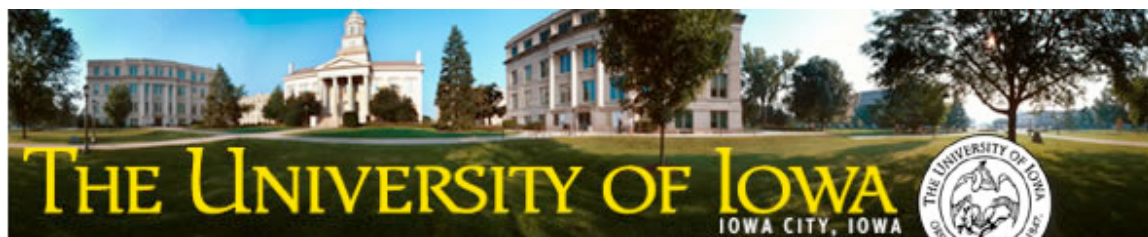


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# ITS Strategic Action Plan v4c

October 7, 2007



## Abbreviations

AIS	ITS Administrative Information Systems
ATAC	Academic Technologies Advisory Council
CCAD	Center for Computer Aided Design
CITL	Campus Information Technology Leaders
CIO	Chief Information Officer, Office of the CIO
CCOM	Carver College of Medicine
CTS	ITS Campus Technology Services
CTSA	Clinical and Translational Science Award
DSP	Division of Sponsored Programs, VPR
FM	Facilities Management
FO	Finance and Operations
GACs	General Assignment Classrooms
GIS	Geographical Information System
HCIS	Health Care Information Systems
ICON	Iowa Courses Online
IAM	Identity and Access Management
IIHR	Iowa Institute of Hydraulic Research
IRB	Institutional Review Board
ISIS	Iowa Student Information Services
ITAdmin	IT Administrators' Group
ITS	Information Technology Services
ITSO	IT Security Office
MARS	Manage Academic Revenue System
MAUI	Made At the University of Iowa (Student Information System)
NAC	Network Access Control
OSIRIS	Administrative companion to ISIS
OVVFO	Office of the Vice President for Finance and Operations
OVPR	Office of the Vice President for Research
PACS	Physical Access Control Systems
RIS	Research Information Systems, VPR
SITA	Student Instructional Technology Assistant
SRM	Student Relationship Management
SPA	ITS Systems and Platform Administration
TNS	ITS Telecommunication and Network Services
VOIP	Voice over Internet Protocol
VPR	Vice President for Research

## GOAL 1. SUPPORT STUDENT SUCCESS THROUGH IT SYSTEMS AND SERVICES.

	ITS Involvement <sup>1</sup>	Dependencies	Time Frame <sup>2</sup>
<b>Strategy 1.1. Promote students' and instructors' use of information technology to support student academic achievement.</b>			
Action 1.1.1. Identify and implement ways to increase efficiency and coordination of centrally and collegiate-managed instructional IT facilities, labs, and classrooms.			
1.1.1.a. Work with the Classroom Advisory Committee and other relevant groups to identify redundancies in technology support of instructional IT facilities.	<b>CTS Instructional Services</b> CIO	Provost	
1.1.1.b. Create a community of those who provide IT support for central, collegiate and departmental instructional IT facilities to foster coordination and efficiency.	<b>CTS Instructional Services</b> CTS Learning Spaces CIO Community	CITL	
Action 1.1.2. Explore ways to expand access to instructional resources for students on and off campus to meet their learning needs.			
1.1.2.a. Investigate expanding current programs to make software readily available to students at reasonable cost.	<b>CTS Help Desk</b> CTS Learning Spaces SPA Enterprise Client Mgmt		
1.1.2.b. Explore distance collaboration tools (like video conferencing) that serve both on and off campus learners.	<b>CTS Instructional Services</b> SPA	Continuing Education CITL	
1.1.2.c. Explore and expand virtual desktop services to provide students with access to more applications from remote locations	<b>CTS Learning Spaces</b> SPA Windows Server Group		
Action 1.1.3. Integrate existing IT systems to enable seamless access and sharing of data among systems (e.g., ICON, ISIS, MAUI, Exchange, InfoHawk).			
1.1.3.a. Implement integrations between ICON and: Exchange, Elluminate, Storage Services, Evaluation & Exam Services, Infohawk eReserves, Identity and Access Management (Enterprise Directory Services), and loan information	<b>CTS Instructional Services</b> CTS Application Support CTS Developers SPA AIS Library	Vendors Library IT	
1.1.3.b. Identify and implement collegiate driven integrations with centrally managed systems	<b>SPA Directory &amp; Authentication</b>	Collegiate Providers	

<sup>1</sup> This column identifies the ITS work groups who will be involved in carrying out the action. The group listed in boldface is the lead group.

<sup>2</sup> The time frame (start and end dates) for each action will be added by the lead group.

## GOAL 1. SUPPORT STUDENT SUCCESS THROUGH IT SYSTEMS AND SERVICES.

	ITS Involvement <sup>1</sup>	Dependencies	Time Frame <sup>2</sup>
1.1.3.b.1. Provide web service integration from ISIS to College of Business Evening MBA Airport System	<b>AIS Project MAUI</b>		
1.1.3.b.2. Provide web service interfaces to Project MAUI modules	<b>AIS Project MAUI</b>		
Action 1.1.4. Explore IT approaches to meeting the needs of today's learners.			
1.1.4.a. Explore "virtual communities of learning" — learning communities that connect students who have similar interests/courses and establish co-curricular groups.	<b>CTS Instructional Services</b> CTS Application Support CTS Developers	Provost Center for Teaching	
1.1.4.b. Extend Courses in Common options for first year students and explore the possibility of including second year students	<b>AIS Project MAUI</b>	Advising	
1.1.4.c. Create and pilot spaces that support collaborative learning.	<b>CTS Instructional Services</b>	Library Provost	
1.1.4.d. Support selected faculty-initiated projects to demonstrate the potential of mobile technologies to support learning.	<b>CTS Instructional Services</b> CTS Application Support SPA TNS Network Services		
1.1.4.e. Sponsor a series of speakers and other events to help the campus understand better the characteristics of today's learners and the impact on teaching.	<b>CTS Instructional Services</b>	Provost Center for Teaching	
Action 1.1.5. Improve processes, automating where appropriate, to minimize administrative burdens for faculty, students, advisors and other staff.			
1.1.5.a. Enhance features and functionality of ISIS, OSIRIS, and MAUI for students, faculty, and staff.	<b>AIS Project MAUI</b> SPA Directory & Authentication		
1.1.5.a.1. Implement Admission's Online advance payment options, High School and Community College Portal, and Prospecting module	<b>AIS Project MAUI</b>	Admissions	
1.1.5.b. Automate, through workflow or web enablement, key academic and administrative processes.	<b>AIS Project MAUI</b> SPA Directory & Authentication		
1.1.5.b.1. Implement automated electronic application upload	<b>AIS Project MAUI</b>	Admission	
1.1.5.b.2. Implement automated electronic transcript transfer and upload	<b>AIS Project MAUI</b>	Admissions	

