

McHenry County College

Three-Year Technology Plan

For Fiscal Years 2008, 2009, and 2010

EXECUTIVE SUMMARY

This document presents the annual review and revision to the forward-looking three-year Computing and Information Technology Plan (CITP). It covers planning for the three fiscal years (FYs) 2008, 2009, and 2010 with particular emphasis on FY 2008 and 2009. This executive summary highlights the primary considerations in this year's technology planning. The executive summary also identifies the most critical planning items and recommendations.

Other key sections of the document include:

- The Information Technology (IT) department's mission statement and organization, along with an explanation of the department's roles in supporting the institution
- A summary analysis of strengths and weaknesses in the internal and external environments. These address the impact of human resources, finance, marketing, facilities, and educational and enrollment planning on the Information Technology department's planning
- A summary analysis of opportunities and threats in the internal and external environments. These address the impact of economic factors, the labor market, funding sources and industry projections on the Information Technology department's planning
- The objectives of the department, including methods of assessing results, the criteria used, activities to accomplish the objectives, and implications of the technology plan on College resources

There are also two attachments. The first attachment shows the organization chart of the Information Technology department and the second attachment provides current budgetary information. The plan specifically covers fiscal years 2008, 2009, and 2010.

This CITP is intended to communicate information about the application of information technology at the College. It is addressed to an audience that is not immersed in the highly detailed implementation and daily use of information technology, but rather with its roles and effectiveness in enhancing learning and providing administrative support. It is addressed to interested members of the public and the press, to MCC's students, to the Board of Trustees, to MCC's employees and to other interested organizations. It is not intended as a project management tool, as an operations manual, or a complete portfolio of projects and operations underway at any given time.

Primary Considerations in This Year's Planning

Three issues merit foremost consideration in this year's technology planning:

1. The first concerns maintaining effective information technology security and compliance systems and processes.

2. The second involves the support that the Enterprise Resource Planning (ERP) system must provide to its users across the College, which in turn has the organization focused on the important issue of replacement of this mission-critical system.
3. The third involves maintaining adequate funding and replacement schedules for the information technology infrastructure, such as servers, switches, storage, security and compliance devices, and related applications, on a level equivalent to the replacement of the public-facing technology components, such as desktop computers, printers, and software.

Making wise design, acquisition, and implementation choices for all three of these issues has vital implications in terms of 1) the College's image, 2) the scope, effectiveness, and efficiencies of the services it provides, and 3) the institution's finances.

Critical Planning Items and Recommendations

Information technology security and compliance: Much of the data in the custody of colleges and universities is of great financial value to identity thieves. Consequently, these institutions are prime targets, and they are cited in disproportionately high numbers when it comes to systems breaches or other loss of non-public personal information. In a time when organizations with far greater financial resources and security infrastructure are losing control of sensitive data, the College must continuously build upon the significant efforts underway to educate employees about best practices concerning information security, including information technology security. Following earlier efforts, in the fall of 2007 a continuous improvement team consisting of representatives from across the College convened to review and make recommendations to review the College's information technology-based regulatory and industry compliance processes. These compliance processes are recognized as best practices in addressing information security. During FY 2008 and beyond, the Information Technology department, and the College as a whole must continue to implement, assess, and audit the policy and procedure recommendations made by this continuous improvement team. In FY 2009 and beyond, this work will continue as a broadly constituted operational team will permanently institutionalize this work and continue addressing concerns about information security, privacy, and compliance. The Information Technology department has a key role in identifying and implementing all of the above, but it is not an exclusive role. Much of the data that the College needs to keep confidential can be obtained in formats and via methods that information technology systems and processes alone can not secure or prevent. The formats include paper-based records and the methods include social engineering. The consequences of loss of confidential information in the College's custody would be significant and wide-ranging, as experience has shown at numerous institutions to date.

Five Recommendations:

1. Enterprise Resource Planning (ERP) System: At this writing, an ERP selection team and consultant are in the final stages of vendor and system evaluation and recommendation of the next ERP system that will serve the College for up to ten years. During FY 2008, the Information Technology department and the College

as a whole must continue to refine and implement the plan defined by the continuous improvement team that did the planning and timeline work for this system. That work was done in the spring of 2007. Since that time, much has been done to define specific College operational and planning needs, research leading ERP vendors and systems supporting higher education, and evaluate vendor offerings. Shortly after the presentation of this CITP, the administration will bring a recommendation to the College's Board of Trustees to approve a vendor, with associated ERP software and hardware, along with project management, data migration and training services. Approval, if granted, will immediately lead to a year-long migration from the current legacy system to the new system.

2. **Commitment and Resources for ERP System Migration:** The ERP supports both the academic and business processes of the College. These processes are determined by the administrators of the areas supported. Consequently, determining the adequacy of the business process-support capabilities of the system lies primarily with the administrators of the departments and programs being supported. Projecting the ongoing costs of ownership and estimated technical life of the system lies primarily with the IT department. A successful ERP migration is dependent upon good project management, but it is largely driven by the degree of commitment and determination of the administrators of the end-user areas over prolonged periods of time. No periods are more important than the year during which migration takes place (FY 2009) and the succeeding year (FY 2010). This follow-on year is a period of assessment, matching the new "plain vanilla" system, with the industry consensus best practices these large ERP systems embody, against the sometimes unique needs of the College. The following year (FY 2011) is important to success, as well. This is a period when, after a year of assessment, judicious configuration of the system is carried out, based on a philosophy of minimizing the time, effort, and cost of keeping the system current in future years. Without sufficient stability in end-user management and Information Technology department management through this period, and the commitment and determination mentioned, these projects often fail after the expenditure of significant time, effort, and dollars. Adequate resources are required to support both migration and continued operations of the College during the migration. These should be provided as the changing situation dictates in order to protect the investment involved in moving to best practices in the enterprise's operations and planning via a new ERP system.

