

MONTGOMERY COLLEGE



INFORMATION TECHNOLOGY STRATEGIC PLAN FY 2010 - 2012

**Strategic Planning Requests
December 23, 2008**

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INFORMATION TECHNOLOGY STRATEGIC PLAN

Strategic Planning Requests December 23, 2008

Executive Summary

The eighth update to the Montgomery College Information Technology Strategic Plan (ITSP) describes information technology initiatives, goals and strategic outcomes as well as additional needs determined by December 23, 2008, through the collegewide planning process.

Montgomery College is a successful, changing and diverse institution. There is diversity within its student body and employees; 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 reliable, flexible and trusted technological environment that addresses a very diverse set of requirements and expectations.

The plan is based on 40 premises which highlight the general information technology environment in the changing world today, student needs and expectations, higher education opportunities and Montgomery College needs. 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 but the Strategies and Assessments have been updated to reflect our 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 as change is occurring within the College, within Montgomery County and at state levels; emphasis on accountability and assessment of projects and the use of resources is increasing; and the aggressive nature of threats to information technology resources continues. This plan describes resources for the College to safely and effectively transact its teaching, learning and business activities within this environment.

Many of the goals and objectives 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 on the basis of reviews, studies and the overall 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 2010 – 2012 (based on strategic planning requests to December 23, 2008), 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

1. College, County and Higher Education Commission projections indicate increased student population growth and business, education, and training needs for the foreseeable future.
2. Assessments and accountability for resources will require additional reporting and justification for resources.
3. Graduates of Montgomery County Public Schools (MCPS) and other students will enter the College with a higher level of technology expectations and a wide range of technology competency.
4. The need, perceived or real, for more communications and contact will increase requests for web pages, blogs, electronic news and cable offerings, and involve students, alumni, faculty and staff on campus and away from the College.
5. Businesses, professions and transfer institutions will continue to require that students have experience with information technology through teaching and learning.
6. The College will need to continue to commit a significant portion of its operating budget resources for information technology.
7. An increasing number of courses will utilize information technology in the delivery of instruction where cost and outcomes are justified.
8. Students will require more customized access to learning to meet their individual learning styles and physical, time and location constraints.
9. The number of students with special needs will increase, requiring greater use of specialized information technology tools and equipment to facilitate equal educational opportunities.
10. The College will increase alliances and electronic connectivity with both public and private sectors for efficient delivery of programs and services.
11. The importance and availability of electronic connectivity and bandwidth within the College and throughout the community will increase.

12. Rapid changes in information technology hardware and software will increase the challenge required for recruiting, training and retaining qualified information technology faculty and staff.
13. Rapid changes in information technology hardware and software will increase the need for professional development by faculty and instructional staff in order for them to remain current in the instructional areas and course development and to work effectively.
14. Electronic commerce and digital exchange of information will increasingly become the method administrative operations and teaching and learning are conducted.
15. Competition in distance learning will increase rapidly as increased instruction will be offered and supported through distance learning both directly to students and in conjunction with other institutions.
16. The College will continue to use relevant data including standard project management processes for the implementation of technology for planning to guide information technology decisions.
17. There will be an increase in staffing and resources to comply with rules, regulations, policies and laws related to privacy and identity management.
18. College libraries will continue to expand their roles as information resource centers for students, faculty, staff and the community; and librarians will continue to expand their instructional role in locating, analyzing and effectively using information resources.
19. Classrooms and labs will have access to hardware and software for voice, data, imaging, video, cable, outside access and other emerging technologies and these uses will increase with blended courses “in class” and “in space” offerings.
20. The variety and number of software titles used for teaching and learning will continue to increase with upgrades occurring at varying times from less than a year, yearly, to more than a year.
21. Vendor hardware introductions are timed yearly or bi-yearly while equipment lifecycles are from 36-60 months.

