Purpose:

The purpose of the Information Technology Services (ITS) Strategic Plan is to document the mission statement, values and vision statement for ITS, outline the ITS view of future technology in higher education, document specific strategic initiatives for ITS and document how ITS will ensure that it continues to move in a direction that support the University's technology needs.

ITS Mission:

The mission of Information Technology Services is to provide technology leadership, expertise and services in support of the teaching, learning, research and outreach goals of the University of Idaho. Through its knowledgeable and committed staff, ITS will offer excellent service to its customers while ensuring an institutional perspective on technology solutions, information security and continuous improvement through technology. ITS is committed to achieving its mission through:

- ***Focusing on customers*** by understanding their needs and offering options that meet their needs and the needs of the University.
- ***Providing leadership*** and awareness on the impacts, resource utilization, and feasibility of technology implementations.
- ***Partnering*** with customers, peer institutions, industry groups and vendors to ensure the technological goals of the university are realized.
- ***Providing services and solutions*** of the utmost quality, stability and reliability.
- Collaborating with customers in ***securing university data*** through technological solutions and the utilization of industry best practices.
- ***Responding*** in a thorough and timely manner to customer needs, changing technologies, and the challenges of compliance with local, state and federal law.
- ***Fostering a positive work environment*** where staff are offered opportunities for continuous improvement and realize the reward and satisfaction that is inherent in meeting the challenge of providing outstanding customer service in support of the University's goals.
- Practicing responsible ***stewardship of University resources***.

ITS Vision:

Information Technology Services is committed to its leadership role of fostering the University's goals through being the partner of choice for technology advancement and innovation.

The Future of Technology in Higher Education and at the University of Idaho:

It is both an exciting and challenging time to be involved with technology in higher education. The pace of innovation increases unabated and technology has become both a driving factor of success and a recruitment and retention tool for students and faculty. Administrative computing encompasses the full range of systems, from large enterprise systems to special niche packages, but all require stable infrastructure, security and integration with each other. Research computing has huge data storage and processing demands and collaboration by researchers is opening new research opportunities. Social networking has changed how students learn and instructors share their knowledge. This creative use of technology in teaching has brought about significant pedagogical change.

Our Strategic Plan is designed to meet our objectives while also remaining flexible and adaptable in the face of technology evolution. An excellent resource for the technology issues facing the University, and higher education in general, is the Educause "Top-Ten IT Issues, 2012." Educause is a higher education-specific technology non-profit association of which UI is a member. Outstanding infrastructure, vigilant security experts, available Internet bandwidth and people to help make technology usable and integrated will continue to be core to UI's success for a long time to come, but there are certain challenging topics that are now relevant to technology at UI and will only become more important in the future:

- Bring Your Own Device (BYOD) – An increasing number of consumer devices, like mobile phones and tablets, are being used as aids in teaching, learning and administrative functions as well as the a primary means to communicate with different University constituencies. The University of Idaho is going to have to catch up, and then get ahead of the curve, in supporting these devices and in deploying software that allows these devices to accomplish different tasks like registering for classes, paying bills, posting to course sites, donating to UI and many others. The capabilities of these types of devices, and their use in daily life, will only continue to increase and we must embrace this change.
- Cloud computing – Historically technology was implemented on campus, housed in the data center, and supported by UI technical experts. Data centers and equipment are expensive, require large support teams, and require the constant updating of the software that runs on them. There are cloud-based options for email, administrative and academic software, data storage, and many other technology-based solutions now available. The implementation of these services is gaining traction industry-wide and at the University of Idaho. These options allow for lower barriers of entry but still hold significant challenges in the areas of security, compliance, integration with other systems, records management and the current high cost of the Internet bandwidth required to utilize them. The maturation of the cloud services market will reduce these challenges and the cost of services in the cloud will continue to fall, making them more and more desirable. The University of Idaho must position itself with the necessary skills, internal infrastructure and available bandwidth to take advantage of these services.
- Security – Hackers continue to develop better tools in attempts to steal information and to compromise our systems in order to use our computing power for nefarious purposes. The growth of cloud computing expands the problem. Now we have to ensure data transmission to the cloud remains secure. Security of University data is of the utmost importance from both reputational and financial standpoints yet the University does not have a formal process for evaluating, mitigating and responding to current and future security issues. The complexity of security requires a distinct focus from trained employees in order to minimize potential problems.
- Compliance – The sheer volume and rapid change cycles of local, state, federal and industry group regulations is astounding. The University of Idaho must ensure satisfactory compliance with FERPA, HIPPA, PCI, DMCA, e-discovery and many others at a time when the legislation has not kept pace with technology advancements like cloud computing. The University must leverage industry organizations to keep abreast of important legislation or industry changes, develop a comprehensive plan for addressing compliance and where important, provide input to decision makers on the technology and cost implications of compliance.
- Large research data sets and high performance computing – Research in many disciplines is creating huge data stores that correspondingly need significant computing power to analyze. In order to keep costs under control but be able to attract the best researchers, the University of Idaho will need to come together internally and with outside collaborators to provide the required resources. This collaborative approach across the University is also needed to understand and meet the specific requirements from funding agencies analyzed to ensure that they can be met in a cost-effective way as failure to meet the requirements will impact future grant opportunities.
- Leading collaboration – There are a number of critical issues where technology can play a positive role but where ownership of the issues is distributed or unclear. Examples of these issues include business intelligence

systems, reporting requirements, process improvement, overall web strategy and many others. In many cases, because technology is involved, people look to ITS to lead the discovery process and drive institutional decisions even when the functionality of these systems should be driven by the needs of the people who use the technology rather than the people who implement it. ITS can, and should, participate in these discussions with their unique institutional perspective. If the need exists, they can and should take a leadership role by coordinating the right people to explore solutions. If it is later determined that a unit other than ITS should lead the way, ITS should be willing to step back and provide technical expertise and allow others to lead.

- Expectations – Prospective students and faculty have ever-increasing expectations of the technology that will be made available to them. They expect the same ease of use in their electronic interactions with the University of Idaho that they have with their banks, online shopping vendors, and their social networking products of choice. In order to provide institution-wide services of this caliber, which is possible, it will be necessary to have an institutional view of staffing and funding for technology support, improved ways to solicit input on new services and a cohesive team of people across UI, regardless of their organizational position, to provide both support and innovation.

The exciting goals in the University of Idaho's "Leading Idaho" strategic plan come on the heels of what many higher education institutions face: reduced staffing and funding. This provides a challenge to become more effective while also not expecting significant new resources to provide the required new services. The opportunities for how technology can advance education are staggering and we have truly only begun to scratch the surface. Over time, the University will need to continuously adapt its skills, people, funding and structure to understand upcoming technology challenges and align itself for success. This constant change, in technology and the culture of its use, requires that change be not only accepted but embraced, that people stay open to new challenges and opportunities and that UI continue to have a defined set of goals and the resources to achieve them.

Objectives for the Strategic Initiatives in the ITS Strategic Plan:

In addition to meeting its mission and moving towards achieving its vision, ITS has identified the following key objectives:

1: Support UI's "Leading Idaho" strategic plan

2: Support UI's goal of 16,000 students by 2020

3: Support UI's goal of $150,000,000 in research by 2020

4: Offer necessary and desired new services to the entire UI community

5: From a UI technology perspective, strive for the best use of financial resources and people's time.

6: Improve communication with customers, partners and each other

7: Make ITS a desirable place to pursue a challenging career in technology

Summary of Strategic Initiatives:

Directed by "Leading Idaho," and developed through customer feedback, our view of the future of technology, our mission and our vision, ITS will undertake the following strategic initiatives. This list of strategic initiatives is a living entity, changing through addition and subtraction, in order to accommodate future needs. As strategic initiatives are completed, new initiatives will be added that best support and provide maximum value to the University Idaho.