**GOAL 1. SUPPORT STUDENT SUCCESS THROUGH IT SYSTEMS AND SERVICES.**

	ITS Involvement <sup>1</sup>	Dependencies	Time Frame <sup>2</sup>
1.1.5.b.3. Implement workflow enabled residency request process	<b>AIS Project MAUI</b>	Admissions Registrar	
1.1.5.b.4. Evaluate, Procure, and Implement a Catalog Content Management System	<b>AIS Provost Office</b>	Registrar	
1.1.5.c. Provide real-time degree audits for all academic objectives (majors, minors, certificates) so students can assess their academic progress.	<b>AIS Project MAUI</b>		
1.1.5.d. Expand electronic student information available for professional and faculty academic advisors.	<b>AIS Project MAUI</b>		
1.1.5.d.1. Convene Project MAUI Academic Advising Committee	<b>AIS Project MAUI</b>	Advising	
1.1.5.d.2. Identify Advising information and user interface requirements.	<b>AIS Project MAUI</b>	Advising	
1.1.5.e. Continue to web-enable student financial aid application and award processes.			
1.1.5.e.1. Implement web-enabled Iowa Verification Form	<b>AIS Project MAUI</b>	Financial Aid	
1.1.5.f. Augment registration system to include automated wait listing, co and pre-requisite checking, and curricular planning	<b>AIS Project MAUI</b>		
1.1.5.g. Simplify student UBill presentation and payment options.			
1.1.5.g.1. Create UBill account summary as per MARS LEAN event	<b>AIS MARS</b>	Cashiers	
1.1.5.g.2. Redesign online UBill as per MARS lean event	<b>AIS MARS</b>	Cashiers	
1.1.5.h. Implement a student relationship management (SRM) system to centrally collect and monitor interactions with students across all student service units			
1.1.5.h.1. Evaluate and procure an SRM system	<b>AIS Project MAUI</b>	Admissions	
1.1.5.h.2. Implement SRM system for Admission's prospecting go-live	<b>AIS Project MAUI</b> AIS Admissions		
1.1.5.i. Improve authoritative Institutional Data.			
1.1.5.i.1. Implement project MAUI Institutions, Academic Organization, and Master data hubs	<b>AIS Project MAUI</b>		
1.1.5.j. Leverage existing tools (like Ad Astra) to increase efficiency of classroom scheduling, including departmental classrooms.	<b>CTS Instructional Services</b> AIS Provost Office	Registrar Provost	

**Strategy 1.2. Provide methods and data for tracking student progress in integrated IT systems.**

**GOAL 1. SUPPORT STUDENT SUCCESS THROUGH IT SYSTEMS AND SERVICES.**

	<b>ITS Involvement<sup>1</sup></b>	<b>Dependencies</b>	<b>Time Frame<sup>2</sup></b>
<b>Action 1.2.1.</b> Identify indicators of student success and develop methods to capture, monitor, and report these indicators via key IT systems such as ICON and MAUI.			
1.2.1.a. Work with the University's Student Success Team to investigate methods for predicting student success.	<b>AIS Project MAUI</b> CTS Instructional Services	Provost Student Success Team Registrar	
1.2.1.b. Explore relevant models at peer institutions.	<b>AIS Project MAUI</b> CTS Instructional Services	Provost Student Success Team Registrar	
<b>Action 1.2.2.</b> Identify IT solutions that help track student progress, build competencies, and assess program effectiveness.			
1.2.2.a. Work with colleges and departments to develop electronic portfolio solutions for their students.	<b>CTS Instructional Services</b> SPA Windows Server Group SPA UNIX	Selected Colleges Provost	
1.2.2.a.1. Provide interfaces from operational systems to electronic portfolio applications	<b>AIS Project MAUI</b> AIS Provost Office SPA Directory & Authentication SPA Enterprise Storage		
1.2.2.b. Provide and support systems (databases) that collect and track indicators of student learning outcomes in order to support program evaluation goals.	<b>CTS Instructional Services</b> AIS Project MAUI	Academic Advising Provost	
1.2.2.b.1. Provide database modeling and administrative support for student learning indicator application	<b>AIS Institutional Data</b>		
<b>Strategy 1.3. Expand training and support programs for campus e-learning systems and tools.</b>			
<b>Action 1.3.1.</b> Explore methods of assessing, and, as appropriate, improving students' and instructors' IT skills.			
1.3.1.a. Investigate methods used at peer institutions.	<b>CTS Instructional Services</b>	Provost Center for Teaching	
1.3.1.b. Pilot selected methods at Iowa.	<b>CTS Instructional Services</b>	Provost Center for Teaching	

**GOAL 1. SUPPORT STUDENT SUCCESS THROUGH IT SYSTEMS AND SERVICES.**

	<b>ITS Involvement<sup>1</sup></b>	<b>Dependencies</b>	<b>Time Frame<sup>2</sup></b>
Action 1.3.2. Communicate with and inform instructors and students about IT resources available to support teaching and learning.			
1.3.2.a. Participate in ITS Service Catalog creation and review	<b>ITS Service Catalog Team</b> ITS		
1.3.2.b. Develop and pilot new techniques for reaching faculty, staff and students, including: screensaver messages in ITCs; posters in academic departments; flyers distributed to students at the bookstore checkout	<b>CTS Instructional Services</b>		
1.3.2.c. Explore award or recognition programs to honor excellence in teaching with IT	<b>CTS Instructional Services</b>	Provost Office	
1.3.2.d. Expand the annual "ICON Day" to include all aspects of instructional technology.	<b>CTS Instructional Services</b>		
Action 1.3.3. Expand current and explore and adopt new support models for faculty and students, including support in the classroom.			
1.3.3.a. Investigate expanding the Student Instructional Technology Assistant (SITA) program to serve more instructors.	<b>CTS Instructional Services</b>		
1.3.3.b. Promote and expand the ITS Student Worker IT Training program to place trained student workers in areas of need.	<b>CTS Help Desk</b>		
1.3.3.c. Explore, define, and promote broader centralized managed desktop services such as Microsoft's Systems Center Configuration Manager (aka SMS).	<b>CTS Application Support</b> CIO CTS Instructional Services SPA Enterprise Client Mgmt		
1.3.3.d. Identify campus needs for web site management, including content management and improved search capability, and pilot solutions, utilizing the CTS Web Services team as appropriate.	<b>CTS Web Services</b> SPA Windows Server Group ITS Webmaster		
1.3.3.e. Identify appropriate areas to expand the use of centrally-provided local support.	<b>CTS Application Support</b> CIO SPA Enterprise Client Mgmt CTS Help Desk		
1.3.3.f. Develop self-service tools that allow customers to more easily manage the services they use	<b>CTS Developers</b> SPA Directory & Authentication		

