	8
Goal 1	8
E-Learning	8
Instructional Support	8
Workforce Development/Continuing Education	10
Learning Centers – Libraries	10
Learning Centers – Instructional Television & Media	12
Production Services	
Student Affairs Support	13
Goal 2	14
Infrastructure and Systems Security	14
Infrastructure (Support Systems)	15
Asset Management	16
Replacement	17
Planning, Assessment, Initiatives and Analysis	18
Communications Systems (Telecommunications)	19
Applications – Systems	20
Goal 3	22
Campus Remodeling, Renovation and Expansion	22
Institutional Advancement and Marketing	24
RESOURCE REQUIREMENTS BY GOAL/INITIATIVE	26
APPENDIX	27

INFORMATION TECHNOLOGY STRATEGIC PLAN

Strategic Planning Requests October 1, 2009

Executive Summary

The ninth update to the Montgomery College Information Technology Strategic Plan (ITSP) describes information technology goals and strategic outcomes determined through College planning processes.

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.

This plan is based on premises associated with the College's mission and the diverse and dynamic technology environment required to support the teaching and learning mission of the College. Emphasis is on those areas which will impact student learning outcomes or 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.

This update was developed during an economic downturn affecting the College, Montgomery County and the state of Maryland. Historically, economic downturns have resulted in students seeking education and training opportunities. This is the case given the College's most recent registration period. The fall 2009 enrollments are the highest enrollments in Montgomery College's history. The emphasis of this plan continues to be on accountability, assessment and the judicious allocation of resources to support student success. This plan describes the necessary resources for the College to efficiently, safely and effectively transact its teaching, learning and business activities within this environment.

Many of the goals and strategic outcomes in this update apply to ongoing OIT operations and depend upon the continued commitment of OIT leadership, staff and financial resources. However, College teaching, learning and operational technology-related requirements continue to change, expand and become more complex. If the Capital Improvement Programs (CIPs) are not funded at their current level, some components of this plan would be delayed. Therefore, new funds would be requested to support College strategic plan requirements.

Along with premises, and goals and strategic outcomes, this update identifies strategies, assessments, resources requirements and timeframes to meet the identified technology needs. Although the plan covers Fiscal Years 2011 – 2013 (based on strategic planning requests to October 1, 2009), it is a dynamic document designed to be updated on a yearly basis as instructional and operational needs change. Portions of the plan will be updated during the year to show additional requests, funding availability and adjustments.

This plan does not detail individual requests but summarizes and groups them into initiatives. The Appendix contains the detail and references used to determine the total resource need.

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 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, pandemic 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	FY11	FY12	FY13
TOTAL	\$475,000	\$375,000	\$355,000

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	FY11	FY12	FY13
TOTAL	\$900,000	\$1,410,000	\$715,000

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 FY11-13. Results will be reported.
2. Network security enhancements will be planned and executed in FY11-13. 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	FY11	FY12	FY13
TOTAL	\$50,000	\$50,000	\$50,000

Learning Centers – Libraries

Strategic Outcome 5

To provide relevant, consistent and timely library resources for students through the College's libraries, learning centers, instructional labs and Internet stations.

Strategy:

1. Continue to ensure the accuracy and completeness of the College's library collections displayed in our online catalog and reflected in OCLC.
2. Continue to provide user access through the online catalog to library resources and course reserve materials both print and electronic.
3. Continue to enhance user access to library materials, journal articles and citations in a single-search environment.
4. Reorganize and configure existing library space to reallocate collection and study space. Implement collaborative project management strategy for the Rockville Library renovation project.
5. Finalize, document and implement the acquisitions plan for the MC Special Collections (formerly Archives) program to collect historical records, documents and memorabilia; provide access to historical collections through

- the online public access catalog (OPAC); promote use of Special Collections through appropriate marketing and communication tools; draft a plan to encourage the donation of memorabilia from various groups within and outside the College community; integrate the Special Collections program with the library instruction and research programs; provide Special Collections support for College events; partner with the Montgomery County Historical Society, Institutional Advancement, and other external and internal agencies to collect resources and share knowledge and/or ideas.
6. Integrate with instructional and administrative College units in support of learning and student success.
 7. Provide appropriate outreach for faculty to increase awareness and curricular potential of library resources and services.

