

WESTERN ILLINOIS UNIVERSITY BOARD OF TRUSTEES

October 16, 2009

Institutional Strategic Plan for Technology At Western Illinois University Fiscal Years 2009 and 2010 Update

In June 2007, the Western Illinois University Board of Trustees unanimously approved the five-year *Institutional Strategic Plan for Technology at Western Illinois University* with the understanding that the Board would receive progress reports on the status of the *Plan*. This report, the second in its series, shows that the campus community has been very successful in implementing the *Plan's* goals and priorities.

The last *Update* showed that of the 153 measurable actions and sub actions, 52 (34 percent) have been completed or are ongoing initiatives, 38 (25 percent) are in progress, and only 63 (41 percent) have not been started one year after implementation of the *Plan*. This *Update* shows that of the measurable actions and sub actions, 94 (61 percent) have been completed or are ongoing initiatives, 41 (27 percent) are in progress, and only 18 (12 percent) have not been started

Successful implementation of the *Institutional Strategic Plan for Technology* continues to bring many advances to the University. A sampling of university accomplishments since the last Update include:

- Supporting high-speed, reliable voice, video, and data networks for approximately 10,000 campus users that receives over 3 million emails per day, and an average of 700,000 hits on the University Website per day.
- Codifying incident response and disaster recovery procedures, and annual testing across all areas of University Technology.
- Acquiring a second point of Internet egress, expanding data storage capacity for end users, and installing a new emergency generator with uninterruptable power supply for the University Data Center.
- Engaging in technology security enhancements, including removal or the encryption of all sensitive data, on university-owned computers, initiating secure email transport authentication, and installing protective software for the University.
- Continuing the Electronic Classroom Upgrade Program, Faculty Computer Upgrade Program, server virtualization and centralization, and Web accessibility initiatives.
- Launching a new Course Articulation System to enhance the seamless transfer process and building upon Western's statewide recognized transfer-friendliness.
- Opening new state-of-the-art electronic classrooms featuring smart board technologies in the Caxton Building and a University Technology (uTech) store on the Quad Cities Campus.
- Supporting laptop check out programs at University Libraries and the Quad Cities Campus, preparing to engage in mobile marketing initiatives, requiring Broadcasting students to have

laptops, and maintaining a four-year rotation on all computers in student University Technology computing laboratories.

- Forming a task force to address alternatives and/or enhancements to the current support center system and processes, and a workgroup to implement a technology change management process that is based on best practices and industry standards for increasing network performance and increased communication with end users.
- Expanding access to over 55,000 on-line journals and databases, utilizing new library technologies to support instructional activities, purchasing and implementing access to *Dissertation Abstracts*, and creating a digital studio to support students and faculty creating digital objects.
- Engaging the Center for Innovation in Teaching and Research, Human Resources, University Technology, Electronic Student Services, and other offices to provide hardware and software training to members of our campus communities.
- Providing the Board of Trustees/Bachelors of Art degree fully on-line, enhancing the electronic course development process, opening the new computer-based college testing center on the Rock Island Arsenal, and engaging in a self-study to strengthen distance learning as part of the University's re-accreditation process from the Higher Learning Commission-North Central Association of Colleges and Schools.
- Launching the new University Technology Website that includes user-requested information on network, e-mail, and Western Online status and updates.
- Initiating a study on issues associated with open-source and commercial data management packages for distributed computing.

The students, faculty, and staff of Western Illinois University will continue to experience service and technology enhancements. The following is a sampling of goals and priorities from the *Institutional Strategic Plan for Technology* that are currently in progress:

- Sustaining high-speed, reliable voice, video, and data networks for telecommunications, mainframe, macro-, and micro- computing.
- Working with end-users to continue to enhance university technology security and security awareness.
- Implementing a knowledge-based help system to address frequently asked technology questions and a new digital signage program for the two campuses of Western Illinois University.
- Launching a re-designed Western Illinois University-Macomb Website supported by a new content management system to streamline webpage development.
- Deploying a new campus portal that will serve as an intranet for the University.
- Continuing successful implementation of the Faculty Computer Upgrade Program, Electronic Classroom Program, Web accessibility initiatives, and priorities from the Mobility Task Force. The latter includes student development of mobile applications that extend across platforms.
- Participating in capital technology planning for new construction and special technology initiatives within our host communities and regions.
- Completing the study of telecommunications solutions that integrate video, voice, and data networks and submitting recommendations to the President's Cabinet.
- Finalizing the institutional self-study on distance learning.
- Pursuing external funding for igniting dark fiber between the two campuses of Western Illinois University and software to support academic and administrative use.

The pages that follow display the goals, actions, and priorities for the *Institutional Strategic Plan for Technology*. A status column has been added to the original plan, and an update is provided for actions that are completed or currently in progress. These changes were made so progress on the *Plan* could be easily followed and updated frequently. It is a strong tribute to the technologists of Western Illinois University for simultaneously and successfully supporting daily operations and strategic planning. The benefactors are the students, faculty, and staff of our two campuses.

The Goals, Actions, and Priorities of the Institutional Strategic Plan for Technology

I. Increase Communication

Advancing the technological goals and priorities of Western Illinois University will require enhanced communication. This includes increased user feedback; a standardized e-mail, calendaring, and groupware solution; an enhanced University Web presence and developed campus portal; expanded data systems; and articulation of technology policies, procedures, accomplishments, and challenges. The success of this *Strategic Plan* is predicated on two-way communication and collaboration between University students, faculty, and staff.

A. User Feedback

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
1. Develop and implement a public institutional technology planning and priority-setting process that includes an established structure and process for reporting to the Macomb and Quad Cities campuses on technology plans, accomplishments, and challenges. (<i>Assistant to the President</i>). Beginning in May 2008, the Vice President for Quad Cities, Planning and Technology provides annual University Technology plans, priorities, and challenges as part of annual consolidated reports that is presented to the campus community. These materials are available for review at wiu.edu/UniversityPlanning/strategicplanning/index.php	Phase I	Short-Term	Complete
2. Continue to use annual consolidated reports to discuss departmental, unit, and college technology plans, accomplishments, and challenges. Continue to communicate these reports to faculty and staff, and post the technology-related material on the newly developing University Technology Web site. (<i>Vice Presidents; Deans; Department Chairs; Planning, Budget and Institutional Research</i>). Annual consolidated reports with technology plans for colleges, departments, and vice president units, are presented to the campus community each spring by the vice presidents and areas reporting to the president. Summaries of these presentations and supporting materials are available at wiu.edu/UniversityPlanning/strategicplanning/index.php	Phase I	Short-Term	Ongoing
3. A list of technology and web contacts for each division, college, and department should be formed and used as the base to communicate and coordinate technology actions at the departmental and unit level. (<i>President's Technology Advisory Users Group</i>). College technology liaisons have been named and these technologists meet monthly with University technology staff to coordinate efforts. During Fiscal Year 2009, an Internet Technology Advisory Committee as formed and charged with the same responsibilities. During Fiscal Year 2010 a comprehensive list of technology support for all departments and units will be posted on the University Technology web site.	Phase I	Short-Term	In Progress
4. Investigate and implement enhancements to help desk and HEAT ticket communications. (<i>University Computer Support Services, Electronic Student Services, University Information Management Systems</i>). A Task Force studied and provided recommendations to the Vice President for Quad Cities, Planning and Technology. Based of the Task Force's recommendations, a knowledge-based help system is being purchased and installed (targeting January 2010), a VOIP phone system has been purchased for the Support	Phase II	Short-Term	In Progress