**GOAL 1. SUPPORT STUDENT SUCCESS THROUGH IT SYSTEMS AND SERVICES.**

	<b>ITS Involvement<sup>1</sup></b>	<b>Dependencies</b>	<b>Time Frame<sup>2</sup></b>
1.3.3.g. Expand and promote the use of IT support tools such as call tracking and knowledge management.	<b>CTS Help Desk</b> CTS Developers		
Action 1.3.4. Provide multi-modal learning opportunities for instructors (one-on-one, small group, on-line) that address pedagogical design support, including discipline-specific design, with a significant focus on effective use of technology.			
1.3.4.a. Work with the Center for Teaching to identify topics likely to have a high impact on student success.	<b>CTS Instructional Services</b>	Center for Teaching	
1.3.4.b. Build learning opportunities for instructors around these topics.	<b>CTS Instructional Services</b>		
<b>Strategy 1.4. Explore, evaluate and foster emerging technologies that enhance teaching and learning</b>			
Action 1.4.1. Support faculty in development and investigative projects to foster exploration of new technologies.			
1.4.1.a. Explore emerging technologies, such as wikis, podcasting, social networking, and gaming and simulations, including pilot studies and projects.	<b>CTS Instructional Services</b> CTS Developers SPA		
1.4.1.b. Share lessons learned, at Iowa and on other campuses, broadly with the campus.	<b>CTS Instructional Services</b>		
Action 1.4.2. Create new faculty development and support programs that encourage and support faculty in adopting instructional technologies.			
1.4.2.a. Evaluate programs at peer institutions and identify their potential applicability for Iowa.	<b>CTS Instructional Services</b>	Center for Teaching	
1.4.2.b. Implement a faculty development program that includes participation from all colleges.	<b>CTS Instructional Services</b>	Center for Teaching	

## GOAL 2. SUPPORT THE EVOLVING RESEARCH NEEDS OF THE CAMPUS.

	ITS Involvement	Dependencies	Time Frame
<b>Strategy 2.1. Cultivate an e-research community.</b>			
Action 2.1.1. Foster campus support for research computing efforts.			
2.1.1.a. Establish a CITL sub-group made up of members from both the IT and research community to focus on research support issues.	<b>CTS Research Services</b> CIO	CITL	
2.1.1.b. Partner with campus research centers to build resources such as central data management.	<b>CTS Research Services</b> CIO CTS Application Support SPA Enterprise Storage	Research Centers OVPR	
2.1.1.c. Engage constituencies across campus (Deans, Research Council, Research Deans, Sponsored Programs, individual researchers and research groups) in understanding researchers' needs and developing common solutions.	<b>CTS Research Services</b> CIO	CITL OVPR	
2.1.1.d. Share with the campus examples of how other campuses are supporting research and look for ways to adapt best practices for Iowa.	<b>CTS Research Services</b> CIO		
2.1.1.e. Establish a center for computational research that provides an identity for organizing multidisciplinary, compute-reliant research activities.	<b>CTS Research Services</b> CIO	VPR Provost	
2.1.1.f. Collaborate with regional peer-institutions and corporations to help build large scale research-computing infrastructures and to foster opportunities.	<b>CTS Research Services</b> CIO CIO Financial Planning SPA	Peers	
2.1.1.g. Provide resources to leverage faculty- or student-developed technologies for use by other research groups on campus.	<b>CTS Research Services</b>		
Action 2.1.2. In concert with the CIO and the VPR, establish routine and transparent mechanisms for addressing campus-wide research computing issues.	<b>CIO</b> CTS Research Services CIO Financial Planning	VPR Deans	
Action 2.1.3. Increase understanding and awareness of the financial processes (such as grant funding, facilities and administrative cost recoveries, and recharge models) that impact the development of research computing resources.			
2.1.3.a. Develop materials to inform principal investigators about the IT resources	<b>CTS Research Services</b>	DSP	

## GOAL 2. SUPPORT THE EVOLVING RESEARCH NEEDS OF THE CAMPUS.

	ITS Involvement	Dependencies	Time Frame
available to them, including boilerplate language describing IT resources for inclusion in grant proposals.	CTS Application Support CIO Communication CIO	OVPFO OVPR	
2.1.3.b. Engage campus administrators and researchers in a dialog about the relationship between Facilities & Administrative (F&A) costs and IT infrastructures and explore opportunities to include IT costs in future F&A negotiations.	<b>CIO</b> CTS Research Services CIO Financial Planning	DSP OVPF Deans OVPR	
2.1.3.c. In concert with the OVPR and DSP, work with funding agencies to better understand how we can partner with them to develop and sustain our campus researchers' IT needs.	<b>CIO</b> CTS Research Services CIO Financial Planning	OVPR DSP	
2.1.3.d. Partner with Grant Accounting to develop a new post-award grant accounting system.	<b>AIS PeopleSoft Financials</b> AIS Finance & Operations	Grant Accounting	
2.1.3.e. Enhance HawkIRB human subjects institutional review board application to include sensitive data registration, DSP/RIS reporting, redesign of scheduling subsystem, AAHRPP compliance, and Veteran's Administration IRB-03.	<b>AIS Web Development</b> SPA Directory & Authentication		
<b>Action 2.1.4. Identify funding sources to support campus research computing needs.</b>			
2.1.4.a. Seek external funding for infrastructure (e.g., shared instrumentation grants).	<b>CTS Research Services</b> CIO CIO Financial Planning	Researchers OVPR	
2.1.4.b. Identify ways to leverage resources in existing ITS services, collegiate IT groups, and faculty labs (e.g., CCAD, IIHR, and DNA core facility).	<b>CTS Research Services</b> CTS Application Support CTS Instructional Services CIO	CITL Resource Centers	
2.1.4.c. Work with researchers and central administrators to develop sustainable funding models, including the investigation of charge-back centers.	<b>CIO</b> CTS Research Services CIO Financial Planning	OVPR Deans	

**GOAL 2. SUPPORT THE EVOLVING RESEARCH NEEDS OF THE CAMPUS.**

	ITS Involvement	Dependencies	Time Frame
<b>Strategy 2.2. Enhance existing basic IT services to better meet the needs of researchers.</b>			
Action 2.2.1. Expand efforts in application support and consulting.			
2.2.1.a. Provide researchers access to a pool of staff and students who can serve as consultants to support research specific needs such as specialized data acquisition systems, scientific software needs, system administration and software development.	<b>CTS Research Services</b> CTS Developers SPA	OVPR	
2.2.1.b. Provide support to help researchers access authentication infrastructures (e.g., HawkID).	<b>CTS Research Services</b> SPA Directory & Authentication AIS Web Development		
2.2.1.c. Actively investigate, analyze, promote and pursue additional opportunities for campus software licensing and purchasing agreements.	<b>CTS Research Services</b> CTS Help Desk	CIO	
Action 2.2.2. Address the specialized training needs of researchers.			
2.2.2.a. Building on UI Learning and Development's study, identify basic IT training needs for researchers and develop opportunities to address those needs.	<b>CTS Research Services</b> CTS Help Desk CTS Application Support CIO Community	UI Learning & Development	
2.2.2.b. Provide training opportunities in specialized research needs, e.g., High Performance Computing, Grid Computing, PACS, GIS, Digital humanities, and Digital art.	<b>CTS Research Services</b> CTS Application Support		
2.2.2.c. Improve the utilization of current learning technology infrastructure (e.g., ICON, SkillSoft) in the training of researchers.	<b>CTS Research Services</b> CTS Instructional Services CTS Application Support	UI Learning & Development	
<b>Strategy 2.3. Develop new cyberinfrastructure and services to address the unique needs of researchers.</b>			
Action 2.3.1. Provide networking infrastructure to support needs of researchers.			
2.3.1.a. Provide resources and information to enable researchers to take advantage of our external network connection with the BOREAS regional optical network.	<b>CTS Research Services</b> CTS Help Desk CIO Financial Planning TNS Business Services TNS Network Services		