Assessment:

1. For Strategy 1: Continuously review and monitor feedback from users and comments sent to the feedback account on the voyager OPAC. Run monthly reports to ensure the accuracy and integrity of the catalog and make updates when needed. Urgent problems are resolved immediately, and non-emergency minor changes are reviewed and made on a semester by semester basis. Major changes will be made once a year in the summer months –May to August.
2. For Strategy 2: Negotiate with vendors for online resources to make metadata (MARC records) *freely* available to libraries for inclusion in the catalog. Our objective is to provide above 90% access to all library resources via the online catalog.
3. For Strategy 3: Review the MC federated central search setup features to enhance the interface, navigation, functionality and search retrieval features by the end of August 2010.
4. For strategy 4: Collection and study space will be reallocated for better use of space.
5. For Strategy 5: Special Collections resources will be included in the online library catalog of the College based on funding availability through a digital content management system. Complete the acquisitions plan for Special Collections in the first year of FY2010-2013. Identify the first phase of Special Collection resources for inclusion in the OPAC during the first year according to planned criteria. Start cataloging the items in the Voyager database in the second year of FY2010-2013. Develop a communications and marketing plan in the first year. Draft a plan to integrate Special Collections into library instruction classes. Identify and develop a plan for partnering with agencies internal and external to the College for the purpose of acquiring and use of historical memorabilia to promote the College.
6. For Strategy 6: A plan will be prepared for the implementation of a literacy program to include: the integration of library services and instruction into the First Year Experience initiative; justification for campus-based components; delivery methods; collaborations with academic disciplines to implement

components of information literacy to meet outcomes assessment; and assessment tools to measure the effectiveness of the identified components.

7. For Strategy 7: Each discipline will have a designated librarian contact on each campus. The library will develop a new faculty orientation website.

Learning Centers – Libraries Resource Requirements: Projected enrollment increases require additional library staff and operating costs. Software is needed to improve reserves and library services.

Goal 1, Learning Centers - Libraries			
Description	FY11	FY12	FY13
TOTAL	\$485,000	\$485,000	\$485,000

Learning Centers - Instructional Television and Media Production Services

Strategic Outcome 6

To augment the College's community outreach programs through increased community programming efforts and partnerships with other County entities. To augment academic programs by providing video, audio and graphic services support. To continue and improve cable productions on the College cable station.

Strategy:

1. Provide support for additional coverage of special events and programs as requested by the College community.
2. Expand cable offerings.
3. Implement on-demand and live video streaming.
4. Leverage FiberNet (MCFnet) to expand offerings and services of ITV for the College community.
5. Research and analyze the use of internet protocol (IPTV) for instructional television (ITV) delivery.
6. Develop a plan to serve as a backup site for Channel 5 news as part of the Continuity of Operations (COOP) initiative.
7. Phase in digital migration of the ITV control room.

Assessment:

1. Implement new initiatives.
2. Implement streambox technology.
3. Complete upgrade for the control room to high definition.
4. Develop a memorandum of understanding with Channel 5 news for the COOP initiative.

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	FY11	FY12	FY13
TOTAL	\$100,000	\$100,000	\$100,000

Student Affairs Support

Strategic Outcome 7

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	FY11	FY12	FY13
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	FY11	FY12	FY13
TOTAL	\$860,000	\$290,000	\$290,000

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.

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	FY11	FY12	FY13
TOTAL	\$1,095,000	\$609,000	\$469,000

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. Investigate feasibility of print management strategies and technology.
3. Implement business processes to assure the transparent and cost efficient acquisition of technology.

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	FY11	FY12	FY13
TOTAL	\$95,000	\$95,000	\$95,000

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	FY11	FY12	FY13
TOTAL	\$16,200,000	\$16,700,000	\$17,200,000

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. The OIT Policy, Planning and Cyber Security Group 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 FY11-13.

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.

Goal 2, Planning, Assessment, Initiatives and Analysis			
Description	FY11	FY12	FY13
TOTAL	\$510,000	\$400,000	\$130,000

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 for the Cafritz Center (WD/CE).
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 FY11-FY13.
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	FY11	FY12	FY13
TOTAL	\$7,251,500	\$3,721,500	\$2,830,000

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	FY11	FY12	FY13
TOTAL	\$3,860,000	\$2,583,000	\$1,560,000