3. **Maintaining and Improving the Information Technology Infrastructure:** Keeping the public-facing components of the information technology architecture current, such as desktop computers and their applications, has served the College well. For almost a decade the College has had a robust process, with associated financing, in place to keep these systems up to date. During that time, the behind the scenes infrastructure has grown in size, sophistication, and dependence, while state-provided grants and other state funding to the institution decreased. The lack of funding has led to an aging of the so-called "back room" information technology infrastructure which has not been on an adequate replacement schedule. Funding requests were made and approved for FY 2007 and FY 2008 that led to acquiring servers, switches, network management software, desktop management software,

and information security tools that have been or will be implemented by mid-FY 2009 with appropriate warranty, maintenance, and support agreements in place. In keeping with the recommendations, requests are being made in the FY 2008 and FY 2009 budgets for components that will replace those components of this “back room” infrastructure that are at the end of their life cycle and should be replaced. This timely replacement of aging components will continue with recommendations for replacement of the public-facing and back room components in FY 2009, FY 2010, and beyond. Adequate funds to maintain this effort will put the supporting IT infrastructure on the same robust replacement and modernization footing as the public-facing components (this was identified as a key strategy by the Bridger organization). The necessary funding should be found and approved in each year.

4. **Responding to External Analysis:** The College’s financial auditors (Sikich, LLP) and the firm contracted to study selected institutional practices (the Bridger organization) made suggestions for improvement of selected processes and practices across the College. A number of these suggestions relate to processes that rely upon information technology processes or support systems. This technology plan includes providing the necessary support for approved process and practice changes resulting from these external analyses.

5. **Continuous Process Improvement Action Projects and Alignment of Information Technology with the College’s Initiatives and Goals:** Over the past several semesters, a number of continuous improvement (CI) action project suggestions have been considered by the AQIP Steering Committee and many of these were approved. The Information Technology department staff members have participated directly in most cases, or closely supported the efforts of teams working on projects as diverse as: a Comprehensive Institutional Business Continuity Plan for MCC, Information Security and Technology Compliance, ERP System Implementation Action Plan and Timeline Development, Improvement of Email Communication at McHenry County College, Improving the Usability of MCC's Shared Information Drive on the Local Area Network, Effective Room Usage, Duplication Guidelines, Repository for Policies and Procedures Training, Retention, Data for Mailing Lists, Purchasing Processes and Procedures, Shipping and Receiving Processes and Procedures, Scholarship Processing, and Crisis Communications, to name a few. During much of this time, Information Technology department staff members have also participated as Steering Committee members. This technology plan includes providing the necessary support for the work of these types of projects and the other approved continuous process improvements that were or will be approved by the Steering Committee. In cases where the work of the continuous improvement teams is institutionalized as part of ongoing operations, this plan reflects support for those activities as well.

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MCC IT DEPARTMENT MISSION STATEMENT

The McHenry County College Information Technology (IT) department provides timely and skillful technical support to McHenry County College's student body, faculty, and staff. In doing so, we value the following:

- Recognizing our role as a support service to other departments.
- Making sure all desktop computers, the underlying network infrastructure and the applications programs are problem free.
- Aiding faculty and staff in supporting the student body.
- Working as a team to resolve problems in the most timely and efficient manner.
- Continually updating and improving information technology resources to meet McHenry County College's growing needs.
- Taking pride and enjoyment in our work.

MCC IT DEPARTMENT ORGANIZATION AND INSTITUTIONAL ROLES

The McHenry County College Information Technology (IT) department reports organizationally through the Administrative Services division to the Vice President, Administrative Services & Treasurer.

The department consists of the coordinating Information Technology administrative group, the Computing Services department, and the Information Systems department. The Information Systems department is comprised of the Network Services group, the End-User Services department, and the Communications Technologies department.

The department provides a full range of computing- and communications-related systems and applications support services to both the line and support departments located in the Learning and Student Support Services division and in the Administrative Services division. The Information Technology department also provides the same full range of support services to the Friends of McHenry County College Foundation. The department provides this support on the main campus, at University Center in Crystal Lake, and at the Shah Corporate Center in McHenry. The department provides coordinated support for operations at the courthouse in Woodstock, working with the technology staff there. As an administrative support area, the Information Technology department's customers are primarily internal customers and it places highest emphasis in terms of support on these customers, as they in turn support the students.

The Computing Services department provides consultative systems analysis, legacy programming, legacy database support, object-oriented programming, and non-legacy database administration to users in both the academic and administrative divisions of the College and in the Friends of McHenry County College Foundation. The College's ERP systems and Student Information Systems (SIS) are encompassed in the "mainframe" operations functions of the Computing Services department.

The roles and responsibilities of the Information Systems (IS) department include providing the College with network services and non-legacy administrative and academic server and desktop technology support. IS includes End-User Services, which provide the desktop hardware and applications support, and help desk assistance. During FY 2008, lab monitor functions and lab scheduling, formerly provided by this department, were transferred to the Learning and Student Support Services (LSSS) division for more efficient resource utilization and coordination with similar LSSS division functions. End-User Services continues to provide technical support in the classrooms and computer labs. IS also includes the Communications Technologies department, which provides audio-visual equipment and support, multimedia production services, physical layer infrastructure, distance education systems support and telecommunications systems support.

Groups and individuals charged with information technology planning and support serve as resources to departments and programs as diverse as AQIP action teams: Special Needs (assistive technology expertise); the Facilities committee (technology-related infrastructure coordination); the Library (lending and catalog servers, access to external databases and information stores); the Friends of McHenry County College Foundation (donor and gift record system); the Traffic Safety School (specialized server management); the Graduation and Commencement team (sound and video event logistics); and Conference Center staff (multimedia services).

The Information Technology department works closely on a day-to-day, week-to-week basis with administrators and technology-support-oriented staff in the Office of Marketing and Public Relations (web and database servers, graphics workstations and servers, and telephone auto attendant); Professional Development (Instructional Technology and learning management system and curriculum delivery); and Distance Education (course management, communications systems, and roster delivery), among others.

Coordination and support for the College's mission, goals and objectives is also accomplished through membership on committees, teams, taskforces, or workgroups, in response to requests for consulting, and via special project work. Providing these resource services extends and strengthens the lines of communications within the College.