22. The use of technology for administrative operations and in the delivery of services to students will increase in those cases where cost savings or outcome improvements can be achieved.
23. The College will continue to maintain hardware, software and infrastructure standards for technology for both instruction and administration.
24. There will be increased costs and new processes to meet emergency management, pandemic and disaster recovery requirements.
25. Security, privacy and identity management of an individual's information is a priority of the College.
26. Computer and software viruses, alteration of files and data, privacy issues and unauthorized access to electronic hardware and software will continue to increase and become more sophisticated worldwide.
27. Information technology policy and enforcement procedures will need to be reviewed and updated in the challenging technology environment of today.
28. Information technology will impact how classrooms are designed and how courses are designed and taught.
29. Increasing numbers of students and business customers who own their own computing equipment will need access to the College's technology resources.
30. The College will need to provide comparable technology access for students at all locations, consistent with individual campus specialization.
31. The increasing use of information technology will have an impact on direct costs to students.
32. The College will need to provide students with greater access to open labs.
33. The need for information technology services will continue to increase beyond College locations.
34. Demand for IT knowledgeable faculty and staff will continue to increase, leading to greater problems in hiring and retaining these employees and requiring the creation of new efforts to employ them.

35. The College community will demand levels of managed customer service that will require fully integrating diverse digital systems and will necessitate review and enhancement of College support processes.
36. Changes in legal requirements for the College and use of technology will require additional technology resources.
37. College facilities' expansion and renovations will continue for the foreseeable future and will require information technology and upgrades.
38. The convergence of technologies and technology mobility impacts the use, support and infrastructure of technology.
39. The demand for enterprise-wide applications to manage academic and instructional activities will continue to grow.
40. The demand for specialized applications to support a specific academic department or administrative units' mission will continue to grow.

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. Maintain same level of service for continued centralized web support for instruction.
2. Deliver Internet2 for online learning classrooms and connections to other institutions for sharing courses.
3. Support new and improved classroom and learning technologies including synchronous and asynchronous online technologies, distance learning, teleconferencing, and podcasting depending on priority and funding.

Assessment:

1. Synchronous technologies will be available for distance learning.

E-Learning Resource Requirements: Additional resources needed.

Goal 1, e-Learning			
Description	FY10	FY11	FY12
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 computer 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. Continue to study virtual labs which is 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. Respond to additional technology requests resulting from growth in instructional grants and institutes.
5. 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.

Strategic Outcome 3

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

Strategy:

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

Assessment:

1. Evaluate lab access and availability to determine if expansion is required.

Instructional Support Resource Requirements: Projected enrollment increases 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	FY10	FY11	FY12
TOTAL	\$900,000	\$1,410,000	\$715,000

Workforce Development /Continuing Education (WD/CE)

Strategic Outcome 4

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

Strategy:

1. Infrastructure and hardware upgrades are provided through normal IT capital funds; programmatic requests are handled on an individual basis and paid for by WD/CE.
2. High speed line upgrade and security enhancements will be made in accordance with established OIT standards.

Assessment:

1. High speed line upgrade will be completed by the end of FY10.
2. Security enhancements will occur in FY10-12.

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	FY10	FY11	FY12
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. Ensure the accuracy and completeness of the College's library collections displayed in our online catalog and reflected in OCLC. Revise cataloging contract criteria to more effectively meet current and changing needs to include electronic resources, analytics and gifts.
2. Provide user access through the online catalog to online or electronic reserve materials.
3. Expand information literacy and library instruction opportunities for faculty and students through program development to include course integration in local history classes, research and archival support for events at the College, partnering with the Montgomery County Historical Society, Institutional Advancement and other agencies inside and outside the College.
4. Provide user access to all-in-one searching capabilities to find library materials, journal articles and citations in a single-search environment.
5. Evaluate the MCAD library resources and adjust acquisitions as appropriate.
6. Reorganize and configure existing library space to reallocate collection and study space. Implement collaborative project management strategy for the Rockville Library renovation project.
7. Finalize the Acquisitions Statement to collect historical records, documents and memorabilia; provide access to historical collections through the online public access catalog; and promote use of archival materials through appropriate marketing and communication tools.
8. Implement collection development plan as guided by the Acquisitions Statement to encourage donation of memorabilia from various groups within and outside the College community.
9. Identify and train all designated/responsible College employees on records management and update Records Retention Schedule.

Assessment:

1. The collection development policy statement will be revised to reflect the new level of services for library patrons.
2. Guidelines for data collection and statistical reporting will be standardized for all campus library locations; data on resource accessibility will be analyzed and results reported on a quarterly basis.
3. Collection and study space will be reallocated for better use of space.
4. Archival resources will be included in the online library catalog of the College based on funding availability.
5. The historical records and memorabilia from MCAD will be incorporated into the College Archives.
6. MCAD records will have been collected and incorporated into the Records Retention Schedule.
7. The Records Retention Schedule will be revised.