**GOAL 2. SUPPORT THE EVOLVING RESEARCH NEEDS OF THE CAMPUS.**

	ITS Involvement	Dependencies	Time Frame
	CIO		
2.3.1.b. Enhance the internal campus network so that it extends the performance of the BOREAS external network to campus desktops and servers where needed.	<b>TNS Network Services</b> CTS Research Services CIO		
2.3.1.c. Explore the creation of a highly secure campus intranet used to access highly sensitive research data.	<b>CTS Research Services</b> CTS Application Support TNS Network Services IT Security Office		
2.3.1.d. Extend the campus wireless infrastructure into research buildings.	<b>TNS Network Services</b> CTS Research Services CIO		
Action 2.3.2. Under the leadership of the OVPR identify unique aspects of Iowa's research portfolio and focus our efforts and resources to build infrastructure to best enable our emerging research programs (e.g., CTSA, Nano-science, Bioinformatics).	<b>CIO</b> CTS Research Services CIO Financial Planning	OVPR	
Action 2.3.3. Implement a multi-phased High Performance Computing program that creates a shared effort for managing clusters and establishes co-location and system administration services.	<b>CTS Research Services</b> CIO CIO Financial Planning SPA	OVPR Research Community	
Action 2.3.4. Provide data center facilities to meet the needs of researchers.			
2.3.4.a. Minimize costs of housing research computing systems by creating a central data center facility.	<b>CIO</b> CTS Research Services SPA CIO Financial Planning	Facilities Mgmt	
2.3.4.b. Continue efforts to build a new data center for the campus; include space in the new data center for research use.	<b>CIO</b> CIO Financial Planning CTS Research Services TNS Infrastructure Services	Facilities Mgmt	

**GOAL 2. SUPPORT THE EVOLVING RESEARCH NEEDS OF THE CAMPUS.**

	<b>ITS Involvement</b>	<b>Dependencies</b>	<b>Time Frame</b>
	TNS Network Services SPA		
2.3.4.c. Acquire new and improve existing data center space for short-term use until the new data center is ready.	<b>CIO</b> CIO Financial Planning CTS Research Services TNS Infrastructure Services TNS Network Services SPA	Facilities Mgmt	
Action 2.3.5. Develop data management services to meet research needs.			
2.3.5.a. Help reduce "information anarchy" through coordinating (the mostly siloed) efforts to understand and manage data on campus.	<b>CTS Research Services</b> CIO CTS Application Support	OVPR	
2.3.5.b. Identify processes or develop services for reliable and secure storage, backup, access to and archiving of researchers' data.	<b>CTS Research Services</b> SPA Enterprise Storage CIO CIO Financial Planning CTS Application Support SPA Unix SPA Windows Server Group	OVPR	
2.3.5.c. Address data sharing policies for federally funded research projects.	<b>CTS Research Services</b> CTS Application Support	OVPR	
2.3.5.d. Address researchers' concerns regarding data access and security (e.g., confidentiality, intellectual property issues).	<b>CTS Research Services</b> IT Security Office	OVPR	
Action 2.3.6. In concert with DSP and OVPR provide tools and resources to streamline the grant application process.			
2.3.6.a. Create budget resource/template documents/applications to facilitate appropriate IT budgeting in grant proposals.	<b>CTS Research Services</b> CTS Application Development CIO Financial Planning	OVPR	

## GOAL 2. SUPPORT THE EVOLVING RESEARCH NEEDS OF THE CAMPUS.

	ITS Involvement	Dependencies	Time Frame
2.3.6.b. Support the Provost's Office in creating a campus-wide system for electronic Curriculum Vitae for faculty and staff that would allow easy retrieval of these documents for use in grant applications.	AIS CTS Instructional Services	<b>Provost</b>	
2.3.6.c. Support Research Information Systems in developing and supporting the UI transition to electronic research administration, including electronic proposal routing and federation of identify.	SPA Directory & Authentication CTS Research Services	<b>OVPR</b>	
<b>Strategy 2.4. Support technology that facilitates collaborative research.</b>			
Action 2.4.1. Support campus interfaces with the national cyberinfrastructure.			
2.4.1.a. Using technologies such as grids, federated identities, Real Time Communications (RTC), and networks, create new and participate in existing virtual organizations.	<b>CTS Research Services</b> CTS Instructional Services SPA Directory & Authentication	OVPR	
Action 2.4.2. Expand the current centrally supported collaboration services shaped by the needs of researchers.			
2.4.2.a. Implement "social tagging" features available in Primo federated search application to promote collaborative use of library resources for research.	<b>AIS Library</b>	Library IT	
Action 2.4.3. Assess the information technology needs of multidisciplinary research centers.			
	<b>CTS Research Services</b> CTS Application Support CTS Instructional Services	OVPR Research Centers	
<b>Strategy 2.5. Facilitate the translation of the broad array of research activities into the curriculum.</b>			
Action 2.5.1. Align cyberinfrastructure development with educational priorities as defined in the Iowa Promise.			
	<b>CTS Research Services</b> CTS Instructional Services	Provost	
Action 2.5.2. Continue to promote instructional technology innovation programs.			
	<b>CTS Instructional Services</b> CTS Research Services	ATAC Provost	
Action 2.5.3. Partner with the Center for Teaching to define needs and implement programs.			
	<b>CTS Instructional Services</b>	Center for Teaching	
Action 2.5.4. Establish showcase classrooms to demonstrate and stimulate the use of cutting edge instructional technologies.			
	<b>CTS Learning Spaces</b> CIO Financial Planning	CIO Provost	

### GOAL 3. SECURE OUR ELECTRONIC INFORMATION AND IT SYSTEMS

	ITS Involvement	Dependencies	Time Frame
<b>Strategy 3.1. Develop tools and services to secure our information assets.</b>			
Action 3.1.1. Provide methods to encrypt sensitive electronic information on all systems and devices.			
3.1.1.a. Develop a website resource with instructions for use of Microsoft and Apple encryption features.	<b>IT Security Office</b>		
3.1.1.b. Develop system administrator guidelines and training resources for support of encryption services to protect sensitive data.	<b>IT Security Office</b>		
3.1.1.c. Make and offer an encryption service centrally.	<b>IT Security Office</b> SPA Windows Server Group		
3.1.1.d. Assess central databases for sensitive Level III data and provide recommendations on encryption for data.	<b>IT Security Office</b> AIS Institutional Data		
3.1.1.e. Convert to secure data transport centrally; set end of life for insecure file transfers to and from central systems	<b>IT Security Office</b> SPA		
Action 3.1.2. Develop and implement two-factor authentication for core systems with level 3 sensitive information.			
3.1.2.a. Evaluate current infrastructure and evaluate strong authentication technologies that would integrate into our enterprise authentication model.	<b>IT Security Office</b> SPA CIO Financial Planning		
3.1.2.b. Pilot one or more selected technologies and develop a recommendation to purchase, integrate, and implement a two-factor authentication system.	<b>IT Security Office</b> SPA		
3.1.2.c. Modify HawkID Login Tools enterprise authentication module to support two-factor authentication	<b>AIS Web Development</b> SPA		
Action 3.1.3. Ensure that all users have access to resources necessary to facilitate meeting baseline security standards.			
3.1.3.a. Promote expanded use of self-service scanning tools, web application assessment tools, and self service health check tools.	<b>IT Security Office</b>		
3.1.3.b. Make institutional data available via Enterprise Directory Services to enable local services.	<b>IT Security Office</b> SPA Directory & Authentication		