In terms of communications, the Information Technology administrators also believe strongly in open door/open hallway policies and maintain good working relationships with administrators, faculty, and staff alike. Approachability is one key to good communications and many needs and policy and procedures questions are initially addressed informally through these informal conversations.

STRENGTHS AND WEAKNESSES RELATED TO THE INTERNAL AND EXTERNAL ENVIRONMENTS

The *Educause Core Data Survey Fiscal Year 2006 Summary Report*, authored by Brian L. Hawkins and Julia A Rudy of Educause, was issued in September 2006. *Campus Computing 2007: The 18th National Survey of Computing and Information Technology in American Higher Education*, authored by Kenneth C. Green of the Campus Computing Project, was issued in December 2007. The *Organizational Effectiveness Study* commissioned by the College and performed by the Bridger organization was provided in January 2007. Finally, the institutions' financial auditors, Sikich, LLP, provide feedback annually, including perspectives on technology systems used to support financial operations. The technology-in-higher-education issues and concerns identified in the work of these entities have provided the College's Information Technology department with valuable third-party perspective, and, often, validation; of strategic alignment, issues identification, approaches to providing support, and prioritization. Other institutions of higher education and other organizations in general share many of the same opportunities and threats and deal with many of the same strengths and weaknesses issues that are present at the College.

Human Resources: Strengths and Weaknesses

With regard to human resources across the College: The College has either recently experienced, or is projected to continue, in a period of transition at the Executive Council, Executive Dean, and AVP levels of the administration. Similar changes have and will continue to occur among members of faculty and the professional and classified staff. At the same time, transition in the IT administration will continue. These changes are occurring at a time when key decisions must be made about the College's ERP system (FY 2008 and FY 2009) and when intense dedication and commitment must be made and sustained at these management levels in order to implement those decisions over a two-to-three year follow-on period (FY 2009, FY 2010, and FY 2011).

The occupants of administrative roles make decisions concerning the projects and operational processes of the College. Considerable flexibility with regard to those projects and operations can be provided by a highly configured or customized ERP system. On the other hand, the range of projects and operations can actually be highly constrained or dictated by a less customized system (often referred to as a "plain vanilla" system). There are advantages and disadvantages to pursuing each type of strategy.

In addition, during the period of ERP selection, implementation, assessment, and configuration (FY 2008 through FY 2009), operational demands will be placed upon the ERP system by AQIP and other continuous improvement efforts and by changes in the College's internal and external environments. Senior administrators must factor in these issues during the upcoming year as the College chooses its ERP system (in late FY 2008) and embarks on migration (beginning in late FY 2008 and FY 2009).

The key to a successful ERP migration depends upon consistent commitment to decisions made at the beginning of the process that must last throughout the implementation. This commitment is required on the parts of both the administrators making the decisions and their successors. So-called “requirements creep” or other significant changes to projects or operations supported by the ERP during implementation are among the primary causes of runaway or failed ERP enhancements and migrations. Expert and consistent project management of the enhancement or migration will also be critical to the success of the process.

In terms of human resources, the skill sets of administrators and other employees in selecting and using technology, particularly systems as complex and expensive as an ERP, represent a significant challenge to the College. In terms of human resources, a significant strength that will serve the institution well in this regard during any of the ERP-focused processes is that the College is well underway in training and engaging its administrators and staff in process-oriented thinking and continuous improvement efforts, in communications, and in commitment to a culture of evidence and assessment. A potential weakness in this area is the fact that significant and deep institutional knowledge at the administrative level might be lost during the extended ERP transition. Process mapping, training, and other documentation support can compensate in part. Adoption of a “plain vanilla” ERP configuration, which embodies a set of best practices in higher education operations, can also assist in minimizing the impact of retirements, other departures, and new hires. Process mapping expertise, business process analysis skills, and project management expertise are available through the Information Technology department due to past planning in this area. Specialized consultative project management services will be provided as part of the ERP acquisition to supplement these efforts. All of these tools can and should be used to assist in successfully managing the simultaneous challenges of ERP migration and turnover of employees at all levels of the organization. As part of the CITP, the College’s Board of Trustees will be updated monthly on the progress of the ERP project through its completion. The continuous improvement team specifying the ERP process and timeline has reported to the Board of Trustees and will continue to assess its process measures, with its progress reviewed by the AQIP Steering Committee, until that team retires.

The same type of intense and continuous commitment is required from the College’s administrators, faculty, and staff in the area of information security and compliance efforts designed to address privacy and information security concerns. Colleges and universities are traditionally open by their very nature, both in terms of attitudes toward information and physical access. Establishing and maintaining a permanent change in culture, education, and behavior, when it comes to certain information (non-public personal information) and restricting access to certain areas and systems where that information is available, is an ongoing challenge. Continued commitment from the top in this matter is a strength of the College. The natural tendency to lower one’s guard because effective information security has a high correlation with inconvenience and with perceived inefficiency is a weakness all employees must constantly address. A plan to address these issues has been approved by the AQIP Steering Committee, as recommended by the Information Security and Technology Compliance continuous

improvement team that worked through the fall of 2007. The efforts of earlier task forces, and the work this team will continue to do before retiring, will be followed by appointment of individuals with permanent functional roles addressing information security, compliance, and privacy responsibilities, with a supporting workgroup, under the direction of the College's Information Security Officer. Some of the work remaining to the current continuous improvement team will be handled by the Information Technology department, using tools approved for purchase in FY 2008 and requested in FY 2009. The continuous improvement team will continue to assess its process measures, with its progress reviewed by the AQIP Steering Committee, until that team retires.

Addressing support for the Human Resources (HR) department's processes directly: As of this writing, the AVP of Human Resources department has resigned and a search for a replacement will commence. The IT department will work closely with the interim and incoming administrator to provide Human Resources Information Systems (HRIS) support to the department itself and to the employees. The IT department will also continue to work with the HR department on compliance and data privacy issues. Currently, the IT support for the HR department is adequate to meet its operational needs, but requests to continue improvements to selected features are anticipated.