<p>Center, and staff meet daily to review and address issues. Additionally, there is a single Support Center for University Technology and Mainframe issues, and funds were reallocated from a staff retirement to create the Assistant Director position in charge of the Support Center operations and user relations.</p>			
<p>5. Develop a University Technology Web site to contain essential technological information for end users. This includes, but is not limited to, Western Illinois University's:</p> <ul style="list-style-type: none"> a. Technology offices and support. b. Technology committees and task forces. c. Technology policies and procedures. d. University Strategic Plan for Technology. e. Security planning and accomplishments. f. Feedback for technology projects currently in development. g. Technology calendar as previously described in this <i>Plan</i>. h. Technology communications as previously described in this <i>Plan</i>. (<i>Planning, Budget, and Institutional Research; University Relations</i>) The University Technology Website is available at wiu.edu/UniversityTech 	Phase I	Short-Term	Complete
<p>6. Within the University Technology Web site, maintain and update daily a Web page (password-protected if needed) delineating abnormal status of the University's Internet connection; e-mail servers, Web server, other file and application servers. (<i>Electronic Student Services; University Computer Support Services; Planning, Budget and Institutional Research</i>) Status of the University's network, on-line learning, and e-mail system is available from the University Technology Website. Also featured on this Website are other current technology updates.</p>	Phase I	Short-Term	Complete
<p>7. Continue to improve the frequency of communication between the providers of technology and end users. This includes:</p> <ul style="list-style-type: none"> a. Announcing at least five working days in advance any nonemergency changes in software pushed to desktops. Such notices should be sent via e-mail and should be posted on an easily accessed Web page. Based on a review of best practices at industry leaders, including the University of North Carolina-Greensboro, University of Texas, Ferris State University and the Institute of Electrical and Electronics Engineers, University Technology will be implementing a Change Management Policy that documents protocol for implementing computing changes. When completed, the new process will be placed on the University Technology Website and communicated with the campus community. b. Providing network status updates. This will help users better understand functional vs. nonfunctional connectivity by reporting outages/slowdowns/server problems that affect more than several individuals (e.g., publish reports on mail server problems during/immediately following the occurrence). See Item #6. c. Updating individuals submitting service requests (HEAT tickets) not resolved within five working days on the status of the ticket. A Task Force is currently examining the use 	Phase I	Short-Term	<p style="text-align: center;">In Progress</p> <p style="text-align: center;">In Progress</p> <p style="text-align: center;">In Progress</p>

<p>of HEAT tickets, enhancements, and alternatives to the current system.</p> <p>d. Posting answers to commonly asked technology support questions in a publicly accessible Web-based FAQ document. (<i>Electronic Student Services; University Computer Support Services; Planning, Budget, and Institutional Research</i>). This will be part of the new knowledge-based help system described in item #4. Additionally Utech staff are updating University Technology publications and initiated a quarterly uTech newsletter to address frequently asked questions.</p>			In Progress
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B. E-mail, Calendaring, and Groupware Solutions

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
8. Create an institutional task force to provide the President's Cabinet with recommendations for the use of a single, fully functional e-mail and calendar client that integrates with personal communications devices and supports a single communications and calendaring platform at Western Illinois University. (<i>President, President's Cabinet, E-Mail and Calendaring Task Force</i>). The Task Force completed its work in spring 2007.	Phase I	Short-Term	Complete

9. Upon successful contract negotiation with the selected vendor for an e-mail, calendaring, and groupware client, form an institutional task force to develop an implementation and training plan for the new client. (<i>President, President's Cabinet</i>). Zimbra has been fully implemented. During summer 2008, a task force was created to provide training on feature enhancements and training to new employees. Zimbra training will soon be automated through a new knowledge base with expected deployment in January 2010.	Phase II	Short-Term	In Progress
10. With the selection of a new e-mail, calendaring and groupware vendor:			
a. Create and implement a single directory services environment rather than the two separate environments that exist within University Computer Support Services and Electronic Student Services; (<i>University Computer Support Services, Electronic Student Services</i>). The University now operates according to a single active directory.	Phase II	Mid-Term	Complete
b. Increase e-mail inbox storage; and (<i>University Computer Support Services, Electronic Student Services</i>) University Technology doubled Storage Area Network server space and now provides redundant back up. Additional space will be added as needed.	Phase II	Short-Term	Complete
c. Establish lifetime e-mail addresses for University alumni. (<i>Alumni Services, University Computer Support Services</i>)	Phase III	Mid-Term	Ongoing

C. Internet and Intranet (Portal)

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
11. Complete the redesign of the University Web site, seek feedback from campus governance groups, and launch the site by January 1, 2007. <i>(University Relations)</i> . A new Western Illinois University Website was launched on January 1, 2007. A new Western Illinois University-Quad Cities Website was launched in July 2008. The Macomb Website is currently being updated and with expected deployment in January 2010 and the Quad Cities Campus is currently investigating the navigability of its Website.	Phase I	Short-Term	Ongoing
12. Demonstrate institutional compliance with Illinois Web Accessibility Standards as part of the Web site redesign. <i>(University Relations, IBHE Web Accessibility Committee)</i> The Executive Director of University Technology is leading an institutional task force to bring Western Illinois University into compliance with Illinois Web Accessibility Standards.	Phase II	Short-Term	Ongoing
13. Form an institutional task force to develop a Western Illinois University campus intranet (portal) to at minimum:	Phase II	Mid-Term	
a. Convert 3270 screens to truly web-developed screens. This is an ongoing responsibility for Administrative Information Management Systems.			Ongoing
b. Host a web-based degree audit system for the Macomb and Quad Cities campuses. Administrative Information Management Systems has completed implementation of a web-based degree audit system.			Complete
c. Integrate changes in data administration (described below).			
d. Evaluate continued use of STARS in the development and implementation of a campus portal. <i>(President's Technology Infrastructure Group)</i> . University Technology is leading institutional implementation of a new campus portal that will include many applications, including use of STARS. An initial launch is planned for the Spring 2010 semester.			In Progress

D. Expanded Data and Systems

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
14. Centralize document imaging across both Western Illinois University campuses. <i>(Electronic Student Services, University Computer Support Services, Dean of University Libraries, Business Services)</i> . There are now just two document imaging processes used on campus: one for business applications and one for student service processes.	Phase I	Mid-Term	In Progress
15. Continue to upgrade and expand, where appropriate, campus data systems (e.g., CS Gold, Beu Health Center, Web ID archive). <i>(Electronic Student Services)</i> . New software and identification cards have been purchased for both campuses to enable expansion of identification card services.	Phase I	Ongoing	Ongoing
16. Evaluate open-source and commercial data-management packages for enhanced multicampus functionality and capabilities in student, faculty, and staff information systems and in personnel, payroll, and purchasing systems. <i>(President's Technology Infrastructure Group,</i>	Phase II	Mid-Term	In Progress

<i>Human Resources, Payroll, Purchasing, Business Services</i>). The Director of Administrative Information Management Systems is leading a study group from that area, Electronic Student Services, and University Technology to consider future options for data-management packages. These efforts were started in fall 2009.			
17. Investigate and evaluate online analytical processing (OLAP) tools for use by faculty and staff. <i>(President's Technology Infrastructure Group)</i> . The ability to utilize OLAP tools is a key consideration in the study group described in item #16.	Phase III	Mid-Term	In Progress

E. Technology Policies, Procedures, and Reporting (JOE LOOK AT POLICIES)

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
18. Following University approval processes, update all University computing policies and procedures (displayed below) and create new policies and procedures where appropriate. <ul style="list-style-type: none"> a. Campus Network Policy (last updated December 2001). b. Computer Antivirus Policy (last updated April 2001). c. Policy on Computer Security (last updated March 2005). d. Policy on Western Illinois Computing Use (last updated August 1996). Updated February 2007. e. Policy on E-Mail Usage and Political Activity (last updated July 2000). f. Web Privacy Policy (not currently an official University policy). <i>(President's Technology Infrastructure Group, Assistant to the President for Planning and Budget, Technology Security Committee, Vice Presidents, President)</i> 	Phase I	Ongoing	Complete

II. Increase Support

Institutional technology is only as strong as the user support for students, faculty, staff, alumni, and guests of the University. Western Illinois University will continue to enhance user support. Increased support takes the form of providing enhanced communication with end users, which is the cornerstone of the all the recommendations in this *Strategic Plan*. For example, this *Plan* culminates in developing/implementing a support plan that exceeds the levels of support, communication, and responsiveness at peer institutions. Western Illinois University will become a national best practice model for others to follow.