Learning Centers – Libraries Resource Requirements: Projected enrollment increases require additional library staff and operating costs. MCAD (SA&D) Library will require additional resources to complete the merger. Software is needed to improve reserves and library services.

Goal 1, Learning Centers - Libraries			
Description	FY10	FY11	FY12
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 for non-cable courses.
 To continue and improve cable productions on the College cable station.
 To provide support for the down-county center if requested and funded by the County.

Strategy:

1. Provide support for additional coverage of special events and programs as requested by the College community.
2. Expand cable offerings.
3. Increase teleconferencing and instructional programs between campuses and with agencies.

Assessment:

1. Recruit and hire one (1) Producer/Director to assist Institutional Advancement for special event requests made by the College community.
2. Implement new initiatives.
3. Implement teleconferencing.

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	FY10	FY11	FY12
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 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.

Assessment:

1. The College will have a minimum of one assistive technology workstation in every classroom or lab on all campuses.

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

Goal 1, Learning Centers - Student Affairs Support			
Description	FY10	FY11	FY12
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.

IT Cyber Security 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. Develop and implement Cyber Security program.
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. Confidential report is prepared annually on AUP and security incidents.
3. Identified projects will be implemented based on timelines and will meet success criteria.

IT Cyber Security 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, IT Cyber Security and Systems Security			
Description	FY10	FY11	FY12
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 Workstations will be installed in all new and renovated facilities (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 if required.
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 implemented in new or renovated instructional facilities as determined by classroom standards.
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.

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 – 2010 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.
3. The College will provide IT staff to support increases in utilization of support systems, applications systems and networking infrastructure systems.

Assessment:

1. Increases in infrastructure resources (bandwidths and services) will be instituted as required continuously from FY10 to FY12.

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	FY10	FY11	FY12
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.

Assessment:

1. Survey results will be used to provide increased performance management for information technology assets.
2. A study will be conducted for print management at Montgomery College.

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

Goal 2, Asset Management			
Description	FY10	FY11	FY12
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 of the current server, scanner, printer and workstation inventory according to the business use type as funding permits.
2. Achieve replacement of new additions to workstation inventories as the College brings new labs, classrooms, buildings and offices into operation.
3. Replace audio/visual equipment in accordance with established replacement schedules.
4. Increase time between PC replacement cycles; workstation replacement cycle is four (4) years.
5. Determine which equipment should be replaced "on failure."

Assessment:

1. Actual replacement appropriations will increase to meet the inventory increases and maintain the lifecycle needs each year of FY10-12.
2. 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 PC's, servers, printers and infrastructure.

Goal 2, Replacement			
Description	FY10	FY11	FY12
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 process.

Strategy:

1. The ITSP process will be updated, documented and communicated across the College.
2. OIT will coordinate with and support the collegewide planning done by the Central Administration and other units.

3. OIT will perform regular assessments of the ITSP achievements against the plans and report to OIT management and the College administration on results.
4. OIT will analyze IT operations to assess performance and identify alternatives for improvement as needed.
5. OIT strategic planning is operationalized through the development of a tactical plan to assure the College's technology requirements are met.

Assessment:

1. OIT will coordinate tactical planning with academic units each year to establish IT priorities and budget allocations available with instructional goals and needs.
2. OIT will provide assessments of IT practices, work and results as requested by administration.
3. Studies and asset inventory assessments will be provided to the College administration each year as needed.
4. Each fiscal year OIT's initial tactical plan is 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 FY10-12.

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 comparisons with other higher education institutions.

Assessment:

1. IT service level definition updates will be placed on the College intranet.
2. A website of assessments and performance will be operated and updated continuously for FY10-12.
3. A knowledgebase of “lessons learned” and improvements will be kept continually for FY10-12 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 review to present an annual assessment of the ITSP.

Strategy:

1. Each year reporting of service levels, best practices and ITSP accomplishments will be performed and provided to the College administration.

Assessment:

1. Periodic and appropriate reporting will be performed and provided to the College administration FY10 through FY12.

Planning, Assessment, Initiatives and Analysis Resource Requirements:

Current resources plus consultant contracts.

Goal 2, Planning, Assessment, Initiatives and Analysis			
Description	FY10	FY11	FY12
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 SCT Network Review Report, OIT will improve Montgomery College’s telecommunications systems and network infrastructure over the coming years as resources permit.