While the Professional Development (PD) area has moved from the HR department to the Executive Dean of Humanities, the interdependent relationship between IT and PD remains strong and successful. The support provided by PD to IT in particular has been critical in managing change and educating the end-users about applications and processes, such as information security and the migration to Microsoft's Office 2007 productivity suite of applications. The IT department will continue to work closely with the PD staff to provide operational and project support to this department in instructional technologies, classrooms, media center, intranet, object-oriented applications, and database support.

Finance: Strengths and Weaknesses

Migration to a new ERP system is costly in terms of dollar costs, time and effort. The administration projects the total cost of moving to a new ERP system at several million dollars. While the ERP system supports many areas of the College, including Learning and Student Support Services, Human Resources, Marketing and Public Relations, and Institutional Research and Planning, one of its main components is the "financials," which broadly includes general ledger, accounts receivable, accounts payable, and payroll functions. The financials subsystem must support both financial and managerial accounting requirements, including numerous governmental reporting requirements.

Members of the Board of Trustees of McHenry County College Finance Committee have indicated the desire to incorporate accrual-based accounting features into the quarterly reporting that is furnished to the Board. More integrated functionality is being sought in the feature set of the new ERP system.

Based on discussions with administrators in the Finance and Business Services areas and with other employees, streamlining the logistics of budgeting and purchasing would

appear to be additional areas where end-user and IT staff time would be well-spent in terms of return on effort. The CITP includes support for AQIP and other continuous improvement efforts, and the Information Technology department is working with the continuous improvement teams that are addressing purchasing processes and procedures, and shipping and receiving processes and procedures. These continuous improvement teams will continue to assess their process measures, with their progress reviewed by the AQIP Steering Committee, until those teams retire. The same is true of the work of the continuous improvement team addressing duplication services at the College, which now report to the Business Services department. This continuous improvement team will continue to assess its process measures, with its progress reviewed by the AQIP Steering Committee, until those teams retire. The Information Technology department is closely supporting the work of these teams, and the Board of Trustees has received a report on their efforts.

While it has many weaknesses, a strength of the current ERP system is that it does provide the College with the necessary tools to store and serve data, provide many financial, managerial, and government reporting functions, robustly conducts transactions in the financials, human resources information system, student information system, course information system, facilities reservation system, and financial aid system, (though not always with the convenience that all users, particularly the more occasional users, would prefer). Another strength – there is a proficient IT programming and operations staff, knowledgeable in the College’s processes in place to support this system. Finally, in the strengths column, much of the data needed for management purposes can be synchronized with relational databases from which it can be accessed with web- or Windows-based applications. An essential part of the technology plan is to support the operations of the outgoing ERP system while “freezing” any significant new development in late FY 2008 and FY 2009, allowing the Computing Services staff to concentrate on migration and configuration of the new ERP system.

Marketing: Strengths and Weaknesses

Current technology systems and processes, while adequate in many ways to support the College’s marketing efforts, do not minimize the costs of marketing efforts. Some of the limitations have less to do with the current technology infrastructure itself than they do with data ownership, data sharing, and data maintenance issues, which are fundamentally process-related. Other limitations are infrastructure-based, including the lack of a self-service portal system, a data-mining or predictive analytics system, and support personnel for both systems. Resolving the data ownership and data quality issues, while not requiring significant infrastructure changes, is human resource intensive, especially during the initial phases. Implementing either, or both, a portal system and a predictive analytics system will first require the data ownership and quality issues to be successfully resolved. Outcomes of the ERP migration process will result in data that has owners and ownership processes supported by unambiguous well-defined business rules, with appropriate data security constraints. Data will also be “cleaned up” as part of the ERP system migration operations. The necessary process mapping, data security, and clean-up steps are part of the CITP for FY 2008 and FY 2009.

Facilities: Strengths and Weaknesses

The College's facilities, in general, represent strengths from an information technology perspective. While there are now two significant satellite locations in service, along with a presence at the McHenry County courthouse facilities, the facilities have to date not proven to be so wide-spread as to require satellite technology support staff and none are planned for FY 2008, though change in the nature or volume of services at the Shah Corporate Center may require this at some point in the future. The remote facilities are sufficiently dispersed and of adequate size that they might well serve as a basis for business continuity and disaster recovery infrastructure, a definite strength. Some of the objectives defined in this CITP, supported through budgetary requests, recommend considering an increase in the bandwidth between the main campus and the Shah Corporate Center as a prerequisite to leveraging the business continuity potential of that site.

Educational and Enrollment: Strengths and Weaknesses

Information technology support for the educational efforts of the College is strong. Delivery of modern, robust equipment and the provision of applications requested by faculty in the classrooms, computer labs, library, and faculty offices are on a firm footing. Support is highly customized to the dynamic and unique requirements of each academic term. The migration to a new learning management system, provided by an application service provider, has been completed, and an electronic portfolio system, provided by another application service provider, is being piloted.

Additional Information

For information on the objectives addressing the strengths and weaknesses addressed above, please see the section of this planning document titled "Objectives of the MCC IT Department."

OPPORTUNITIES AND THREATS RELATED TO THE INTERNAL AND EXTERNAL ENVIRONMENTS

Economic factors: Opportunities and Threats

The costs of information technology equipment continue to remain steady or decline relative to the quality or power provided. The pervasive nature of increasingly sophisticated information technology in supporting today's institution results in offsets to some of these potential savings because additional information technology systems and applications are introduced to support the academic or administrative operations of the College.

Labor market: Opportunities and Threats

The labor market for IT personnel is competitive and strong, and has been for some time, resulting in low levels of unemployment and steady or increasing salaries in IT management, IT project management, networking, object-oriented and web programming and design, information security, instructional technology, and database administration. While this environment provides potential opportunities for the academic programs that could provide education and training in these areas, the threat facing the College is a potential shortage of, or high acquisition costs for, new or replacement IT staff (and faculty teaching technology curricula) in any or all of these areas as the College grows and employment market factors act.