As part of this emulation process, Western Illinois University will enhance student, faculty, and staff technological training. We will also assume leadership in providing information in alternative formats, allowing students to register online, and providing a staffed center for hardware and software support. These actions are in tandem with all other action items contained within this *Strategic Plan*.

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
19. Enhance technology support by establishing or increasing:			
a. Faculty training and support for classroom instruction.	Phase I	Ongoing	Ongoing

<i>(Center for Innovation in Teaching and Research, Distance Learning Support Staff)</i> . Technology Training for faculty is provided by the Center for Innovation in Teaching and Research. Topics include such areas as use of clickers, podcasting, and advanced power point applications.			
b. Faculty training in synchronous distance education. (CODEC), pedagogy <i>(Center for Innovation in Teaching and Research, Distance Learning Support Staff)</i> . The Center for Innovation in Teaching provides training in the use of the University's on-line teaching system.	Phase I	Ongoing	Ongoing
c. Training and support for faculty in the use of course management software for hybrid courses. <i>(Center for Innovation in Teaching and Research, Distance Learning Support Staff)</i> . The Provost's Office, through the implementation of the School of Extended Studies, provides funding to the Center for the Application of Information Technologies to assist in the development of on-line courses. University Technology, working with the School of Extended Studies, is in the process of evaluating content management systems for use by the campus community.	Phase I	Ongoing	Ongoing
d. Regular training sessions for students, faculty, and staff on University-supported software. <i>(Center for Innovation in Teaching and Research, University Information Management Systems, University Computer Support Services)</i> . In addition to information presented in Action #19A, Human Resources provides technology training on University-supported software. Sessions include different levels of training on Microsoft Word, Excel, Access, Power Point, and Publisher.	Phase I	Ongoing	Ongoing
e. Provide ResNet training sessions for students. <i>(University Computer Support Services)</i> . ResNet and Lab Managers provide training to students supporting University Technology. In addition, an informational brochure of technology uses was provided to all on-campus students as part of the fall 2009 move in process.	Phase I	Ongoing	Ongoing
f. E-mentoring for faculty and teaching assistants. <i>(Center for Innovation in Teaching and Research)</i>	Phase II	Mid-Term	
20. Implement <i>Illinois Web Accessibility Standards. (Web Accessibility Committee)</i> . See item #12,	Phase I	Ongoing	Ongoing
21. Implement the statewide Course Articulation System that provides course transfer and matriculation information. <i>(University Registrar, University Information Management Systems)</i> . Administrative Information Management Systems completed programming and the system has been implemented.	Phase I	Mid-Term	Complete
22. Create a staffed center for software/hardware training <i>(President, Provost, Center for Innovation in Teaching and Research, University Libraries)</i> . Training regarding the application of software is provided by the Center for Innovation in Teaching and Research and Human Resources. The current uTech store in Macomb and the Quad Cities uTech store to be opened later in the fall semester help to answer hardware questions.	Phase II	Mid-Term	Ongoing

III. Improve Technologies

A. For Students, Faculty, and Staff

Higher Values in Higher Education commits Western Illinois University to providing excellence in all instructional, research, and service activities as we become the leading comprehensive/master's-granting institution in the United States. Clearly, technology is a tool that supports the vision and daily operation of students, faculty, and staff. Currently, the amount, type, and access to hardware and software at University are all normally distributed. Institutional planning with clearly identified sources of revenue that extend well beyond end-of-year funding are needed to provide students, faculty, and staff with the technological tools necessary to complete educational mission and professional responsibilities. Strengthening technological resources and access begins with establishing/clarifying/planning budgetary responsibilities for technology at Western Illinois University.

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
23. Clarify university computing infrastructure (hardware and software) that will be centrally funded by the University and infrastructure that will be funded by vice presidential divisions, colleges, academic departments, and administrative units. <i>(President; Vice Presidents; Assistant to the President for Planning, Budget and Institutional Research)</i> . Through the Electronic Classroom Upgrade Program, central funding pays for upgrades to those classrooms that can be accessed by students, faculty, and staff from any discipline at Western Illinois University. Central funding and college/departmental funding also support development of a four-year technology computer rotation program in Academic Affairs. Forty one electronic classroom upgrades will be completed by the end of calendar year 2009.	Phase I	Short-Term	Ongoing
24. Aligned with the goals of this <i>Institutional Strategic Plan for Technology</i> and as part of the University's annual planning and accomplishments presentations in the spring, establish and implement divisional, college, and departmental computing and instructional equipment plans, policies, and guidelines. <i>(Vice Presidents, Deans, Chairs, Directors)</i> . See item #2.	Phase I	Short-Term	Ongoing
25. Involve faculty in hardware and software purchases and technology implementation planning to ensure that instructional needs are driving technology selection and use rather than technology driving instruction. <i>(President; Vice Presidents; Assistant to the President for Planning, Budget, and Institutional Research; Deans; Chairs; Directors)</i> . Faculty have been involved in the selection of institutional software (e.g., the new knowledge-based help system, WebCT Vista, Zimbra) and through the President's Technology Advisory Users Group faculty defined classroom technology standards as part of the Electronic Classroom Upgrade Program.	Phase I	Short-Term	Ongoing
26. Ensure compatibility between hardware and software in classrooms, computer laboratories, and faculty and staff offices. <i>(Deans, Chairs, President's Technology Infrastructure Group)</i> . Standardized equipment is being purchased in the Electronic Classroom Upgrade Program and the Faculty and Staff Computer Upgrade Program.	Phase I	Mid-Term	Ongoing

B. In Classrooms and Laboratories

All Western Illinois University students and faculty must have equal access to classrooms, laboratories, and the corresponding hardware and software that provide the necessary technologies to support educational objectives. Therefore, the first step is to inventory the types of technology available in the classrooms and then develop/publish a

scheduling system that allows convenient faculty access to classrooms that will simultaneously meet pedagogical and technological needs.

The academic excellence and educational opportunities provided by Western Illinois University faculty require increased and current technology. Western Illinois University will institutionally move to an all-electronic classroom solution. An interim approach to this migration to improved classrooms and laboratories will be to develop college standards for classrooms (recognizing that updating will require a multiyear approach applied consistently across the academic colleges and University Libraries) and convenient technology checkout programs for faculty and staff. Convenience also extends to enhanced technology and classroom support with increased sensitivity to the academic calendar.

The University also commits to continually evaluating and purchasing, where appropriate, new and emergent technologies that will advance the successful fulfillment of the University's academic mission and service operations.