2. Utilizing the IT Infrastructure Strategic Plan FY2010 – 2012, OIT will improve Montgomery College’s telecommunications systems and network infrastructure over the coming years as resources permit.
3. OIT will introduce new telecommunications technologies, as they are efficient and cost-effective for the College.
4. Wireless technologies will be considered for new construction that require network infrastructure. When resources allow, the “basic” infrastructure to support secure wireless access to Montgomery College’s networks will be included in new building construction.
5. 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.
6. OIT will complete an in-depth strategic plan regarding Montgomery College’s telephone/voice networked systems.
7. The College will provide IT staff to support new campus facilities and campus growth impacting workloads on support systems, applications systems and networking infrastructure systems.
8. Upgrade telephony hardware and voice mail.
9. Continue and implement evolving messaging and notification technology.

Assessment:

1. OIT will update the SCT Network Review Report twice a year.
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 to support the college community.
4. Wireless technologies will be used, where appropriate, across the campuses.
5. A completed OIT telephone/voice strategic plan reviewed and approved by Montgomery College’s administration and Board of Trustees.
6. OIT will initiate increases of communications systems resources as required, and funded, from FY10 to FY12.

Communications Systems (Telecommunications) Resource Requirements:

Current resources plus current capital, grants and operating requests.

Goal 2, Communications Systems (Telecommunications)			
Description	FY10	FY11	FY12
TOTAL	\$7,251,500	\$3,721,500	\$2,830,000

Applications – Systems

Objective 11

To furnish appropriate support for standard applications utilized by College faculty and staff and provide software updates, enhancements and alternatives as applicable.

Strategy:

1. OIT will expand on current Banner applications functionality and reporting capability.
2. Responsible offices and OIT will assess and reduce the number of Banner modifications.
3. OIT will provide additional new administrative applications to support student check-in and tracking; provide student e-mail support, portfolio management; office document imaging and electronic grants management systems.
4. Responsible offices and OIT will implement the Web standards for the College's Internet and intranet sites.
5. Evaluate and begin implementation of eProcurement system as funded by prior CIP.
6. Improve datawarehouse and reporting capabilities.
7. Evaluate and begin implementation of Enrollment Management system to meet requirements.
8. Continued transition and training for Vista and Office 2007
9. Continuation of Web Content Management project.
10. Implement space inventory and utilization as funded by prior CIP.
11. Investigate feasibility of mass email strategies and technology.

Assessment:

1. Completion of phase one for tracking of student lab use and counseling visit accounting by the end of FY10.
2. Implementation of student check-in and tracking, student e-mail support, portfolio management, office document imaging and electronic grants management system.
3. Reduction in web sites not compliant with the Web Standards.
4. A study will be conducted for mass email at Montgomery College.

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

Goal 2, Applications Systems			
Description	FY10	FY11	FY12
TOTAL	\$4,010,000	\$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 into the early stages of Takoma Park expansion initiatives.
2. Provide information technology to all labs, classrooms, and offices of the planned Takoma Park Campus expansion, new buildings and area renovations.
3. Provide telecommunications upgrades at Takoma Park Campus, including Commons Building renovation, during remodeling and temporary use in the transition period of campus expansion.
4. OIT will continue to participate in the CFAC development project to ensure that adequate facilities are made available to accommodate the OIT Network Operations Center relocated from the Rockville Campus.
5. The IT Facilities and Network Planning group, working with IT Services groups, will prepare IT building specifications to support Commons residents.
6. Execute the tactical project plans to accomplish the relocation of OIT staff and the OIT Network Operations Center to the CFAC.

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 Commons 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

Information Systems and Student Services Pavilion Renovations

Cultural Arts Center

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

Germantown Campus

Child Care Center

Bioscience Education Center – including extension of Observation Drive and parking

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	FY10	FY11	FY12
TOTAL	\$7,505,000	\$14,753,000	\$15,613,000

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. Promote the "Web First" approach for publishing information.
2. Publish and improve the interactivity of the online 'official' College Catalog.
3. Review and update if necessary the Web sites 'Privacy Statement'.

Assessment:

1. The curriculum section of the catalog will be integrated and database driven.
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 2010-2012.

Institutional Advancement and Marketing Resource Requirements: Additional operating requests.