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 Commons Building, Health Science WDCE renovation and relocation to Cafritz, OIT Network Operations Center relocating from the Rockville Campus, Resource Center Library, and the West Parking Garage during remodeling and temporary use in the transition period of campus expansion.
 - Germantown Campus including the Germantown Science and Applied Studies Building, Bioscience Building and Child Care Center.
 - Rockville Campus including the Student Services Building and Science East and West Buildings.
3. OIT will continue to participate in the CFAC development project to assure adequate facilities are made available to accommodate the OIT Network Operations Center relocated from the Rockville Campus. This includes the backfill renovation of the Rockville Campus NOC.
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:
 - Commons, Health Sciences WDCE renovation and relocation to Cafritz, and West Parking Garage Residents
 - Rockville Science Building, Student Services Building and Science East and West Building to support the residents
 - Germantown Bioscience 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 OIT Network Operations Center to the CFAC
 - The Rockville Science Center and Science East and West Buildings
 - The Germantown Bioscience Center and Child Care Buildings

- The Takoma Park Commons Building, Health Sciences WDCE renovation and relocation and West Parking Garage structures.

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 Bioscience 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.

The following is a list of Facilities expansion projects as outlined in the FMP (Facilities Master Plan) proposed for FY2009 – FY2012. (This list does not include all general renovation projects.):

Takoma Park Campus

- Commons Renovation
- Performing Art Center (Previously Cultural Arts)
- West Parking Structure # 2 (existing parking structure is Parking Structure # 1)
- 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)

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

WDCE

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

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.
3. 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:

1. Network infrastructure renovation work will be completed as required for each of the renovations and new constructions.
2. OIT will successfully establish a network infrastructure support and operational functions for the new campus expansion areas.
3. 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	FY11	FY12	FY13
TOTAL	\$11,533,000	\$12,569,500	\$13,484,000

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:

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

Assessment:

1. The web redesign will be completed by FY13.
2. 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.

Assessment:

1. Work with MC ITV&MPS to produce at least 4 quality multi-media presentations per year for 2011-2013.

Institutional Advancement and Marketing Resource Requirements: Additional operating requests.

Goal 3, Institutional Advancement and Marketing			
Description	FY11	FY12	FY13
TOTAL	\$100,000	\$0	\$0

RESOURCE REQUIREMENTS BY GOAL/INITIATIVE

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

ITSP 2011-2013 Totals				
Goal	Initiative	FY11	FY12	FY13
Goal 1	e-Learning	\$475,000	\$375,000	\$355,000
Goal 1	Instructional Support	\$900,000	\$1,410,000	\$715,000
Goal 1	Workforce Development & Continuing Education	\$50,000	\$50,000	\$50,000
Goal 1	Learning Centers - Libraries	\$485,000	\$485,000	\$485,000
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	\$860,000	\$290,000	\$290,000
Goal 2	Infrastructure (Support Systems)	\$1,095,000	\$609,000	\$469,000
Goal 2	Asset Management	\$95,000	\$95,000	\$95,000
Goal 2	Replacement	\$16,200,000	\$16,700,000	\$17,200,000
Goal 2	Planning, Assessment, Initiatives & Analysis	\$510,000	\$400,000	\$130,000
Goal 2	Communications Systems (Telecommunications)	\$7,251,500	\$3,721,500	\$2,830,000
Goal 2	Applications Systems	\$3,860,000	\$2,583,000	\$1,560,000
Goal 3	Campus Remodeling, Renovation and Expansion	\$11,533,000	\$12,569,500	\$13,484,000
Goal 3	Inst. Advancement and Marketing	\$100,000	\$0	\$0
ITSP 2011-2013 Totals		\$43,574,500	\$39,448,000	\$37,823,000

APPENDIX

Goal 1, e-Learning			
Description	FY11	FY12	FY13
Multi-Media Specialists at Campuses/1 yr/3 FTE	\$75,000	\$75,000	\$75,000
Teleconferencing Staff/2 yr/6 FTE	\$150,000	\$150,000	\$150,000
Teleconferencing Expenses	\$180,000	\$80,000	\$60,000
Staff- appl. Support & development for Web/5 FTE	\$70,000	\$70,000	\$70,000
TOTAL	\$475,000	\$375,000	\$355,000

Goal 1, Instructional Support			
Description	FY11	FY12	FY13
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 (Podcasting)	\$20,000	\$20,000	\$20,000
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
Digital Darkroom (Study Requirements: Project Estimate)	\$10,000	\$300,000	\$45,000
TP/SS World Language Comp Lab w/in Rdg&Wrtg Ctr (Study Req: Project Estimate)	\$5,000	\$250,000	
TP/SS: SN- 24 Laptops w/Internet (Study Requirements: Project Estimate)	\$5,000	\$190,000	
Support for Distance Lrng/Teleconf/Podcasting: 1 FTE	\$60,000		
Support for Distance Lrng/Teleconf/Podcasting: HW/SW	\$200,000	\$50,000	\$50,000
TOTAL	\$900,000	\$1,410,000	\$715,000