It is important to understand that many of the projects reflected here represent additional work above the already significant operational duties for which ITS staff are responsible. It is not expected that additional staff can be added to support these initiatives, though appropriate staffing levels will be recommended to senior administration. The effective use of available positions, the hiring of temporary help, the engagement of consultants, the deferral of certain operational tasks, the exploration of operational efficiencies, and the acceptance of additional risk in certain areas are all tactics that may be used to ensure that these projects are completed successfully.

The planning process has proved that there are more projects to be done than resources to do them. While prioritization of which projects to undertake is difficult, the following criteria were used in the evaluation:

- Does the project help achieve one or more objectives?
- Is significant value added to the UI community through the successful completion of the initiative?
- Is the desired direction clear and achievable?
- Are financial resources available both for implementation and long-term support?
- Are staff trained (or is training possible) and do they have time for the projects in addition to normal operational responsibilities?

#	Strategic Initiative	Objectives Supported	Owner	Target Completion Date
13-1	Work with Human Resources to update ROJDs and ensure proper employee classifications	5,7	Ewart	06/30/2013
13-2	Develop and implement an ITS employee development program	7	Holthaus	09/30/2012
13-3	Achieve the technical aspects of PCI compliance	4	Quinn	06/30/2013
13-4	Replace current faculty/staff email solution	2,4,5,6	Lanham	03/31/2013
13-5	Improve backup internet connection bandwidth	4	Jemes	10/31/2012
13-6	Implement federated identity management	3,4,6	Davidson	02/28/2013
13-7	Implement new data storage	1,2,4	Granja	06/30/2013
13-8	Implement new data backup architecture	1,2,4,5	Granja	06/30/2013
13-9	Implement the first phase of the virtual computer lab	2,4	Michelson	08/20/2012
13-10	Complete the first phase of the computer lab technology refresh	2,4	Michelson	07/31/2012
13-11	Implement the first phase of the UI mobile application	2,4,6	Clabough	12/31/2012
13-12	Complete the first phase of upgrading classroom technology to add digital signal capabilities	1,2,4	Clifford	08/09/2013
13-13	Develop a plan for a cost effective video conferencing solution for classes and meetings	1,2,4,5,6	Thompson	12/31/2012
13-14	Implement guest wireless	1,2,3,4,6	Jemes	08/20/2012

#	Strategic Initiative	Objectives Supported	Owner	Target Completion Date
13-15	Create a plan for the full implementation of a voice over IP (VoIP) telephone system	4,5,6	Thompson	06/30/2013
13-16	Create a plan for the next generation UI network, both wired and wireless	1,2,3,4,6	Lien	03/31/2013
13-17	Create an ITS service catalog	4,5	Kearney	12/31/2012
13-18	Redesign and re-implement the ITS web site with a focus on customer needs	6	Davidson	12/31/2012
13-19	Develop a five year budget model for ITS, by service and by ITS unit	1,2,3,5	George	02/28/2013
13-20	Drive to completion the implementation of the Advisory Group for Information Technology (AGIT)	1,2,3,4,5,6	Ewart	08/02/2012
13-21	In partnership with Center personnel, develop formal five-year support plans for technology at the Coeur d'Alene, Boise and Idaho Falls Centers	1,2,5,6	Davidson	06/30/2013
13-22	Identify duplicate technology services at UI and make recommendations on remediation steps	1,4,5	Lanham	06/30/2013
13-23	Formalize role in research computing	3,4,6	Ewart	12/31/2012
13-24	Develop and implement a plan to imbed a Lean Continuous Improvement culture within ITS	5	Wood	10/01/2012
13-25	Conduct an internal security audit and build action items into operational and strategic plans.	1,4,5	Lien	3/31/2013
13-26	Develop institutional standards for laptops, desktops, scanners and printers and a process for the regular update of the standards.	1,4,5	English	10/1/2012
13-27	Formalize the role of ITS in the overall UI web presence	1,5,6	Ewart	12/31/2012
13-28	Implement a central code repository for university software development.	4,5,7	Hall	10/31/2012
13-29	Develop a services review process and phase out the following services currently offered by ITS: Blackberry support, laptop checkout program, support for personal printing devices	5	Lanham	12/31/2012
13-30	Shutdown the Luminis "MyUIdaho" portal	5	Borchers	10/31/2012
13-31	Implement first phase of desktop management internal to ITS	4,5	Michelson	01/15/2013