Goal 3, Institutional Advancement and Marketing			
Description	FY10	FY11	FY12
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 2010-2012 Totals				
Goal	Initiative	FY10	FY11	FY12
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	IT Cyber Security 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	\$4,010,000	\$2,583,000	\$1,560,000
Goal 3	Campus Remodeling, Renovation and Expansion	\$7,505,000	\$14,753,000	\$15,613,000
Goal 3	Inst. Advancement and Marketing	\$100,000	\$0	\$0
ITSP 2010-2012 Totals		\$39,696,500	\$41,631,500	\$39,952,000

APPENDIX

Goal 1, e-Learning			
Description	FY10	FY11	FY12
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	FY10	FY11	FY12
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	FY10	FY11	FY12
Increased support and maintenance	\$50,000	\$50,000	\$50,000
TOTAL	\$50,000	\$50,000	\$50,000

Goal 1, Learning Centers - Libraries			
Description	FY10	FY11	FY12
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	FY10	FY11	FY12
ITV - Improvement Level	\$100,000	\$100,000	\$100,000
TOTAL	\$100,000	\$100,000	\$100,000

Goal 1, Learning Centers - Student Affairs Support			
Description	FY10	FY11	FY12
DSS Technology Upgrades	\$60,000	\$60,000	\$60,000
TOTAL	\$60,000	\$60,000	\$60,000

Goal 2, IT Cyber Security and Systems Security			
Description	FY10	FY11	FY12
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	FY10	FY11	FY12
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	FY10	FY11	FY12
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	FY10	FY11	FY12
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	FY10	FY11	FY12
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	FY10	FY11	FY12
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	FY10	FY11	FY12
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	\$400,000	\$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	\$4,010,000	\$2,583,000	\$1,560,000

Goal 3, Campus Remodeling, Renovation and Expansion			
Description	FY10	FY11	FY12
Staffing: TP/SS Cultural Arts (4)	\$140,000	\$140,000	\$140,000
Staffing: TP/SS NOC/Asset Mgmt (3)	\$140,000	\$140,000	\$140,000
Staffing: Germantown Bioscience Building (15)			\$525,000
Staffing: Rockville Science Center (21)		\$735,000	\$1,470,000
Staffing: Gude (Phase 2) (2)	\$70,000	\$70,000	\$70,000
Staffing: Gude (Phase 3) (4)		\$280,000	\$280,000
Staffing: TP Commons Renovation (3)	\$105,000	\$105,000	\$105,000
Staffing Subtotal	\$455,000	\$1,470,000	\$2,730,000
Operating Expenses for All Buildings: Contractors/Consultants	\$175,000	\$325,000	\$325,000
Operating Expenses for All Buildings: Telecommunications	\$80,000	\$161,000	\$161,000
TP/SS: Cultural Arts Equipment	\$75,000	\$75,000	\$75,000
TP/SS: Cultural Arts on-going maintenance	\$280,000	\$280,000	\$280,000
TP/SS: NOC/Asset Mgmt	\$280,000	\$560,000	\$560,000
Germantown Bioscience Building			\$447,000
Rockville Science Center IT mtc			\$511,000
Rockville Science Center CW Infrastructure		\$192,000	\$384,000
Gude (Phase 3)		\$120,000	\$120,000
TP Commons Renovation	\$60,000	\$120,000	\$120,000
Operating Expenses Subtotal	\$950,000	\$1,833,000	\$2,983,000
New Buildings Other Funding: TP/SS NOC (CIP)	\$2,000,000	\$2,000,000	\$2,000,000
New Buildings Other Funding: Germantown Bioscience Building		\$2,450,000	
New Buildings Other Funding: Rockville Science Center	\$2,300,000	\$2,000,000	\$4,300,000
New Buildings Other Funding: Rockville Science Center		\$3,200,000	
New Buildings Other Funding: Network Infrastructure (CIP)	\$1,000,000	\$1,000,000	\$2,000,000
New Buildings Other Funding: Student Learning Support Systems (CIP)	\$800,000	\$800,000	\$1,600,000
Other Funding Subtotal	\$6,100,000	\$11,450,000	\$9,900,000
TOTAL	\$7,505,000	\$14,753,000	\$15,613,000

Goal 3, Institutional Advancement and Marketing			
Description	FY10	FY11	FY12
Interim Arts Web	\$100,000		
TOTAL	\$100,000	\$0	\$0