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
27. Create and maintain an electronic inventory of technological equipment in all classrooms. (<i>University Registrar, Colleges, Departments</i>) Staff has been identified from University Technology to be responsible for working with staff from the University Registrar, colleges, departments, and Quad Cities Technology to maintain an electronic inventory of all technological equipment in classrooms and laboratories on both campuses.	Phase I	Short-Term	Ongoing
28. Implement an automated room-scheduling system that allows colleges and departments to schedule classrooms electronically. (<i>University Registrar</i>). See action #27.	Phase I	Short-Term	In Progress
29. In consultation with Deans, Department Chairs, and program faculty, develop and begin implementation of University plans for configuration of three general levels of electronic classrooms to meet basic, intermediate, and high-end needs. <ul style="list-style-type: none"> • These plans should include instructions for Physical Plant installation of teaching stations and cabling, projection screens where needed, and electrical and network connections. • These plans should also include consideration for increased physical security of installed equipment. (<i>Deans, Departments, President's Technology Advisory Users Group, College Representatives, Physical Plant</i>). The President's Technology Advisory Users Group has defined standards and these standards are being applied. Through combined efforts of staff from Physical Plant, University Technology, Quad Cities Technology, and in collaboration with end-users on both campuses, 41 of the University's 127 general instructional electronic classrooms (32.2 percent) have been upgraded. 	Phase I	Short-Term	In Progress
30. Establish a laptop and other hardware checkout program (wireless laptop cart, data projectors, portable ELMOs, digital video cameras, and digital still cameras) for faculty and staff. (<i>Dean of University Libraries, Director of Special Projects, President's Technology Advisory Users Group, President's Technology Infrastructure Group</i>). A task force of the Deans, faculty, and Director of Technology Special Projects has been developed to study and implement mobile computing initiatives. University Libraries, the College of Education and Human Services, and Quad Cities	Phase I	Mid-Term	In Progress

Technology have developed checkout programs and Broadcasting now requires all students to have a laptop.			
31. Implement a plan to transition all classrooms into electronic classrooms at:	Phase I	Short-Term	
a. Western Illinois University-Macomb. (<i>Provost, Deans, Chairs, Director of Special Projects, President's Technology Advisory Users Group</i>). See item #29.	Phase I	Long-Term	In Progress
b. Western Illinois University-Quad Cities for both 60 th Street and the newly developing Riverfront Campus. (<i>Provost, Deans, Chairs, Director of Special Projects, Quad Cities Users Group Technology Subcommittee</i>) In addition to the information reported in action #29, electronic classroom planning has been completed for Building One on the newly developing Western Illinois University-Quad Cities Riverfront Campus, and the Caxton Building features all new electronic classrooms.	Phase I	Long-Term	In Progress
32. As defined by the academic community, the conversion of standardized electronic classrooms should use standardized equipment (projectors, visual presenters, speakers, video signal amplifiers, computers, etc.) and control panels in electronic classrooms, to the greatest extent possible, to facilitate easier support and repair of classrooms and to make it easier for users to enter an unfamiliar room and use the equipment. (<i>Director of Special Projects, President's Technology Advisory Users Group, Deans</i>). Specifications for technology in the classrooms was defined by the academic representatives on the President's Technology Advisory Users Group.	Phase I	Mid-Term	Complete
33. Improve and centralize support of electronic classrooms and all computer laboratories. (<i>University Computer Support Services, Colleges, Departments</i>). A new Classroom Support Unit was created within University Technology to coordinate classroom support and to identify/correct technological problems in the classroom before they occur. Also, beginning in fall 2009, professional staff is now available to resolve technology issues during evening classes. This service enhancement is consistent with practice on the Quad Cities Campus.	Phase I	Short-Term	Complete
34. Implement a web-based technology calendar that identifies critical points in the academic calendar and priority periods for technological work (e.g., scheduling installation of hardware and software before the start of the academic semester) according to the following guiding principles: <ul style="list-style-type: none"> • Continue to institute upgrades and changes to equipment and software with respect for the academic calendar. Highest priority will be given to proactive scheduling between departments and technology units, allowing setup of classroom computers, teaching laboratory computers, and faculty office computers prior to the beginning of academic terms. This will be part of the new Change Management Process described in action #7A. • When instituting upgrades (e.g., operating systems, networking access, Office suite applications) academic departments and administrative units, not individual users, will be the units for upgrading to promote standardization and enhanced user 	Phase I	Short-Term	In Progress Ongoing

<p>support. This scheduling model was used in the institutional migration to Zimbra, technology security enhancements, and will be used again in future technological conversions.</p> <ul style="list-style-type: none"> Given the centrality to instruction of electronic classrooms and computer laboratories, no such facility should be out of commission more than 24 hours after a problem is reported to the extent that the situation is under control of Western Illinois University. (<i>University Computer Support Services, Electronic Student Services, President's Technology Advisory Users Group</i>). This is a guiding principle of University Technology and will be part of the new Change Management Process described in action #7A. 			Ongoing
<p>35. Investigate security solutions (swipe card systems, video recording, etc.) to enable expanded computer laboratory hours of operation. (<i>President's Technology Infrastructure Group, Technology Security Committee</i>). An ID Card Task Force made recommendations for new equipment that could, given the availability of resources, be purchased on both campuses to enable expanded computer laboratory hours of operation.</p>	Phase II	Mid-Term	Complete
<p>36. Investigate/implement new, emerging, and innovative technologies to support the academic mission of Western Illinois University. These include, but are not limited to, pod casting to wired and wireless devices, video on demand, clicker technology, and a multimedia room with global video conferencing capabilities. (<i>Faculty and Staff, Center for Innovation in Teaching and Research, President's Technology Infrastructure Group, President's Technology Advisory Users Group</i>). Faculty are podcasting on the Macomb and Quad Cities campuses, use clickers, and new smart board technologies are being piloted on the Quad Cities Campus.</p>	Phase II	Ongoing	Ongoing
<p>37. Investigate the feasibility of requiring laptops for all Western Illinois University students. (<i>President's Technology Advisory Users Group, University Computer Support Services, Financial Aid, Center for Innovation in Teaching and Research</i>). This is part of the task force work described in Item #30.</p>	Phase II	Mid-Term	In Progress
<p>38. Develop and implement centrally-operated, computer-based testing and assessment labs on both Macomb and Quad Cities campuses. (<i>Director of Non-Traditional Programs, University Computer Support Services</i>). The Quad Cities Campus launched a new centrally-operated, computer-based college testing center on the Rock Island Arsenal in Spring 2009.</p>	Phase II	Mid-Term	Ongoing
<p>39. Expand campus-wide site licenses. Potential high-need software includes Adobe/Macromedia, Dreamweaver, and Photoshop. (<i>Assistant to President, President's Technology Advisory Users Group, University Computer Support Services</i>). As part of the college-university technology support agreements, University Technology will investigate software site licenses when requested by a member of the academic community. University Technology is currently exploring site licenses with Microsoft and Apple.</p>	Phase II	Ongoing	Ongoing

C. At University Libraries

The University Libraries are committed to identifying, collecting, organizing, preserving, and providing access to information supporting the instructional programs of the University. The Libraries make available essential resources in each curricular field and participate in the education of their users. The Libraries also support the research and

informational needs of students, faculty, staff, and people of the region. Technology and its enhancement, as demonstrated in the action items below, are critical to the mission and success of the Libraries.