### GOAL 3. SECURE OUR ELECTRONIC INFORMATION AND IT SYSTEMS

	ITS Involvement	Dependencies	Time Frame
3.1.3.c. Share port attributes from the TNSConnect application with the Security Office and other IT service providers.	<b>IT Security Office</b> TNS Business Services SPA Directory & Authentication		
3.1.3.d. Expand the web application vulnerability scanning services.	<b>IT Security Office</b> AIS Web Development CTS Developers		
Action 3.1.4. Complete the implementation of network firewalls around core administrative and healthcare systems and investigate network isolation strategies for other parts of campus			
3.1.4.a. Complete the implementation of firewalls in data center facilities	<b>IT Security Office</b> SPA TNS Network Services		
3.1.4.b. Investigate IPV6 and service implementation using IPV6. The project should test basic service delivery using IPV6.	<b>TNS Network Services</b> SPA		
Action 3.1.5. Implement public key infrastructure (PKI) systems and services			
3.1.5.a. Complete the implementation of the Microsoft PKI infrastructure.	<b>IT Security Office</b> SPA Windows Server Group		
Action 3.1.6. Investigate options for secure email services			
3.1.6.a. Implement authenticated SMTP (simple mail transport protocol) service, and evaluate options for Microsoft Exchange/Outlook secure email.	<b>SPA Windows Server Group</b> CTS Application Support IT Security Office		
<b>Strategy 3.2. Appropriately manage all IT systems according to applicable policies and best practices</b>			
Action 3.2.1. Form a group with broad representation to establish physical security standards			
3.2.1.a. Draft policy addressing appropriate roles and responsibilities for management and provision of Physical Access Control (PAC) systems, and criteria/requirements for PAC systems. Review existing security policy for gaps.	<b>IT Security Office</b> SPA	College of Engineering CITL	
3.2.1.b. Identify physical security requirements for IT managed facilities across campus; propose appropriate new or updated policy/procedures.	<b>IT Security Office</b> TNS Networking services		

### GOAL 3. SECURE OUR ELECTRONIC INFORMATION AND IT SYSTEMS

	ITS Involvement	Dependencies	Time Frame
	SPA		
3.2.1.c. Document access authorizations to critical physical IT assets (departmental grids).	<b>ITS Directors</b>		
Action 3.2.2. Ensure that established physical security standards are implemented in all campus design and construction standards	<b>IT Security Office</b> TNS	Facilities Mgmt	
Action 3.2.3. Develop and implement a plan to upgrade or relocate existing IT spaces to meet the minimum physical security standards			
3.2.3.a. Upgrade IT facilities to meet physical security policy as defined in 3.2.1.b, and work with Facilities Management to re-key all telecom closets and implement card access.	<b>IT Security Office</b> TNS Infrastructure Services	Facilities Mgmt	
Action 3.2.4. Develop, implement and enforce policy requirements for a device to be connected to the campus network.			
3.2.4.a. Implement a layered network defense model, using port level network policy. Use an opt-in strategy for limited communication capability, and default as status quo/open communications.	<b>IT Security Office</b> TNS Network Services		
3.2.4.b. Pilot for a select number of network ports in one or more buildings, and determine requirements for broader implementation.	<b>IT Security Office</b> TNS Network Services		
3.2.4.c. Determine requirements to expand ResNet Quarantine system to campus buildings.	<b>IT Security Office</b> TNS Network Services		
3.2.4.d. Implement client management technologies such as the Microsoft's Systems Center Configuration Manager (aka SMS) on a majority of campus workstations.			
3.2.4.d.1. Clearly define resources necessary to support migration and long-term management for 10-15,000 machines.	<b>SPA Enterprise Client Mgmt</b>		
3.2.4.d.2. Develop a training program for department support personnel.	<b>CTS Application Support</b> IT Security Office SPA Enterprise Client Mgmt	ITAdmin	
3.2.4.d.3. Form a steering committee to develop best practices, and to address needs for data backup, guest devices, and health check facilities.	<b>IT Security Office</b> CTS Application Support SPA Enterprise Client Mgmt	ITAdmin	
Action 3.2.5. Expand proactive efforts to identify security vulnerabilities, mitigate risks and			

### GOAL 3. SECURE OUR ELECTRONIC INFORMATION AND IT SYSTEMS

	ITS Involvement	Dependencies	Time Frame
prevent attacks			
3.2.5.a. Assess and then register or replace Wireless Access Points with an affordable campus standard wireless implementation.	<b>TNS Network Services</b> IT Security Office		
3.2.5.b. Upgrade campus optical taps to match core network link speeds to facilitate troubleshooting, Intrusion Detection, and NetFlow collection/analysis	<b>TNS Network Services</b> IT Security Office		
<b>Strategy 3.3. Locate, protect, and track the use of sensitive information on campus systems</b>			
Action 3.3.1. Require that all servers connected to the campus network, or containing institutional data are inventoried, tracked and managed according to best practices			
3.3.1.a. Promote registration of servers, through responsibility and automation techniques such as the USR (Ulowa System Registry), and Campus IT Leaders being informed of or in a work flow path for hostmaster requests, in conjunction with 3.2.4.a, and in conjunction with 3.3.2.a.	<b>IT Security Office</b> AIS Web Development TNS Network Services	CITL	
3.3.1.b. Utilize the HawkIRB system and IRB/Human Subjects Office processes and procedures to require registration of research computer systems.	<b>IT Security Office</b> AIS	Human Subjects Office	
Action 3.3.2. Require that all applications used on the campus that access or store institutional data are inventoried, tracked and managed according to best practices			
3.3.2.a. Obtain resources necessary to implement security risk assessment of all devices with sensitive data, in conjunction with 3.3.1.a.	<b>IT Security Office</b>		
3.3.2.b. Perform an audit of all data linkages to and from central applications and systems (i.e., MARS, Peoplesoft, MAUI, ICON).	<b>IT Security Office</b> AIS CTS Instructional Services CTS Developers SPA		
3.3.2.c. Complete SSN remediation activities.	<b>IT Security Office</b> AIS SPA Directory & Authentication		
Action 3.3.3. Facilitate and control user access to critical online applications and resources while protecting confidential personal and business information from unauthorized users.	<b>IT Security Office</b> SPA Directory & Authentication		
3.3.3.a. Work with data stewards to perform periodic AIS system authorization	<b>AIS Leadership Team</b>		

### GOAL 3. SECURE OUR ELECTRONIC INFORMATION AND IT SYSTEMS

	ITS Involvement	Dependencies	Time Frame
audits			
<b>Strategy 3.4. Increase awareness of each individual's role in IT security and privacy</b>			
Action 3.4.1. Develop materials that can be used by departmental staff to raise awareness of the importance of individual action for IT security. These materials should address all security roles: executive leadership, business owner, data steward, and end-user.	<b>IT Security Office</b> CIO Communication SPA		
3.4.1.a. Require all users (including existing employees) to attend or complete security awareness training, on a two year cycle, by a) require/insert a presentation for new faculty and staff at orientation or at first login to the Self Service application, b) make "canned" power point awareness presentations available for staff meetings, and for administrators, deans, and DEO's, and c) promote the ICON Security Awareness course, and d) assist data stewards by developing awareness of their role, their responsibility, and how to apply the institutional data access policy with respect to sensitive Level III data.	<b>IT Security Office</b>	UI Administration CITL	
Action 3.4.2. Provide appropriate training to all employees with responsibility for IT security			
3.4.2.a. Re-develop and subsequently promote the MIST (Modular Information Security Training) IT Security Training Course.	<b>IT Security Office</b>		
3.4.2.b. All ITS staff complete the Security Awareness Training course.	<b>ITS Directors</b> ITS		
3.4.2.c. Increase promotion of and attendance at the monthly IT Security Office seminars.	<b>IT Security Office</b> CIO Community	CITL ITAdmin	
3.4.2.d. Create "defensive programming" best practices for campus developer community, and provide training.	<b>IT Security Office</b>		
3.4.2.e. Implement software development tool to scan code for security/performance issues.	<b>IT Security Office</b> AIS Web Development		
3.4.2.f. Provide demonstrations to IT Staffs that promote understanding of security vulnerabilities.	<b>IT Security Office</b>		
Action 3.4.3. Annually notify all users of campus IT Policies			
3.4.3.a. Implement annual acknowledgement and acceptance of a data confidentiality statement via the Employee Self Service application, for all UI employees.	<b>IT Security Office</b> CIO Communication CIO HR	University HR	
Action 3.4.4. Develop methods to recognize and reward users and IT providers who exemplify			