Funding Sources: Opportunities and Threats

The State of Illinois' commitment to funding the IT skills enhancement and technology infrastructure of the community colleges has decreased significantly over the past several years, as such grants have been greatly reduced or have simply gone unfunded. Similarly, the grants environment for IT infrastructure, particularly the so-called "back room" infrastructure representing the College's most significant current maintenance challenges, is weak. Opportunities are good from the viewpoint of what today's technologies offer in terms of support for students, faculty, and staff. The threat, with potential impact to the College, lies in not finding dependable funding sources to continually replace aging or missing infrastructure components at the same time other costs are rising. The College is participating in efforts to restore the grants.

Industry Projections: Opportunities and Threats

New technologies for the classroom and for support staff continue to emerge at a blistering pace. Most are initially costly, many are short-lived, supplanted by newer iterations of the same technology or new technologies, and many do not live up to the promise of enhanced learning or greater productivity in the classrooms or offices,

respectively. Still others are ahead of their time. The challenge to the College is to identify, adapt, and implement proven newer technologies at the appropriate stage of development and optimal total costs of ownership. The ability to do so prudently has proven to be a strength of the College, but the potential threat remains: with early adoption, the risk is always high of making expensive mis-steps in a funding environment that is not forgiving in this regard. An example of negotiating this fine line: retaining older CRT computer monitors for several years while waiting for the right combination of technological features and price in the LCD (flat panel) monitor market.

Additional Information

For information on the objectives addressing the opportunities and threats addressed above, please see the section of this planning document titled “Objectives of the MCC IT Department.”

OBJECTIVES OF THE MCC IT DEPARTMENT

The major planning-dependent objectives of the MCC IT department are shown in this section.

The FY 2008, FY 2009, and FY 2010 Objectives

1. During FY 2008, maintain effective information technology security and compliance systems and processes by continuing the current process review and improvement processes.
2. During FY 2008, determine the ongoing process and upcoming project needs of the College that are dependent on the ERP system through structured interviews with the management and staff of the departments that “own” or share in those processes and projects.
3. During FY 2008, working with senior administration and at the direction of the AQIP Steering Team, engage outside expertise in the needs analysis and selection phases of the ERP replacement project. Identify the best replacement ERP system for the College, based on effectiveness in meeting needs of students and staff, while minimizing personnel support costs (salaries and training), equipment costs, and maintenance and programming costs involved in migrating to and maintaining the new system over the next ten years.
4. During FY 2008, determine the costs, scheduling, and funding of a robust information technology infrastructure maintenance and replacement process, based on efforts begun in FY 2006 and FY 2007 and on the model used over the past eight years to replace the public-facing technology components, such as desktop computers. During FY 2008 and FY 2009, complete the implementation of the first “catch-up” phase of this process. Continue timely replacement in FY 2010 and beyond based on lifecycle management.
5. During FY 2008, assist the Finance and Business Services areas in implementing changes to the quarterly reporting process, the annual budgeting process, the purchasing process, the shipping and receiving process, and the duplication services process.
6. During FY 2008, assist the Corporate and Community Education areas in making the changes necessary to permit web-based registration for select programs in these areas. Implement the production version of web-based registration for these programs in FY 2008 and FY 2009.

7. During FY 2008, FY 2009, and FY 2010, fill current and future vacancies in the ranks of IT administration, professional, and classified staff with dedicated individuals who are well-qualified to meet the College's current and future needs.
8. During FY 2008 and FY 2009, complete the transition from a predominantly physical server environment to a primarily virtual server environment.
9. In FY 2009, begin the planning process for an upgrade of the major telecommunications components.
10. In late FY 2008, FY 2009 and FY 2010 install the components of an emergency communications infrastructure.
11. In FY 2009, complete the upcoming departmental five-year program review due at that time.
12. In FY 2008, FY 2009, and FY 2010, continue annual project and operational support in network, application development, end-user services, and communications technologies at the same or better service levels as currently provided.

Methods of Assessing Results

A combination of process mapping, survey, facilitated systems needs analysis, and project portfolio management tools will be used to accomplish and track the activities required to accomplish the activities listed above.

Criteria Used In Assessing Results

Timelines with milestones will be the primary criteria used to determine whether activities are on schedule. Sign-off acknowledgements by the administrators of end-user departments and by senior administrators that certain activities have been satisfactorily completed will be used where appropriate. End-user surveys will be used where appropriate to determine certain activities have been successfully implemented. Audits of procedure and processes will be used in determining the effectiveness of certain security and compliance activities. Human Resources' evaluations will be conducted as part of the evaluation of the success of IT staffing-related activities. Board of Trustees approval of recommended courses of action will be used to determine successful implementation or "readiness-to-proceed" for certain activities.

Activities to Accomplish the Objectives

1. IT security and compliance. Specific security-related activities will not be discussed here for the obvious reason that they might expose vulnerabilities that

- are being addressed. The Information Technology staff is constantly reviewing its own procedures and systems to identify and remediate potential vulnerabilities and it will continue to do so over the next three years. Planning, progress, and outcomes of this work are covered regularly on the agendas of various IT department meetings. The IT department will also work continuously with the Information Security and Compliance continuous improvement team and with the follow-on team and other departments to continuously remediate identified issues related to information security, data privacy, and technology-dependent compliance. When operational responsibility for information security, data privacy, and compliance is handed off to the follow-on team, the IT department will work with this team and the other departments of the College on procedure and education issues.
2. Interviews are being conducted with administrators of the College in FY 2008 to identify the specific ERP-related issues facing these administrators in carrying out their business processes. Any currently pending requests for ERP enhancements will be included as part of this review. Process mapping assistance or other systems analysis support is being provided where necessary to fully develop ambiguous issues. Needs are being cataloged for evaluation against the College's objectives and are being used in the decision process being used in the selection of the College's next ERP system. AQIP Steering Committee oversight remains in place for these activities.
 3. A decision support tool provided by the consultant engaged for this purpose will be applied to the question of which new ERP system represents the best option to succeed the current ERP system. The results of this search will be presented to the administration and the Board of Trustees with a recommended course of action near the end of FY 2008.
 4. During FY 2008 and going forward, the servers, switches, storage, security and compliance systems, and applications are being re-evaluated for useful life and timely replacement. The anticipated costs and scheduling of replacement and upgrades are being detailed in FY 2009 budgeting requests and the IT project management office. These remaining upgrades and replacements will be implemented on a prioritized basis beginning in FY 2009. By FY 2010, this will become a routine annual operational activity.
 5. During FY 2008, interviews are being conducted (some as part of activity number 2 and some unrelated to the ERP activities) with the Finance and Business Services areas and the appropriate continuous improvement teams to determine applications that can be tested and implemented in time for the annual budgeting and planning process that begins in mid-fiscal year. During FY 2008, IT will work to implement the most appropriate applications or provide any technology-based enhancements that would streamline the supporting the budgeting process, the purchasing process, the shipping and receiving process, and the duplication services' process. For FY 2009 and FY 2010, IT will work to implement any