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
40. Evaluate and enhance University Libraries' electronic and print resources in light of curricular needs of the University and statewide statistical collection norms. <i>(Provost, Dean of University Libraries)</i> . In 2008-2009, the library liaisons and administration conducted a major journal cancellation project and reevaluated library and departmental collection budgets.	Phase I	Ongoing	Ongoing
41. Continue to explore and participate in external and internal cooperative arrangements that support the University's mission, expand the libraries' resources, and encourage intellectual and cultural development. <i>(Provost, Dean of University Libraries)</i> . University Libraries continues to work with CODSULI and CARLI to expand access and delivery of information to library users anytime and anywhere.	Phase I	Ongoing	Ongoing
42. Provide the delivery of information to Western Illinois University and regional patrons by <ul style="list-style-type: none"> a. Migrating print collections to electronic resources as available. Western Illinois University now has access to more than 55,000 online journals and databases b. Utilizing technology where appropriate to educate library users of available print and electronic resources. Between 2006 and 2008, University Libraries experienced 186% growth in the Electronic Reserve system. In 2008-2009 WIU Libraries implemented LibGuides, a tool to support instruction and liaison activities. c. Enhancing Interlibrary Loan delivery using high-end copy, transmission, and data management systems such as ILIAD to support WIU and our educational partners. University Libraries implemented ILLiad, which is an online interlibrary loan request and tracking system in academic year 2007-2008. In 2008-2009 users are extremely pleased with the improved response time for processing and receiving interlibrary loans. The WIU Libraries has established a digitization unit to support the digital storage and dissemination of resources. d. Developing web-based databases and applications. In 2008-2009, University Libraries implemented LibGuides, a tool to support instruction and liaison activities. e. Streamlining behind-the-scenes technology infrastructure and systems operations for acquisitions, cataloging, and collection management. <i>(University Libraries)</i>. University Libraries implemented GOBI and PromptCat to improve acquisitions and cataloging functions and efficiency during academic year 2007-2008. Assessment in 2008-09 showed GOBI to be a successful tool whereas PromptCat was causing additional work. It is no longer used at the University. 	Phase I	Ongoing	Ongoing Complete Ongoing Ongoing Ongoing
43. Develop a library portal to integrate and provide a gateway to library resources, quality internet resources, and library services. <i>(University Libraries)</i> . In 2008-2009, University Libraries moved	Phase II	Mid-Term	In Progress

<p>from development of a portal to participating with and supporting the university portal initiatives.</p>			
<p>44. Convert the libraries' print format to electronic resources by:</p> <ul style="list-style-type: none"> a. Digitizing selective library collections, This priority is in progress and is an ongoing process. b. Supporting the creation and distribution of scholarly communication electronically, and This priority is in progress and is an ongoing process. c. Implementing technology-based improvements, including SFX Link Resolver and Federated Search Engines to search across databases. (<i>University Libraries</i>). Actions complete. 	Phase I	Ongoing	<p>Ongoing</p> <p>Ongoing</p> <p>Complete</p>
<p>45. Implement the creation and preservation of the University's electronic theses and dissertations and honors theses. (<i>University Libraries</i>). In 2008-2009, University Libraries purchased and implemented access to Dissertation Abstracts. Because this product does not address the needs of honors theses, the Libraries are working with Honors to address their needs.</p>	Phase II	Short-Term	In Progress
<p>46. Transform the current Library Audiovisual space into a technologically advanced collaborative learning environment by:</p> <ul style="list-style-type: none"> a. Providing evolving technology for student learning including high-tech computer workstations and peripherals. In academic year 2007-2008, University Libraries opened the new digital commons that includes a new state-of-the-art computer laboratory. In 2008-2009, a Digital Studio was created to support students and faculty creating digital objects. b. Expanding the library infrastructure to support high-end technology and collaborative learning. The Digital Commons also includes Computer Stores, a demonstration electronic classroom, a coffee bar, and offices for University Technology to support high-end technology and collaborative learning. In, 2008-2009 The Computer Store moved to the union and the Digital Studio moved into the Digital Commons. c. Hiring technologically savvy support staff to assist users in integrating the use of technology in their educational pursuits and to support scholarly communication. (<i>University Libraries</i>). In academic year 2007-2008, University Libraries established technology-driven formative evaluations to allow online review of library instruction sessions by department faculty and students. 2008-2009 the Libraries hired additional tech savvy student and civil service staff to support our technology needs. 	Phase I	Ongoing	<p>Ongoing</p> <p>Complete</p> <p>Ongoing</p>

IV. Strengthen Distance Education

Electronically offered programs support and extend the roles of educational institutions. Increasingly they are integral to higher education, with growing implications for institutional infrastructure. A strong distance learning program, with appropriate technological infrastructure and staff support, will allow Western Illinois University faculty to achieve *Higher Values in Higher Education* goals of outreach and excellence in undergraduate and graduate education.

The planned action items displayed below are in sequential order. They begin with completion of current initiatives to provide the Board of Trustees Bachelor of Arts degree fully online and to provide the infrastructure to support hybrid instruction in Macomb and the Quad Cities. They continue with advancement of the Higher Learning Commission-North Central Association of Colleges and Schools' *Best Practices for Electronically Offered Degree and Certificate Programs* for new (and existing) distance education degree programs. Extension of distance learning best practices reinforces the University's commitments to educational opportunity and excellence in undergraduate and graduate education.

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
47. Complete plans to offer the Board of Trustees Bachelor of Arts degree fully online. (<i>Center for Innovation in Teaching and Research, Distance Learning Advisory Board, UPI Distance Learning Committee, Deans</i>). The BOT/BA degree is now fully online.	Phase I	Short-Term	Complete
48. Complete plans to offer an online course wizard to support planning and scheduling for timely Board of Trustees Bachelors of Arts degree completion. (<i>Center for Innovation in Teaching and Research</i>)	Phase I	Short-Term	
49. Upgrade all 16 of the University's video-conferencing units. (<i>Provost, University Computer Support Services</i>). All of the University centrally funded CODEC systems have been upgraded.	Phase I	Short-Term	Complete
50. Clarify the procedures necessary to access CODEC facilities, and publish policies for use of CODEC classrooms. (<i>College of Business and Technology, College of Education and Human Services</i>)	Phase I	Short-Term	In Progress
51. Upgrade course management software (WebCT Vista). (<i>University Computer Support Services</i>). Western Illinois University completed migration to WebCT Vista in summer 2007. WebCT Vista was acquired by Blackboard and is at End of Life in 2010.	Phase I	Ongoing	In Progress
52. Provide a consistent and coherent technical framework for distance education students and faculty. (<i>Center for Innovation in Teaching and Research, Distance Learning Committee, Distance Learning Support Staff</i>). Western Illinois University is benchmarking and adapting best practices in on-line education as part of its special emphasis self-study for institutional re-accreditation from the Higher Learning Commission-North Central Association of Colleges and Schools.	Phase II	Short-Term	In Progress
53. Create a Distance Learning Portal for all online courses at Western Illinois University to provide a single point of access for all potential and current students to review online courses offered at the University. <ul style="list-style-type: none"> The distance learning portal should include information about the University, its programs, courses, costs, and related policies and requirements; pre-registration advising; application for admission; placement testing; enrollment/registration in programs and courses; financial aid information; academic advising; tutoring; career counseling and placement; appropriate library resources; training in information literacy; bookstore services; ongoing technical support, preferably offered during evenings and weekends as well as normal institutional working hours; and access to grievance procedures. (<i>Center for Innovation in Teaching and Research, Distance Learning Advisory Board, UPI Distance Education Committee</i>) 	Phase II	Short-Term	