Goal 1, Workforce Development & Continuing Education			
Description	FY11	FY12	FY13
Increased support and maintenance	\$50,000	\$50,000	\$50,000
TOTAL	\$50,000	\$50,000	\$50,000

Goal 1, Learning Centers - Libraries			
Description	FY11	FY12	FY13
Royalty Pymts-eReserves & Dig Strmg	\$5,000	\$5,000	\$5,000
Increased Staff for Enroll. Increases	\$270,000	\$270,000	\$270,000
Information Literacy Staffing	\$60,000	\$60,000	\$60,000
Library Operating Expense Increase	\$150,000	\$150,000	\$150,000
TOTAL	\$485,000	\$485,000	\$485,000

Goal 1, Learning Centers - Instructional Television and Media Production Services			
Description	FY11	FY12	FY13
ITV - Improvement Level	\$100,000	\$100,000	\$100,000
TOTAL	\$100,000	\$100,000	\$100,000

Goal 1, Learning Centers - Student Affairs Support			
Description	FY11	FY12	FY13
DSS Technology Upgrades	\$60,000	\$60,000	\$60,000
TOTAL	\$60,000	\$60,000	\$60,000

Goal 2, Infrastructure and Systems Security			
Description	FY11	FY12	FY13
Intrusion Detection, Virus Protection, Data Breaches: 1 FTE	\$80,000		
Firewalls, Borders/Internal	\$50,000	\$50,000	\$50,000
IT Security Policy Risk/Staff and Technology	\$90,000		
IT Policy and Security Officer/1 FTE	\$70,000		
Professional Development and Audits	\$125,000	\$125,000	\$125,000
Security Training Programs/Sessions	\$15,000	\$15,000	\$15,000
Cybersecurity and privacy policies, processes & compliance: 1 FTE	\$80,000		
Cybersecurity & privacy policies, process & compliance: Sec. Op Costs	\$150,000	\$30,000	\$30,000
Cybersecurity Compliance w/state and federal legislation	\$100,000	\$20,000	\$20,000
Cybersecurity Disaster Recovery and Business Continuity	\$100,000	\$50,000	\$50,000
TOTAL	\$860,000	\$290,000	\$290,000

Goal 2, Infrastructure (Support Systems)			
Description	FY11	FY12	FY13
Instructional System Monitoring	\$45,000		
Network Util. Record & Rptg System	\$60,000	\$9,000	\$9,000
Network Mapping - Updates	\$35,000	\$35,000	\$35,000
Smart Instructor Workstations	\$120,000	\$80,000	\$40,000
Video Conferencing	\$350,000	\$200,000	\$100,000
Support services contract increases	\$60,000	\$60,000	\$60,000
Continued transition and training for Vista and Office 2007	\$200,000		
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	\$125,000	\$125,000	\$125,000
TOTAL	\$1,095,000	\$609,000	\$469,000

Goal 2, Asset Management			
Description	FY11	FY12	FY13
Asset Mgmt-Helpdesk Consulting and Upgrades	\$10,000	\$10,000	\$10,000
New software for academic programs	\$15,000	\$15,000	\$15,000
Increase in software licensing costs	\$20,000	\$20,000	\$20,000
Unanticipated requests for software	\$50,000	\$50,000	\$50,000
TOTAL	\$95,000	\$95,000	\$95,000

Goal 2, Replacement			
Description	FY11	FY12	FY13
Replacement & Expenses	\$16,200,000	\$16,700,000	\$17,200,000
TOTAL	\$16,200,000	\$16,700,000	\$17,200,000

Goal 2, Planning, Assessment, Initiatives and Analysis			
Description	FY11	FY12	FY13
Tracking Study	\$100,000		
User Validation/Single Sign On Study		\$200,000	
New Technology Studies	\$40,000	\$40,000	\$40,000
New Tech. Png & Systems Png Analysts (2 FTE)	\$70,000	\$70,000	
Emerging Technology Test Equipment	\$20,000	\$20,000	\$20,000
User liaison support for collegewide units (3 FTE)	\$70,000	\$70,000	\$70,000
Financial Integrity and Compliance: 2 FTE	\$140,000		
Strategic oversight : Planning Functions & Reporting: 1 FTE	\$70,000		
TOTAL	\$510,000	\$400,000	\$130,000