### GOAL 3. SECURE OUR ELECTRONIC INFORMATION AND IT SYSTEMS

	ITS Involvement	Dependencies	Time Frame
good security practices			
3.4.4.a. Provide reports to university administration and deans regarding security awareness training attendance/completion.	<b>IT Security Office</b> CIO HR	University HR	
Action 3.4.5. Develop procedures that reinforce the personal accountability implied in each security role			
3.4.5.a. Perform vulnerability testing for all systems.	<b>IT Security Office</b> ITS		
3.4.5.b. Renew IT staff Confidentiality Agreements annually.	<b>CIO HR</b> ITS Managers		

**GOAL 4. INCREASE THE UTILIZATION AND EFFECTIVENESS OF IT.**

	ITS Involvement	Dependencies	Time Frame
<b>Strategy 4.1. Improve user knowledge, skills and abilities regarding available technologies, services and tools.</b>			
Action 4.1.1. Implement a user education program to facilitate the understanding of what technologies and IT services are available to each person and how they can best access them.			
4.1.1.a. Develop and publish ITS Service Catalog	<b>ITS Service Catalog Team</b> ITS		
4.1.1.b. Update ITS web site so services are easily identified	<b>ITS Webmaster</b> ITS		
4.1.1.c. Update ITS Departmental web sites to reflect ITS service catalog and the current suite of technologies supported.	<b>ITS Webmaster</b> ITS		
Action 4.1.2. Establish appropriate IT literacy standards for faculty, staff and students.	<b>CIO HR</b> CIO CTS	UI HR CITL Provost	
Action 4.1.3. Analyze currently available training to identify the necessary components of complementary modalities. Develop pilot offerings in several modalities (e.g., classroom setting, instructor-led online, etc.), evaluate for effectiveness, and convert to ongoing offerings.	<b>ITS Training Group</b> ITS	UI Learning & Development	
<b>Strategy 4.2. Improve efficient and effective access to electronic information.</b>			
Action 4.2.1. Develop plans to address core administrative systems' ability to meet the needs of the campus community for accessing electronic information.			
4.2.1.a. Inventory and assess core administrative systems' institutional data accessibility.	<b>AIS Institutional Data</b>		
4.2.1.b. Partner with data stewards to analyze AIS supported core administrative applications for their ability to provide campus institutional data needs.	<b>AIS</b>		
4.2.1.c. Partner with data stewards to analyze SPA supported core infrastructure for their ability to provide campus institutional data needs.	<b>SPA Directory &amp; Authentication</b>		
Action 4.2.2. Enhance and expand support and services for the Web and application developer community.			
4.2.2.a. Provide tools, utilities and frameworks to support web development			
4.2.2.a.1. Develop authentication web service for integration with	<b>SPA Directory &amp; Authentication</b>		

**GOAL 4. INCREASE THE UTILIZATION AND EFFECTIVENESS OF IT.**

	<b>ITS Involvement</b>	<b>Dependencies</b>	<b>Time Frame</b>
technologies (e.g., Flash) that can't seamlessly use the HawkID Login Tools			
4.2.2.b. Encourage developer participation in professional development grants	<b>CIO HR</b>		
4.2.2.c. Sponsor quarterly web developer and database/directory community events	<b>CIO Community</b>		
4.2.2.c.1. Actively participate in various campus developer and database/directory related communities.	<b>AIS</b> SPA Directory & Authentication		
4.2.2.c.2. Provide support for local area developer users groups (e.g. Java, Rails)	<b>AIS</b>		
4.2.2.d. Develop standard directory data access solutions.	<b>SPA Directory &amp; Authentication</b>		
<b>Action 4.2.3. Improve access to University institutional data.</b>			
4.2.3.a. Provide web services access to core institutional data	<b>AIS Project MAUI</b> SPA Directory & Authentication		
4.2.3.b. Support web reporting and searching solutions for institutional data			
4.2.3.b.1. Participate in Library's Primo federated information search implementation	<b>AIS Library</b>	Library IT	
4.2.3.b.2. Extend MARS reporting environment	<b>AIS MARS</b>		
4.2.3.b.3. Review Financial application reporting strategy	<b>AIS PeopleSoft Financials</b> AIS Finance & Operations		
4.2.3.c. Explore business intelligence and analytics initiatives			
4.2.3.c.1. Develop Project MAUI reporting and business intelligence strategy	<b>AIS Project MAUI</b>		
4.2.3.c.2. Work with HCIS to capture best practices from their business intelligence initiative	<b>AIS Institutional Data</b>		
4.2.3.d. Develop and deploy a self-service portal for TNS services (and other ITS services, such as classroom equipment), including orders, troubles, status checks, invoices, and other reports	<b>TNS Business Services</b> SPA Directory & Authentication		
4.2.3.e. Deploy emergency notification technology (Reverse 911), including end-user ability to directly provide emergency notification data/preferences via self-service portal.	<b>TNS Director</b> TNS Voice Services CIO		

**GOAL 4. INCREASE THE UTILIZATION AND EFFECTIVENESS OF IT.**

	<b>ITS Involvement</b>	<b>Dependencies</b>	<b>Time Frame</b>
	SPA Directory & Authentication AIS Project MAUI		
<b>Strategy 4.3. Expand and improve end user support.</b>			
Action 4.3.1. Develop a mechanism (e.g., new component of HR Self Service portal) that will allow all members of the UI community to identify their primary provider of IT support, with links to additional information provided by their support group.	<b>CTS Help Desk</b> <b>CIO Communication</b>	UI HR CITL	
4.3.1.a. Develop an ITS services web portal	<b>CTS Application Support</b> SPA Directory & Authentication		
4.3.1.b. Provide support for underlying technologies (e.g., SharePoint 2007, web services to HRIS)	<b>CTS Application Support</b> SPA Directory & Authentication SPA Windows Server Group		
Action 4.3.2. Develop templates and best practices for each IT support provider, to explain to users what kind of support is available, and let them know what they can expect.	<b>CTS Help Desk</b> CIO Communication		
Action 4.3.3. Develop and foster an IT support community by designing and creating a system where local IT providers have higher-level support channels to central IT providers. Build a community to facilitate direct access from IT providers to appropriate internal staff.	<b>CTS Help Desk</b> SPA Directory & Authentication CIO Community		
4.3.3.a. Develop web parts/templates for team and personalized SharePoint 2007 sites	<b>CTS Web Services</b> CTS Developers SPA Windows Server Group		
Action 4.3.4. Identify current enhanced support programs that are recognized as successful (e.g., the Student Instructional Technology Assistant program in ITS) and target them for expansion.	<b>CTS</b>		
4.3.4.a. Create an FAQ for key AIS services that can be shared and published centrally.	<b>AIS</b>		
<b>Strategy 4.4. Build and buy systems that are easy to use and understand.</b>			
Action 4.4.1. Include ease of use as a criterion in RFP and other evaluation processes.			
4.4.1.a. Work with Purchasing and other campus IT providers to create standard usability and user interface compliance language to be included in RFPs.	<b>AIS Director</b>	CITL Purchasing	
4.4.1.b. Work with Purchasing and other campus IT providers to create standard	<b>AIS Director</b>	CITL	