Strategic Initiatives Details:

Initiative 13-1: **Work with Human Resources to update ROJDs and ensure proper employee classifications.**

There are currently 27 ROJD's for current employees that have significant differences between the documented responsibilities of the position and the responsibilities actually performed. This has led to improper classifications and in some cases has restricted both employee development and the best possible utilization of employee skills.

Initiative 13-2: **Develop and implement an ITS employee engagement and recognition program**.

Without a doubt, the greatest asset of ITS is its people. Retaining our current people through opportunities for training, personal development, recognition of hard work and opportunities to have fun should be our primary focus. By achieving this, we will also make ITS an even more desirable place to work, allowing us to successfully compete for new talent.

Initiative 13-3: **Achieve the technical aspects of PCI compliance.**

The University of Idaho is not currently PCI compliant from a network perspective, which is critical to provide credit card payment options for University services. A plan has been created to achieve PCI compliance but funding has not been available to implement the plan. Over $23,000,000 is expected to flow through the University's ecommerce system in FY 2012, so continuing out of compliance represents a significant risk in terms of data loss, fines and reputational damage.

Initiative 13-4: **Replace current faculty/staff email solution.**

The current University email solution is based on Microsoft Exchange 2003 and does not offer many of the modern functions demanded by email users. The general direction is to upgrade to Exchange 2010 using Microsoft 365 cloud-based email service but a full requirement definition is important before a final decision is made. The cloud-based solution may be at no charge to UI, but the upgrade project, regardless of the technology decision, represents a significant effort.

Initiative 13-5: **Improve the backup Internet connection**.

The University of Idaho relies on the Idaho Regional Optical Network (IRON) for its primary Internet connection. If the IRON connection fails, the current backup connection provides less than 5% of the bandwidth used on a regular basis, resulting in an effective shutdown of services in the event there is a problem with IRON. The most desirable solution is a low-cost "retainer" that allows us to move all traffic to the backup connection in the event of an IRON failure.

Initiative 13-6: **Implement federated identity management**.

To improve overall security as well as to improve ease of access to cloud-based resources for researchers, faculty and students, the University of Idaho joined InCommon in 2009. InCommon is a group of higher education and research organizations that have agreed to trust one another and allow access to computer resources based on trust relationships. Being able to truly realize the values of InCommon and federated identity management require the implementation of technology and active participation in the InCommon Federation, which is made up of over 300 institutions of higher education, government agencies and government research labs. The project to implemented federated identity management will be to specifically support the upgrade of the University's email system but will serve as a foundation for future integration projects.

Initiative 13-7: **Implement new data storage**.

The University of Idaho uses a significant amount of disk storage to store data from administrative systems, files, research, web pages and other sources. The current central storage solution is five years old, slower than newer solutions and nearing capacity. While the long-term goal is to utilize cloud based storage wherever possible, current bandwidth costs and the lack of a sufficient redundant Internet connection make cloud-based storage an expensive and risky proposition. The implementation of a new Storage Area Network (SAN) on the Moscow campus, but serving all of the University's locations, will act as the bridge until cloud storage becomes a better possibility.

Initiative 13-8: **Implement new data backup architecture**

The data stored on the SAN mentioned above must be reliably backed up in the event that data recovery is required. The current data backup solution is based on tapes that are high risk, require off-site storage and make recovery a time-consuming process. A disk-based data backup architecture will better serve our needs and, again, act as a bridge until cloud-based solutions are a better option.