technology based enhancement that the process identifies as most appropriate to that timeline. AQIP Steering Committee oversight remains in place for these activities.

6. During FY 2008, IT will continue the systems analysis and design efforts begun in FY 2006 to assist the Corporate, Continuing and Adult Education areas in making the business process changes necessary to permit web-based registration for select programs in these areas. IT made the programming and database changes required to pilot the new web-based registration. During FY 2008 and FY 2009, working with Corporate, Continuing and Adult Education staff, IT will complete programming and database changes and implement the production web-based registration for these programs.
7. Beginning FY 2007 and continuing into FY 2008 and through FY 2009, searches will be conducted to fill vacancies in the ranks of the IT administration, professional, and classified staff. The selection process will focus on individuals who are well-qualified to meet the College's current and future needs as captured in updated position descriptions. These activities will be ongoing throughout FY 2010, as required.
8. During FY 2008 and FY 2009, complete the transition from a predominantly physical server environment to a primarily virtual server environment. This work began in FY 2006 and significant progress has already been made. Remaining consolidation will be accomplished in FY 2009. The staging of appropriate equipment, (as determined by support requirement experiences in early FY 2007 and FY 2008 at the Shah Corporate Center) may be continued in FY 2009. Investigation of possible business continuity benefits of building out the Shah Corporate Center information technology infrastructure should be investigated.
9. In FY 2009, begin the planning process for an upgrade of the major telecommunications components, including the PBX and voicemail systems in FY 2010. Also in FY 2009, investigate the potential acquisition of a Fax server appliance that would permit the retirement of many of the traditional Fax machines on campus. Investigate and plan for the associated retention and storage requirements. Early planning will be useful in managing anticipated funding and spending. Budget appropriately for the upgrades identified.
10. The components of an emergency notification infrastructure have been identified and the administration is identifying the necessary funding. In FY 2008, install the first component of an emergency communications infrastructure, a mass notification system. In FY 2009 and FY 2010, complete this infrastructure build-out with a campus-wide video surveillance system and a digital signage system with associated emergency alert functions.
11. In FY 2009, complete the upcoming departmental five-year program review due at that time. This is a structured operation (not detailed here) involving the

development of new and updated information, the setting of goals, objectives, and activities and their proposed assessment, with a review of outcomes anticipated in the previous program review

12. In FY 2008, FY 2009 and FY 2010, continue annual project and operational support in network, application development, end-user services, and communications technologies at the same or better service levels as currently provided. These are routine operational activities mentioned here because of their significant scope, consumption of resources and high impact on the College's overall operations.

Implications of the Technology Plan on College Resources

The ERP-related and information security efforts require prolonged, time-consuming, and in-depth employee involvement at all levels of the College, particularly the administrator level. ERP migrations in particular are notorious for dominating the time of administrators and staff, sometimes requiring "back-filling" certain positions with supplemental staffing at times during the process. While employee participation in time-intensive continuous process improvement and information security efforts will incidentally reveal certain ERP-dependent needs that can be used in the ERP process, the process improvement and security work will also compete separately for the time of College administrators and staff who remain primarily tasked with day-to-day operational responsibilities. The need for employees to go "above and beyond" for prolonged periods cannot be understated.

While the information security efforts are not without dollar costs, these will be minor in relation to the significant dollar costs of an ERP migration, which will generate significant costs over a two or more consecutive years. These costs will be above and beyond the normal information technology-related budget. Funds have been set aside to cover these costs.