**GOAL 4. INCREASE THE UTILIZATION AND EFFECTIVENESS OF IT.**

	<b>ITS Involvement</b>	<b>Dependencies</b>	<b>Time Frame</b>
usability and user interface demonstration scripts		Purchasing	
4.4.1.c. Include Simpler Sign On (SSO) with HawkID Credentials	<b>SPA Directory &amp; Authentication</b>		
<b>Action 4.4.2. Implement process improvements in conjunction with new system deployment.</b>			
4.4.2.a. Provide business process re-engineering training for functional and technical leads	<b>CIO Financial Planning</b>	FO Organizational Effectiveness	
4.4.2.b. Ensure Business Processing Re-engineering is included in system analysis and design processes.	<b>AIS Project MAUI</b>		
4.4.2.c. Identify best practices for TNS business workflow as part of Phase III of TNSConnect project.	<b>TNS Business Services</b> TNS		
4.4.2.d. Directory-enable services to eliminate duplication of account data base and add awareness of institutional business rules	<b>SPA Directory &amp; Authentication</b>		
<b>Action 4.4.3. Focus on accessibility and consistency in new system design.</b>			
4.4.3.a. Create a user interface and accessibility community to share best practices	<b>AIS Director</b> CIO Community	CITL	
<b>Strategy 4.5. Include technology usage considerations in Process Improvement initiatives.</b>			
<b>Action 4.5.1. Include IT services and technologies expertise on Organizational Effectiveness process improvement teams.</b>		FO Organizational Effectiveness	
4.5.1.a. Provide trained IT staff to participate in process improvement initiatives	<b>ITS Directors</b>		
<b>Action 4.5.2. Incorporate business process analysis in major IT deployments and migrations</b>			
4.5.2.a. Look for opportunities to simplify, streamline, standardize, automate, and web enable student service processes through the implementation of Project MAUI.	<b>AIS Project MAUI</b>		
<b>Strategy 4.6. Provide tools and training for IT providers to better understand how end users are accessing campus data.</b>			
<b>Action 4.6.1. Encourage server-level tracking and reporting for service usage.</b>			
4.6.1.a. Create simple web application and database server usage metrics	<b>AIS Project MAUI</b> AIS Institutional Data		
4.6.1.b. Improve Operations Management	<b>SPA</b>		
4.6.1.c. Develop additional (standardized) metrics for servers and provide ongoing reports	<b>SPA Windows Server Group</b> SPA UNIX		

**GOAL 4. INCREASE THE UTILIZATION AND EFFECTIVENESS OF IT.**

	<b>ITS Involvement</b>	<b>Dependencies</b>	<b>Time Frame</b>
	AIS Institutional Data		
Action 4.6.2. Encourage application-level tracking of usage and usability.			
4.6.2.a. Create Project MAUI metrics hub	<b>AIS Project MAUI</b> AIS Institutional Data		
4.6.2.b. Add provisioning infrastructure for reporting local service usage	<b>SPA Directory &amp; Authentication</b>		
Action 4.6.3. Identify and publicize existing solutions in a catalog of services.			
4.6.3.a. Participate in ITS Service Catalog creation and review	<b>ITS Service Catalog Team</b> ITS		

**GOAL 5. PROVIDE IT SERVICES THAT MEET THE CAMPUS NEEDS IN A COORDINATED AND EFFICIENT MANNER.**

	ITS Involvement	Dependencies	Time Frame
<b>Strategy 5.1. Actively pursue understanding of technology changes and of campus IT needs and develop supported services to meet those needs.</b>			
Action 5.1.1. Coach IT providers on how they can 1) develop a better understanding of their users work requirements, and 2) identify services that could help those users be more successful or efficient.	<b>CIO Community</b>	CITL	
5.1.1.a. Provide business analysis training to key campus IT providers	<b>CIO Financial Planning</b>	FO-Org Effectiveness CITL	
Action 5.1.2. Implement an annual process to engage IT users in all areas of the University to assess satisfaction with IT services provided and gather information about potential new services.	<b>CIO Community</b>	CITL	
5.1.2.a. Create, administer, and publish results of ITS annual customer satisfaction survey	<b>ITS Directors</b> CIO Communication		
Action 5.1.3. Annually review IT services delivered on campus to identify gaps.	<b>CIO Community</b> CIO Financial Planning	CITL	
5.1.3.a. Participate in annual ITS service reviews	<b>ITS Service Lifecycle Team</b> ITS		
Action 5.1.4. Assess the instructional, research, administrative and clinical needs of the Carver College of Medicine faculty, staff and students whose work requires them to be served by both ITS and HCIS, and jointly develop plans to meet those needs.	<b>CIO</b> ITS	HCIS	
5.1.4.a. Participate in and develop a response to the CCOM IT external review and recommendations.	<b>CIO</b> ITS Directors	HCIS	
<b>Strategy 5.2. Increase cost effectiveness of IT solutions on campus.</b>			
Action 5.2.1. Adopt a Life Cycle approach to IT services and solutions across campus that continually assesses benefits and cost.			
5.2.1.a. Review AIS Application Portfolio for opportunities to retire or replace systems	<b>AIS Leadership Team</b>		
5.2.1.b. Develop a service lifecycle management philosophy and process for ITS, which will include service review.	<b>ITS Service Lifecycle Team</b> ITS		
5.2.1.c. Understand Total Cost of Ownership for services, including future costs.	<b>CIO Financial Planning</b>		

**GOAL 5. PROVIDE IT SERVICES THAT MEET THE CAMPUS NEEDS IN A COORDINATED AND EFFICIENT MANNER.**

	<b>ITS Involvement</b>	<b>Dependencies</b>	<b>Time Frame</b>
	CIO ITS Directors		
Action 5.2.2. Establish and report usage metrics for each IT service to be used for annual service reviews.			
5.2.2.a. Create an ITS service metric strategy	<b>CIO</b> ITS Directors CIO Financial Planning		
5.2.2.b. Capture ITS service metrics	<b>ITS Directors</b>		
Action 5.2.3. Annually review IT services delivered on campus to reduce unnecessary duplication and identify services that should be retired based on operating costs exceeding operating benefits. The review will include services offered by departmental, collegiate and the enterprise IT providers on campus.	<b>CIO</b> CIO Financial Planning ITS	CITL	
5.2.3.a. Recreate ITS cost by service analysis and automate for future analysis	<b>CIO Financial Planning</b> CIO ITS Directors		
5.2.3.b. Work with HCIS, Engineering, and Public Health to resolve the issues surrounding the support of multiple account domains in Active Directory	<b>SPA Directory &amp; Authentication</b> SPA Windows Server Group CIO ITS Directors	CITL HCIS	
Action 5.2.4. Complete an analysis to determine the standardization opportunities that will bring the greatest benefit to the University.	<b>CIO Financial Planning</b>	CITL	
5.2.4.a. Review user interface and reporting as possible standardization opportunities	<b>AIS</b>		
Action 5.2.5. Determine the minimum number of standard configurations of software images and printers that meets campus needs.	<b>CTS Learning Spaces</b> CTS Help Desk CTS Application Support SPA Enterprise Client Mgmt		
Action 5.2.6. Reduce the need for parallel systems by developing new or modifying existing systems in order to improve effectiveness of faculty, staff and students.	<b>CIO Financial Planning</b>	CITL	
5.2.6.a. Work with customers and data stewards to identify core needs and	<b>AIS</b>		