54. Provide an ongoing program of appropriate technical, design, and production support for faculty members. (<i>Center for Innovation in Teaching and Research, Distance Learning Support Staff</i>). Dr. Rick Carter works with the Center for the Application of Information Technologies to provide faculty with technical, design, and production support for distance learning courses.	Phase II	Ongoing	Ongoing
55. Provide technical and physical plant facilities including appropriate staffing and technical assistance to support distance-delivered programs. (<i>Provost, Deans, Chairs, Center for Innovation in Teaching and Research, Physical Plant, University Computer Support Services</i>)	Phase II	Ongoing	
56. Establish and implement distance education programs identified in academic master plans and supported in the University’s curricular approval processes. (<i>Colleges, Departments, Faculty, Center for Innovation in Teaching and Research</i>). Western Illinois University has approval from the Higher Learning Commission-North Central Association of Colleges and Schools to offer the Board of Trustees/Bachelors of Arts, Masters in Instructional Design and Technology, and the Masters in Business Administration online.	Phase III	Ongoing	Ongoing
57. Take existing stand-alone degree programs and embed them into existing academic programs (e.g., Fire Science into Emergency Management). (<i>Faculty, Departments, Colleges</i>)	Phase III	Short-Term	
58. Establish a knowledge-management system for sharing information and best practices especially for the continuum of technology-enhanced instruction. Promote more collaboration and sharing of best practices and ideas within departments. Disseminate current information regarding copyright use, especially with technology tools. (<i>Center for Innovation in Teaching and Research, University Libraries, Faculty</i>). A knowledge-based management system is being purchased for the University as described in Action #4. In addition to other technologies within Web 2.0 applications.	Phase III	Short-Term	In Progress

V. Enhance Infrastructure and Security

At the center of Western Illinois University’s technology is the core network that connects all University buildings and campuses. If Western Illinois University is to successfully promote academic excellence and educational opportunities, it must provide a high-speed core network with load balancing and redundancy. A strong infrastructure supports state-of-the-art classrooms and instruction, a wireless network throughout the Macomb and Quad Cities campuses, and commitments to ResNet—a student fee-funded program that supports a high-speed network which connects residents’ computers with University computer resources. Equally import to the University’s core network is state-of-the-art telecommunications and network management emphasizing risk management and security planning.

A. High-Speed Core Network

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
59. Complete infrastructure work associated with load balancing and redundancy.			
a. Complete the redundant fiber loop on the Western Illinois University-Macomb Campus. (<i>University Computer Support Services, Physical Plant</i>). The Macomb campus fiber loop is complete.	Phase I	Short-Term	Complete
b. Replace “core” switches. (<i>University Computer Support</i>)	Phase I	Short-Term	Complete

<i>Services, Physical Plant</i>). Technology Infrastructure Support Services has replaced core network switches. The old switches were deactivated in summer 2008.			
c. Implement a multiyear plan to exchange hubs and switches in academic buildings. (<i>University Computer Support Services, Physical Plant</i>). All hubs have been replaced.	Phase I	Mid-Term	Complete
d. Acquire additional power for Morgan 103. (<i>University Computer Support Services, Physical Plant</i>). Additional power was procured as part of the purchasing of an emergency generator as described below.	Phase I	Short-Term	Complete
e. Obtain generator power for Morgan 103. (<i>Assistant to the President for Planning, Budget, and Institutional Research; University Computer Support Services; Physical Plant</i>). An emergency generator with uninterruptable power supply has been purchased and installed.	Phase I	Short-Term	Complete
f. Acquire additional Internet bandwidth. (<i>Assistant to the President for Planning and Budget, Director of Special Projects, University Computer Support Services, Physical Plant; Telecommunications</i>). Bandwidth on the Quad Cities campus is at 19.0Mb with ongoing evaluation of cost with the feasibility to add more. The Macomb campus increased from 85Mb to 200Mb. A second point of egress was acquired by the University and offers connectivity for Macomb schools, business and industry. Bandwidth will be evaluated as needed.	Phase I	Short-Term	Ongoing
60. Engage in ongoing facilities and capacity upgrades. By the end of Fiscal Year 2010:			
a. Formalize information technology contingency planning with institutional policies on backups, data storage, data verification, data restoration, and recovery planning. (<i>President's Technology Infrastructure Group, President's Cabinet, and President</i>). Administrative Information Management Systems, Electronic Student Services, and University Technology all documented disaster recovery plans, and protocol in each area is tested at least annually. When completed each area will be tested annually.	Phase I	Short-Term	Ongoing
b. Formalize incidence response policies and procedures to data and/or network intrusions. (<i>President's Technology Infrastructure Group, President's Cabinet, and President</i>). The Chief Technology Security Officer received President's Cabinet approval incidence response policies and procedures to data and/or network intrusions.	Phase I	Short-Term	Complete
c. Replace CAT3 with CAT6. (<i>University Computer Support Services, Physical Plant</i>). Geographic Information Systems and University Technology completed mapping of the Western Illinois University Network. University Technology has identified category 3 cables that needs to be replaced inside buildings.	Phase II	Mid-Term	In Progress
d. Establish climate control for wiring POPs. (<i>University</i>	Phase II	Mid-Term	In

<i>Computer Support Services, Physical Plant</i>). University Technology is documenting all wiring closets to inform climate control planning.			Progress
e. Implement port per pillow in ResNet. (<i>University Computer Support Services, Physical Plant, University Housing and Dining Services</i>). University Technology is benchmarking feasibility and viability in regard to wired versus wireless technology. Recommendations to the President's Cabinet will be made during Fiscal Year 2010.	Phase II	Long-Term	In Progress
f. Review using Sherman Hall as the Network's/Telecommunications' primary location. (<i>Telecommunications, Vice President for Administrative Services, University Computer Support Services, Director of Special Projects</i>). A second point of egress is now operational in Morgan Hall. University Technology staff will be considering the advisability and viability of Sherman Hall being a single telecommunication point of contact.	Phase II	Mid-Term	In Progress
61. Create a complete wireless network on the Western Illinois University-Macomb Campus beginning with all academic buildings and continuing with nonacademic buildings and spaces between buildings.			
a. Complete the fiber loop on the Macomb campus to support a completely wireless environment by running fiber from:			
Sherman through Simpkins to Olson. (<i>University Computer Support Services, Physical Plant, University Housing and Dining Services</i>). This and all other phases of the fiber loop (described below) are complete.	Phase I	Short-Term	Complete
Olson to Grote Hall. (<i>University Computer Support Services, Physical Plant, University Housing and Dining Services</i>)	Phase I	Short-Term	Complete
Grote through Hanson Field to Tanner Hall. (<i>University Computer Support Services, Physical Plant, University Housing and Dining Services, Intercollegiate Athletics</i>)	Phase II	Short-Term	Complete
Tanner across University Drive to Thompson Hall. (<i>University Computer Support Services, Physical Plant, University Housing and Dining Services, Intercollegiate Athletics</i>)	Phase III	Mid-Term	Complete
b. Modify the current wireless environment to require authentication. (<i>University Computer Support Services</i>). University Technology is expected to have this action completed by the end of calendar year 2009.	Phase I	Mid-Term	In Progress
62. Add additional capacity for ResNet. (<i>University Computer Support Services</i>). ResNet Bandwidth was increased by 40Mb and total Macomb campus bandwidth increased to 115Mb. Bandwidth will be addresses as needed	Phase III	Short-Term	Complete
63. Provide wireless access for all ResNet rooms. (<i>University Computer Support Services, University Housing and Dining Services, Physical</i>	Phase III	Mid-Term	In Progress