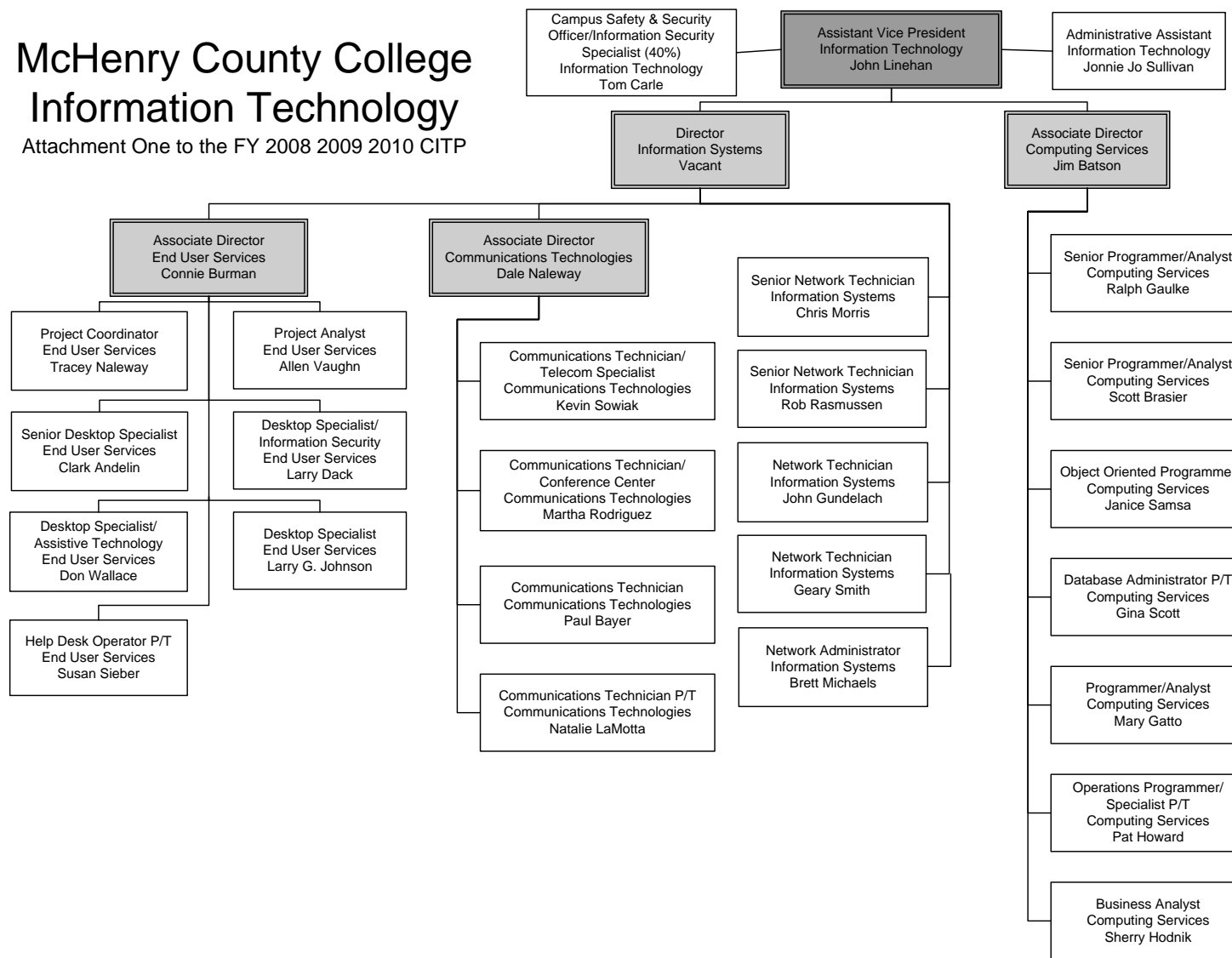
Adding to this are the costs of other information technology infrastructure modernization which will have to be funded through all three years of this plan and beyond. These could total between one and two hundred thousand dollars additional per year on an ongoing basis.

ATTACHMENT ONE

Information Technology Organization Chart FY 2008, 2009, and 2010 CITP

McHenry County College Information Technology

Attachment One to the FY 2008 2009 2010 CITP



Revised 8/21/07

ATTACHMENT TWO

FY 2008 (Most Recent Year) Budgets

IS- Information Technology

FYR	CostCenter	Object	Title	AdjBudget
2008	0195-005	511.000	ADMINISTRATION	\$116,866.92
2008	0195-005	512.000	PROFESSIONAL	\$95,521.51
2008	0195-005	516.000	CLERICAL	\$0.00
2008	0195-005	521.000	BENEFITS	\$15,480.38
2008	0195-005	529.800	SURS	\$1,034.11
2008	0195-005	532.000	CONSULTANTS	\$0.00
2008	0195-005	543.000	SUPPLIES	\$1,950.00
2008	0195-005	543.200	SOFTWARE	\$470.00
2008	0195-005	543.300	BOOKSTORE SUPPLIES	\$3,000.00
2008	0195-005	544.020	POSTAGE	\$50.00
2008	0195-005	545.000	BOOKS & MANUALS	\$0.00
2008	0195-005	546.100	SUBSCRIPTION	\$50.00
2008	0195-005	546.300	DUES & PUBLICATIONS	\$300.00
2008	0195-005	551.000	MEETING EXPENSE	\$316.91
2008	0195-005	551.100	CHAMBER MEETING	\$0.00
2008	0195-005	552.000	TRAVEL IN DISTRICT	\$176.28
2008	0195-005	552.100	CHAMBER LOCAL TRAVEL	\$0.00
2008	0195-005	553.000	TRAVEL OUT OF DISTRICT	\$446.81
2008	0195-005	559.000	OTHER CONF & MEETING	\$400.00
2008	0195-005	575.000	TELEPHONE	\$0.00
2008	0195-005	585.000	OFFICE EQUIPMENT	\$0.00
2008	0195-005	585.100	REPL. EQUIP. - OFFICE	\$0.00
			Total	\$236,062.92

IS-Information Systems

FYR	CostCenter	Object	Title	AdjBudget
2008	0195-310	511.000	LICS-ADMINISTRATIVE FT	\$90,000.00
2008	0195-310	512.000	LICS-PROFESSIONAL FT	\$347,433.25
2008	0195-310	516.000	LICS-CLERICAL FT	\$0.00
2008	0195-310	516.100	LICS-PT CLERICAL	\$0.00
2008	0195-310	517.000	LICS-SERVICE STAFF	\$0.00
2008	0195-310	521.000	LICS-BENEFITS	\$68,152.74
2008	0195-310	529.800	LICS-SURS	\$2,187.16
2008	0195-310	532.000	LICS-CONSULTANTS	\$817.98
2008	0195-310	534.000	LICS-MAINTENANCE SERVICE	\$36,963.00
2008	0195-310	539.000	LICS-CONTRACTUAL	\$15,000.00
2008	0195-310	543.000	LICS-SUPPLIES	\$16,382.02
2008	0195-310	543.200	LICS-SOFTWARE	\$154,261.00
2008	0195-310	543.300	LICS-BOOKSTORE SUPPLIES	\$300.00
2008	0195-310	545.000	LICS-BOOKS & MANUALS	\$0.00
2008	0195-310	546.100	LICS-SUBSCRIPTIONS	\$0.00
2008	0195-310	546.300	LICS-DUES & PUBLICATIONS	\$500.00
2008	0195-310	551.000	LICS-MEETING EXPENSE	\$100.00
2008	0195-310	552.000	LICS-LOCAL TRAVEL	\$100.00
2008	0195-310	553.000	LICS-TRAVEL OUT OF DISTR	\$100.00
2008	0195-310	559.000	LICS-OTHER CONF & MTG	\$75.00
2008	0195-310	575.000	LICS-TELEPHONE SERVICES	\$0.00
2008	0195-310	585.000	LICS-EQUIP	\$0.00
2008	0195-310	586.000	LICS EQUIP-NEW	\$0.00
2008	0195-310	586.100	LICS EQUIP-REPLACEMENT	\$0.00
			Total	\$732,372.15