**GOAL 5. PROVIDE IT SERVICES THAT MEET THE CAMPUS NEEDS IN A COORDINATED AND EFFICIENT MANNER.**

	ITS Involvement	Dependencies	Time Frame
incorporate into administrative systems			
<b>Strategy 5.3. Build a new campus data center and data management infrastructure as a part of an overall strategy to centrally provide core IT infrastructure that efficiently enables locally delivered services.</b>			
Action 5.3.1. HCIS and ITS will jointly develop and implement a comprehensive plan to meet the projected Data Center space needs for University constituents, including plans for new facilities or upgrades, operational plans, and sustainable funding models.	<b>CIO</b> CIO Financial Planning CTS Research Services SPA	HCIS CITL	
5.3.1.a. Acquire new and improve existing data center space for short-term use until the new data center is ready.	<b>CIO</b> CIO Financial Planning SPA TNS Infrastructure Services TNS Network Services CTS Research Services		
Action 5.3.2. Develop a data management infrastructure.			
5.3.2.a. Define restoration requirements for critical services.	<b>ITS Directors</b> ITS Managers		
5.3.2.b. Update the ITS Disaster Recovery plan addressing all IT services.	<b>ITS Directors</b> ITS Managers		
5.3.2.c. Define and implement data storage and management services.	<b>SPA Enterprise Storage</b> CTS Research Services CTS Application Support		
Action 5.3.3. Provide core IT infrastructure.			
5.3.3.a. Increase the availability of wireless access to the campus data network to include primary areas where students, faculty and staff work with laptops or other mobile network devices or there is no wired access alternative available.	<b>TNS Network Services</b> CIO Financial Planning		
5.3.3.b. Build a relationship with Facilities Management so that buildings, IT and campus planning can be coordinated.	<b>CIO</b> TNS Infrastructure Services	Facilities Management	

**GOAL 5. PROVIDE IT SERVICES THAT MEET THE CAMPUS NEEDS IN A COORDINATED AND EFFICIENT MANNER.**

	<b>ITS Involvement</b>	<b>Dependencies</b>	<b>Time Frame</b>
	TNS Business Services		
5.3.3.c. Evaluate authentication and directory services with goals of improving the end user experience and reducing support time for IT staff.			
5.3.3.c.1. Participate in authentication initiatives, such as Shibboleth and two factor authentication.	<b>SPA Directory &amp; Authentication</b> SPA Windows Server Group IT Security Office AIS Library		
5.3.3.c.2. Deploy tools for administrators and developers to access and manage directory service data	<b>SPA Directory &amp; Authentication</b>		
5.3.3.c.3. Authentication support for special populations (e.g., guest accounts, delegates, library patrons, researchers)	<b>SPA Directory &amp; Authentication</b> CTS Learning Spaces		
<b>Strategy 5.4. Implement effective planning and governance for IT at organizational levels, and joint annual planning cycles for all IT groups on campus.</b>			
Action 5.4.1. Form a CIO Advisory Council to review and modify as needed the existing structure of IT advisory bodies and to advise the CIO on strategic and policy issues.	<b>CIO</b>		
Action 5.4.2. Formalize the relationship between the CIO and all IT service providers to facilitate more effective coordination of IT related activities across the entire University.	<b>CIO</b>	CITL	
Action 5.4.3. Each IT unit on campus will prepare annual plans that are widely shared and coordinated with the IT Strategic Plan and other units plans.	<b>CIO Community</b> CIO Financial Planning ITS	CITL	
<b>Strategy 5.5. Improve IT processes to gain efficiencies and provide better services with available resources.</b>			
Action 5.5.1. Provide training to IT staff for using process improvement models, techniques and tools.	<b>CIO</b>	FO-Organizational Effectiveness	
Action 5.5.2. Implement a review cycle to identify the high impact IT processes and investigate them for improvement opportunities.	<b>ITS Directors</b> ITS Managers CIO Financial Planning	CITL	
Action 5.5.3. Develop/Formalize Change Management policy/procedures for ITS.	<b>Change Management Team</b> ITS		
Action 5.5.4. Identify best practices in IT service delivery, including the development of Service	<b>ITS Service Lifecycle Team</b>	CITL	

**GOAL 5. PROVIDE IT SERVICES THAT MEET THE CAMPUS NEEDS IN A COORDINATED AND EFFICIENT MANNER.**

	<b>ITS Involvement</b>	<b>Dependencies</b>	<b>Time Frame</b>
Level Agreements, and share those practices within the IT community.			
Action 5.5.5. Increase the use of tools to allow more efficient management of desktop computers (e.g., system management services).	<b>CTS Application Support</b> CTS Learning Spaces SPA Enterprise Client Mgmt IT Security Office		
Action 5.5.6. Increase the use of virtualization to more effectively use server resources.	<b>SPA Windows Server Group</b> SPA Unix		
Action 5.5.7. Improve service provisioning and de-provisioning processes and tools.	<b>SPA Directory &amp; Authentication</b> CTS Application Support TNS		
<b>Strategy 5.6. Build the IT community and increase collaboration opportunities.</b>			
Action 5.6.1. Strengthen the role of the CITL in campus-wide IT activities.			
5.6.1.a. Form a CITL Executive Committee to assist the CIO in leading CITL.	<b>CIO</b> CIO Community	CITL	
5.6.1.b. Form a CITL Communication Subgroup to facilitate communication within CITL and with the campus.	<b>CIO Community</b>	CITL	
5.6.1.c. Form a Campus IT Project and Service Portfolio Subgroup to develop a process for building and maintaining a Campus IT Project and Service Portfolio.	<b>ITS Directors</b>	CITL	
Action 5.6.2. Use the Campus IT Leaders group as a catalyst to identify and develop additional IT community groups, as needed.	CIO Community	CITL	
5.6.2.a. Lead formation of an Enterprise Computing Advisory Group.	<b>AIS Leadership Team</b>		
5.6.2.b. Assist data stewards in creating institutional data focus groups.	<b>AIS</b>		
Action 5.6.3. Increase participation of the broadest set of IT professionals in University IT related events.	<b>CIO Community</b>	CITL	
5.6.3.a. Provide expertise and presentations for various IT Communities	<b>CIO Community</b> ITS		
Action 5.6.4. Formalize an annual IT events calendar, like Tech Forum, Security Day, etc., to nurture the culture to expect these events.	<b>CIO Community</b> CIO HR	CITL	