<i>Plant</i>). There is wireless access in common areas in all residence halls and dining centers on the Macomb campus.			
64. Establish climate control for all ResNet wiring closets. (<i>University Computer Support Services, University Housing and Dining Services, Physical Plant</i>) Lincoln Hall climate control is in process.	Phase III	Mid-Term	In Progress
65. Establish multiple fiber paths to all ResNet core buildings. (<i>University Computer Support Services, University Housing and Dining Services, Physical Plant</i>). Fiber redundancy continues as funding permits.	Phase III	Mid-Term	Complete
66. Implement port isolation and private VLANs in all ResNet buildings. (<i>University Computer Support Services, University Housing and Dining Services, Physical Plant</i>)	Phase IV	Long-Term	
67. Complete redundant fiber links to all ResNet buildings. (<i>University Computer Support Services, University Housing and Dining Services, Physical Plant</i>)	Phase IV	Long-Term	In Progress
68. Complete rewiring of all ResNet rooms to increase the number of available ports. (<i>University Computer Support Services, University Housing and Dining Services, Physical Plant</i>). This is part of the benchmarking review described in action #60E.	Phase IV	Long-Term	In Progress

B. Telecommunications

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
69. Work with the City of Moline and Renew Moline to identify dark fiber connections between Moline and Macomb to enable additional internet access/egress between the Western Illinois University campuses and, therefore, providing the technological infrastructure for additional bandwidth, Internet2, VOIP telecommunications, and other streaming. (<i>Director of Special Projects; Assistant to the President for Planning, Budget, and Institutional Research; University Computer Support Service; Telecommunications</i>). A fiber pathway from the two campuses of Western Illinois University has been completed. Ignition of the fiber is contingent on funding.	Phase I	Short-Term	Complete
70. Establish partnerships with local providers to offer local wireless and DSL at affordable rates to students, faculty, and staff. (<i>Telecommunications, Purchasing, Director of Special Projects, University Computer Support Services</i>). The establishment of the second point of egress on the Macomb Campus enabled local providers to offer local wireless and DSL at affordable rates to students, faculty, and staff.	Phase II	Mid-Term	Complete
71. Assess telecommunications systems and consider the convergence of telephone, VoIP, all voice services, and data. (<i>Telecommunications, Purchasing, Director of Special Projects, University Computer Support Services</i>). The Vice President for Quad Cities, Planning, and Technology is leading a study group that will make telecommunications recommendations to the President's Cabinet during Fiscal Year 2010.	Phase II	Mid-Term	In Progress
72. Partner with cellular provider(s) to integrate functionality and billing. (<i>Telecommunications, Purchasing, Director of</i>	Phase III	Mid-Term	In Progress

<i>Special Projects, University Computer Support Services)</i> <i>Further action is contingent upon VOIP implementation.</i>			
73. Improve cellular coverage and capacity. <i>(Telecommunications, Purchasing, Director of Special Projects, University Computer Support Services)</i>	Phase III	Mid-Term	

C. Network Administration

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
74. Complete hiring of a data security officer. <i>(Security Officer Search Committee, University Computer Support Services)</i> . A Security Specialist was hired in University Technology to serve in this capacity.	Phase I	Short-Term	Complete
75. Implement a robust firewall and intrusion detection environment. <i>(University Computer Support Services)</i> . University Technology completed firewall and intrusion detection system installation on both campuses.	Phase I	Short-Term	Complete
76. Eliminate the ability to use VNC, Remote Desktop, or other remote control software to access PCs from outside the Western Illinois University network. <i>(University Computer Support Services)</i> . The abilities described above are no longer possible.	Phase I	Short-Term	Complete
77. Create and use server-only segments. <i>(University Computer Support Services, Electronic Student Services)</i> . Server only segments have been installed.	Phase I	Short-Term	Complete
78. Centrally locate servers on the Macomb and Quad Cities (60 th Street and Riverfront) campuses, where such centralization will not adversely affect the purposes of those servers; develop local, service-level agreements between the units and UCSS prior to relocation of servers. <i>(University Computer Support Services; Physical Plant; Telecommunications; Director of Special Projects; Assistant to the President for Planning, Budget, and Institutional Research; Colleges)</i> . University Technology, Electronic Student Services, and Center for the Application of Information Technologies have centralized servers in the Morgan Hall 103 facilities.	Phase I	Long-Term	Ongoing
79. Review and implement VPN or other technology access to Western Illinois University servers outside the University network. <i>(University Computer Support Services)</i> . VPN has been installed and is supporting end users.	Phase II	Short-Term	Complete
80. Review and implement, where appropriate, data encryption and double encryption options. <i>(University Computer Support Services, Electronic Student Services, Director of Special Projects)</i> . Western Illinois University longer allows for the storage of social security numbers, credit card information or other sensitive data unless expressly required for job use. All sensitive data contained on University computers is to be encrypted. University Technology is currently scanning all university computers to ensure that this process is being followed, and will be making recommendations to the President's Cabinet on routine scanning procedures.	Phase II	Mid-Term	In Progress

81. Implement required registration of all personal computers within the Western Illinois University network. <i>(University Computer Support Services, Electronic Student Services)</i> . Beginning in October 2010, University Technology will assign fixed IP addresses to all university-computers. This action will be completed by the end of Fiscal Year 2010.	Phase II	Mid-Term	In Progress
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D. Risk Management and Security

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
<p>82. Create a Social Security Task Force charged with surveying all deans and directors to inventory current use of Social Security numbers at Western Illinois University to document where SSNs are used, how they are used, and where they are stored (paper and electronically). <i>(President, Vice Presidents, Assistant to the President for Planning and Budget)</i></p> <p>The end result of data collection and benchmarking of practices at peer institutions is to make policy and procedure recommendations to the President's Cabinet on University Social Security number use and where the University identification number could be used as a proxy. The Task Force will also note where Social Security number use and reporting are required by state or federal legislation, external agencies, etc. <i>(Social Security Task Force)</i>. Task force recommendations were made in December 2007. They have been given to the Chief Technology Security Officer for consideration and implementation with University Technology Directors and the Campus Technology Security Committee.</p>	Phase I	Short-Term	Complete
<p>83. Create a Credit Card/Debt Card Task Force charged with surveying all deans and directors to inventory current use of credit/debit cards at Western Illinois University. <i>(President, Vice Presidents, Assistant to the President for Planning and Budget)</i></p> <p>The end result of data collection is to document where they are used, how they are used, and where information is stored (paper and electronically). The end result of data collection and benchmarking of practices at peer institutions is to make policy and procedure recommendations to the President's Cabinet on University credit/debit card use and reporting. <i>(Credit Card/Debit Card Task Force)</i>. Same response as item #82.</p>	Phase I	Short-Term	Complete
<p>84. Create a Data Transfer Task Force charged with reviewing all mainframe downloads to PCs and /or servers. <i>(President, Vice Presidents, Assistant to the President for Planning and Budget)</i></p> <p>The end result of data collection is to determine who is downloading what information, why it is necessary, whether it contains sensitive data, and if there is an alternative to performing those downloads. <i>(Data Transfer Task Force)</i>. Same response as item #82.</p>	Phase I	Short-Term	Complete
<p>85. Develop a comprehensive data security plan for Western Illinois University, including successful implementation of the following:</p> <ul style="list-style-type: none"> a. Effective training across all levels of the University and with certification of training and policy compliance. Business Office and Chief Technology Security Officer 	Phase I	Mid-Term	Ongoing