IS-End-User Services

FYR	CostCenter	Object	Title	AdjBudget
2008	0195-380	511.000	ITC-ADMINISTRATION FT	\$61,889.39
2008	0195-380	512.000	ITC-PROFESSIONAL FT	\$297,721.49
2008	0195-380	516.000	ITC-CLERICAL FT	\$39,477.25
2008	0195-380	516.100	ITC-CLERICAL PT	\$40,192.43
2008	0195-380	517.000	ITC-TECHNICAL FT	\$0.00
2008	0195-380	519.000	ITC-STUDENT EMPLOYEE IWS	\$0.00
2008	0195-380	521.000	ITC-BENEFITS	\$95,204.67
2008	0195-380	529.800	ITC-SURS	\$1,980.70
2008	0195-380	534.000	ITC-MAINTENANCE SERVICES	\$2,079.00
2008	0195-380	539.000	ITC-CONTRACTUAL	\$0.00
2008	0195-380	543.000	ITC-SUPPLIES	\$8,105.00
2008	0195-380	543.200	ITC-SOFTWARE	\$5,000.00
2008	0195-380	543.300	ITC-BKSTR SUPPL	\$8,350.00
2008	0195-380	544.020	ITC-POSTAGE	\$0.00
2008	0195-380	546.300	DUES AND PUBLICATIONS	\$99.00
2008	0195-380	551.000	ITC-MEETING EXPENSE	\$100.00
2008	0195-380	552.000	TRAVEL-LOCAL	\$500.00
2008	0195-380	553.000	ITC-TRAVEL	\$500.00
2008	0195-380	559.000	ITC-CONF & MTG EXP	\$3,050.00
2008	0195-380	575.000	ITC-TELEPHONE	\$0.00
2008	0195-380	585.000	ITC-OFFICE EQUIP	\$0.00
2008	0195-380	585.100	EQUIPMENT - REPLACEMENT	\$0.00
2008	0195-380	586.000	ITC EQUIP-NEW	\$0.00
2008	0195-380	586.100	ITC EQUIP-REPLACEMENT	\$0.00
2008	0195-380	586.200	ITC EQUIP-USAGE	\$0.00
			Total	\$564,248.93

IS-Computing Services

FYR	CostCenter	Object	Title	AdjBudget
2008	0195-010	511.000	IADP-ADMINISTRATIVE	\$69,300.00
2008	0195-010	512.000	IADP-PROFESSIONAL FT	\$354,249.56
2008	0195-010	512.100	PROFESSIONAL STAFF PT	\$46,996.03
2008	0195-010	521.000	IADP-BENEFITS	\$23,962.40
2008	0195-010	529.800	IADP-SURS	\$2,101.24
2008	0195-010	532.000	IADP-CONSULTANTS	\$0.00
2008	0195-010	534.000	IADP-MAINTENANCE	\$110,098.00
2008	0195-010	539.000	IADP-OTHER CONTRACTUAL	\$0.00
2008	0195-010	543.000	IADP-SUPPLIES	\$4,250.00
2008	0195-010	543.200	IADP-SOFTWARE	\$6,250.00
2008	0195-010	543.300	IADP-BOOKSTORE SUPPLIES	\$400.00
2008	0195-010	546.300	IADP-DUES/PUBLICATONS	\$250.00
2008	0195-010	551.000	IADP-MTG EXP INDISTRICT	\$50.00
2008	0195-010	553.000	IADP-TRAVEL OUT OF DIST	\$500.00
2008	0195-010	575.000	IADP-TELEPHONE	\$0.00
2008	0195-010	585.000	IADP EQUIP-NEW	\$0.00
2008	0195-010	585.100	IADP-EQUIPMENT REPL	\$0.00
2008	0195-010	586.000	IADP INSTR EQUIP-NEW	\$0.00
			Total	\$618,407.23

IS-Communications Technologies

FYR	CostCenter	Object	Title	AdjBudget
2008	0195-350	511.000	LAVS-ADMIN	\$80,517.51
2008	0195-350	512.000	LAVS-PROF STAFF FT	\$116,098.39
2008	0195-350	512.100	LAVS-PT PROFESSIONAL	\$20,837.45
2008	0195-350	521.000	LAVS-BENEFITS	\$19,065.43
2008	0195-350	529.800	LAVS-SURS	\$963.90
2008	0195-350	532.000	LAVS-CONSULTANTS	\$2,000.00
2008	0195-350	534.000	LAVS-MAINTENANCE	\$18,103.00
2008	0195-350	539.000	LAVS-OTHER CONTRACT	\$5,000.00
2008	0195-350	543.000	LAVS-SUPPLIES	\$14,397.00
2008	0195-350	543.200	LAVS-SOFTWARE	\$1,475.00
2008	0195-350	543.300	LAVS-BOOKSTORE SUPPLIES	\$650.00
2008	0195-350	546.100	LAVS-PERIODICALS	\$0.00
2008	0195-350	546.300	LAVS-DUES	\$375.00
2008	0195-350	551.000	LAVS-MEETING EXP	\$50.00
2008	0195-350	552.000	LAVS-TRAVEL LOCAL	\$200.00
2008	0195-350	553.000	LAVS-TRAVEL OUT OF DISTR	\$300.00
2008	0195-350	559.000	LAVS-CONF & MTG EXP	\$1,000.00
2008	0195-350	575.000	LAVS-TELEPHONE	\$4,800.00
2008	0195-350	586.000	LAVS-EQUIPMENT	\$0.00
2008	0195-350	586.100	LAVS-EQUIPMENT REPLAC	\$4,500.00
			Total	\$290,332.68

Grand Total

\$2,441,423.91