Goal 2, Communications Systems (Telecommunications)			
Description	FY11	FY12	FY13
Campus to Campus Redundant Links	\$300,000	\$100,000	
FiberNet & Video Conferencing	\$50,000	\$50,000	\$50,000
Video Conferencing	\$180,000	\$180,000	\$180,000
Network Infrastructure	\$2,000,000	\$2,000,000	\$2,000,000
Network Operating Center	\$731,500	\$731,500	
Network MD	\$20,000	\$10,000	\$10,000
Internet2 and MAX	\$10,000	\$10,000	\$10,000
Contracted Svcs- maintain svc levels, install assist.	\$100,000	\$100,000	\$100,000
Voice Mail Upgrade	\$400,000	\$80,000	\$80,000
Continue telephony, messaging & notification (2 FTE)	\$60,000	\$60,000	
Continue telephony, messaging & notification: HW/SW	\$3,400,000	\$400,000	\$400,000
TOTAL	\$7,251,500	\$3,721,500	\$2,830,000

Goal 2, Applications Systems			
Description	FY11	FY12	FY13
Electronic Grants Management	\$30,000		
Portfolio Management (Webfolio)		\$150,000	\$30,000
Facilities Parking Management Software System	\$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	\$1,800,000	\$600,000	\$600,000
Document imaging-hardware/consulting/2 FTE	\$600,000	\$200,000	\$200,000
Implement new procurement system: 1 FTE	\$70,000		
Implement new procurement system: hardware/software/consulting	\$250,000	\$160,000	\$130,000
HW and SW to improve datawarehouse & reporting capabilities	\$270,000	\$733,000	
Implement Enrollment Management system: hardware and software	\$300,000	\$200,000	\$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)	\$70,000	\$70,000	
TOTAL	\$3,860,000	\$2,583,000	\$1,560,000

Goal 3, Campus Remodeling, Renovation and Expansion			
Description	FY11	FY12	FY13
Staffing: Rockville Science Center (10) (1/2 year FY11)	\$350,000	\$700,000	\$700,000
Staffing: Rockville SE Renovation (2)			\$70,000
Staffing: Germantown Bioscience (7) (3/4 year FY12)		\$367,500	\$490,000
Staffing Subtotal	\$350,000	\$1,067,500	\$1,260,000
Rockville Science Center Operating Expenses:			
Contractors/Consultants	\$150,000	\$150,000	\$150,000
Telecommunications	\$20,000	\$20,000	\$20,000
Contracted Services	\$96,000	\$895,000	\$895,000
Germantown Bioscience Building Operating Expenses:			
Contractors/Consultants		\$75,000	\$75,000
Telecommunications		\$40,000	\$40,000
Contracted Services		\$447,000	\$894,000
Subtotal Other Expenses	\$266,000	\$1,627,000	\$2,074,000
New Buildings Other Funding: TP/SS NOC	\$2,000,000	\$2,000,000	\$2,000,000
New Buildings Other Funding: Germantown Bioscience Building	\$2,450,000		
New Buildings Other Funding: Germantown Bioscience Building (electr. signage)		\$75,000	
New Buildings Other Funding: Germantown Child Care (electronic signage & teleph)	\$15,000		
New Buildings Other Funding: Germantown Science & Appl. Sci. (hw/sw/equip)			\$300,000
New Buildings Other Funding: Rockville SE Renovation (electronic signage)			\$50,000
New Buildings Other Funding: Rockville SW Renovation (electronic signage)			
New Buildings Other Funding: Rockville Science Center (electronic signage)	\$75,000		
New Buildings Other Funding: Rockville Science Center (hardware/software/equip)	\$2,000,000	\$4,300,000	\$4,300,000
New Buildings Other Funding: Rockville Science Center	\$3,377,000		
New Buildings Other Funding: Rockville SE Renovation (hardware/software/equip)		\$1,500,000	
New Buildings Other Funding: Rockville SW Renovation (hardware/software/equip)			\$1,500,000
New Buildings Other Funding: Network Infrastructure	\$1,000,000	\$2,000,000	\$2,000,000
Subtotal Capital/Other Funding	\$10,917,000	\$9,875,000	\$10,150,000
TOTAL	\$11,533,000	\$12,569,500	\$13,484,000

Goal 3, Institutional Advancement and Marketing			
Description	FY11	FY12	FY13
Interim Arts Web	\$100,000		
TOTAL	\$100,000	\$0	\$0