<p>provide annual credit card handling training.</p> <p>b. Creation and expansion of a single directory services environment. See action #10a</p> <p>c. IP security cameras with centralized storage.</p> <p>d. Improved data security protocols and encryption. Encryption policy was approved by the President's Cabinet in April 2009.</p> <p>e. Security and computer-use policies.</p> <p>f. Policies for requiring antivirus, test, and quarantine.</p> <p>g. Auditing practices to obtain more feedback and to address deficiencies (<i>President's Technology Infrastructure Group</i>)</p>			Complete
86. Enhance Internet security by implementing a firewall and intrusion-detection systems. (<i>University Computer Support Services</i>). See action #75.	Phase I	Mid-Term	Complete
87. Hire an institutional security officer to coordinate technology security training and implementation across the University. This position, separate from the new network security technician described earlier in this <i>Plan</i> , should report to a senior-level institutional official and should work with a security committee and other institutional task forces to address technology security at the University. (<i>President</i>). A Chief Technology Security Officer was hired at Western Illinois University.	Phase I	Short-Term	Complete
88. Create/update disaster contingency planning to ensure recovery of these systems and test processes and make appropriate adjustments annually. (<i>President's Technology Infrastructure Group</i>). See action #60A.	Phase I	Ongoing	Ongoing
89. Implement a redundant server and storage location at Western Illinois University-Macomb and Quad Cities (60 th Street and Riverfront). (<i>President's Technology Infrastructure Group</i>). The Quad Cities campus has been established as the tape media storage location for the Macomb Campus.	Phase I	Long-Term	Ongoing
90. Establish the feasibility and need for establishing a second firewall between ResNet and the University data network to create an additional level of protection and adequate restriction to University systems. (<i>University Computer Support Services</i>). Feasibility study revealed another solution that has been implemented.	Phase II	Mid-Term	Complete
91. Review and develop an implementation plan for approved recommendations of the Social Security Task Force. (<i>President; Vice Presidents; Assistant to the President for Planning, Budget, and Institutional Research</i>). Ongoing sensitive data scans eliminated over 642,000 SSNs and over 6,100 credit cards from university computers. Additionally, a data management administrative procedure was approved by the President's Cabinet in August 2009.	Phase II	Mid-Term	In Progress
92. Review and develop an implementation plan for approved recommendations of the Credit Card/Debit Card Task Force. (<i>President; Vice Presidents; Assistant to the President for Planning, Budget, and Institutional Research</i>) On going sensitive data scans eliminated over 644,000 SSNs and over 6,100 credit cards from university computers. A data management	Phase II	Mid-Term	In Progress

administrative procedure was approved by the President's Cabinet in August 2009.			
93. Review and develop an implementation plan for approved recommendations of the Data Transfer Task Force. <i>(President; Vice Presidents; Assistant to the President for Planning, Budget, and Institutional Research)</i> See item #84.	Phase II	Mid-Term	In Progress

VI. Demonstrate Accountability

To successfully achieve institutional technology goals requires fiscal planning for technology at the University level, instead of relying on end-of-the-year monies. As Western Illinois University clearly identifies funding responsibilities for technology at the institutional, divisional, college, and departmental level, there are opportunities for increased funding across all levels of the University.

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
94. Incorporate technological and infrastructure planning into the newly developing Western Illinois University campus master plans by identifying technology and infrastructure plans for the:	Phase I	Short-Term	
a. Performing Arts Center at Western Illinois University-Macomb. <i>(Performing Arts Center Users Group, Dean of Fine Arts and Communication, University Computer Support Services, Physical Plant)</i> . Western Illinois University received Illinois Capital Development Board to include technology and telecommunications infrastructure as part of the construction budget.			In Progress
b. Western Illinois University-Quad Cities Riverfront Campus, including: <ul style="list-style-type: none"> i. Establishing classroom standards for technology. <i>(Quad Cities faculty, Quad Cities Users Group Technology Subcommittee, Director of Special Projects, University Computer Support Services)</i>. Action completed as part of Riverfront Campus master planning. ii. Implementing a dark fiber connection between Macomb and the Quad Cities campuses at 60th Street and on the riverfront, acquiring additional Internet egress, and adding an additional access and egress point in Macomb. <i>(Director of Special Projects; University Computer Support Services; Telecommunications; Physical Plant; Assistant to the President for Planning, Budget, and Institutional Research)</i>. See Item #69. 			Complete In Progress
c. Multicultural Center at Western Illinois University-Macomb. <i>(Student Services, Electronic Student Services, University Computer Support Services, Physical Plant)</i> . Representatives from Electronic Student Services and University Technology were included in the technological and infrastructure planning for the Multicultural Center.			Complete

95. Incorporating technology needs into the newly developing comprehensive campaign. <i>(President, Vice Presidents, Deans)</i> . Information technologies are a funding priority in the newly developing comprehensive campaign for Western Illinois University that is currently in the quiet phase.	Phase I	Short-Term	Complete
96. Seeking external funding for technology and technological innovation at Western Illinois University. <i>(Faculty, Staff, President's Technology Advisory Group)</i> . This is an ongoing activity of University faculty and staff. The Center for the Application of Information Technologies, for example, is exclusively externally funded.	Phase II	Ongoing	Ongoing

Equally as important is the effective and efficient use of existing staff and fiscal resources. Western Illinois University will develop and implement actions to coordinate the efficient acquisition, utilization, and application of technology. By building on existing strengths, addressing challenges, and meeting opportunities, we will advance technology in support of the academic mission and service operations of the University.

<u>Action</u>	<u>Priority</u>	<u>Completion</u>	<u>Status</u>
97. Review existing technological resources available at Western Illinois University, and balance these resources against the need for supporting daily operations and long-term planning of the University. An external consultant will help the President's Cabinet and the President's Technology Infrastructure Group, with recommendations from the President's Technology Advisory Users Group, determine the best action strategies to achieve the ambitious goals of this <i>Strategic Plan</i> , balanced against the demands of daily operations. <i>(President; Vice Presidents; Assistant to the President for Planning, Budget, and Institutional Research, President's Technology Infrastructure Group; President's Technology Advisory Users Group)</i> . A consultant's report was received in spring 2007 and the President's Cabinet carefully considered the recommendations in that report.	Phase I	Short-Term	Complete
98. Benchmark technology support per faculty and staff ratios and other measures of technological services at Illinois public universities and other benchmark institutions. <i>(Planning, Budget, and Institutional Research)</i> . A fall 2007 benchmarking analysis demonstrated that Western Illinois University had one of the most decentralized technological structures of Illinois public universities and benchmark institutions.	Phase I	Short-Term	Complete
99. Following the first two actions stated above, develop and implement a support plan that exceeds the levels of support at peer institutions. <i>(President; Vice Presidents; Assistant to the President for Planning, Budget, and Institutional Research; President's Technology Infrastructure Group; President's Technology Advisory Users Group)</i> . A centralized university technology structure was created that partners with Administrative Information Management Systems and Electronic Student Services. A new area of Technology User Support Services was created and new responsibilities for Classroom Support Services and Web Support Services were specifically assigned to staff.	Phase I	Short-Term	Complete

<p>100.Consolidate technology resources, where appropriate, to maximize services to students, faculty, and staff and prevent unnecessary duplication of efforts. <i>(President; Vice Presidents; Assistant to the President for Planning, Budget, and Institutional Research)</i>. Technology agreements between University Technology, the colleges, and Quad Cities Technology Support Services have maximized services to students, faculty, and staff and prevented unnecessary duplication of efforts. As technology needs evolve, Service Level Agreements (SLA's) and support needs will also evolve.</p>	Phase I	Short-Term	Ongoing
<p>101.Provide professional development opportunities for technology faculty and staff to stay current in this dynamic field. <i>(President, Vice Presidents, Deans, Chairs, Directors)</i>. This is an ongoing activity.</p>	Phase I	Short-Term	Ongoing
<p>102.Clarify the organizational roles and responsibilities of technology units and technology staff in colleges, departments, and units to determine and implement action strategies that best utilize the University's technology support staff and structure. <i>(President's Technology Infrastructure Group, Deans, Chairs)</i>. See Item #100.</p>	Phase I	Short-Term	Ongoing