Initiative 13-9: **Rollout the first phase of virtual student computer labs**.

ITS makes a significant number of specialized software applications available to faculty and students through workstations in computer labs on the Moscow campus. With ongoing concerns over space utilization and a growing need (and expectation) that lab software will be available at both the Centers and at other UI locations besides the Moscow-based computer labs, the lab software must also be made available to students and faculty, from anywhere, with a broadband internet connection. This will also allow access to software on many of the BYOD devices like netbooks and tablets.

Initiative 13-10: **Complete the first phase of the computer lab technology refresh**.

Most computers in the student computer labs and computer classrooms are nearing five years old. Labs are critically important in allowing students access to expensive software, provided by the University, to complete class assignments and research projects.

Initiative 13-11: **Rollout the first phase of UI mobile application**.

The University does not currently have a standard platform for mobile application development nor an institutional mobile application. If not rectified soon, many different departments will begin mobile application development efforts, incurring significant costs and not allowing for integration with core systems. An ITS proof of concept is currently underway to determine the technical feasibility of the technology provided by our Banner vendor but no final decisions on technology or functionality have been made. The project to roll out the first phase of the mobile application will be to understand current mobile initiatives, determine UI needs, determine the appropriate technology platform, create a proof of concept, and begin planning for phase 2.

Initiative 13-12: **Complete the first phase of upgrading classroom technology to add digital signal capabilities**.

ITS' award winning classroom technology group have integrated hardware and software solutions in the classrooms that have been very well received by faculty and students. However, much of the technology is at the end of its useful life and requires replacement. It is important to upgrade the technology to include digital signal capabilities which will allow presenters to connect laptops and other devices that output signals in digital-only formats, such as HDMI, DVI-D, DisplayPort, and Thunderbolt. The current analog infrastructure cannot support digital signals.

Initiative 13-13: **Develop a plan for a cost effective video conferencing solution for classes and meetings**.

Video conferencing represents a significant opportunity for increased success given the University of Idaho's Land Grant mission, multiple statewide locations, and the desire to make classes available to all. Unfortunately, current video conferencing solutions are aging, require significant financial and personnel resources to support, are not integrated to an appropriate level and are supported by a cost structure that discourages use rather than encouraging new ways of thinking. The project to develop a plan for a cost effective video conferencing solution will include inventorying the University's video conferencing assets, understanding needs, determining the best mix of technology, developing a budget and determining long-term budget availability.

Initiative 13-14: **Implement guest wireless access**.

The UI Moscow campus and the UI Centers all welcome many guests to campus, usually people who do not have access to the University network. The lack of a true guest wireless solution limits University groups in who they can invite to campus and further restricts potential revenue generation through conferences and seminars. While security is a key concern, the robust technology infrastructure at the University of Idaho allows for the implementation of a guest wireless system.

Initiative 13-15: **Create a plan for the full implementation of a voice over IP (VoIP) telephone system**.

The Moscow campus' current telephone system is old, provides only basic dial tone and voicemail and does not scale to include the Centers. A VoIP pilot has been in place for some time, including at Coeur d'Alene, but has not been rolled out to the rest of the University. This project will determine a long-term plan for the implementation of VoIP and prepare for the many extra benefits and potential cost savings that it would provide.

Initiative 13-16: **Create a plan for the next generation UI network, both wired and wireless.**

The expectations for network access to services has become "anywhere, anytime and really fast." For many years, "anytime, anywhere" meant wireless networking and "really fast" applied to wired networking. With changes in technology, however, opportunities exist to accomplish all three goals with a new combined network philosophy and implementation. This project will review current and upcoming technology in order to lay out the philosophy behind future UI network expenditures and provide a roadmap and costs for the implementation of that philosophy.

Initiative 13-17: **Create an ITS Service Catalog**.

ITS has not historically done a solid job of communicating to the University community the services that it offers. This has, in part, caused the duplication of systems and services that is now prevalent. An ITS service catalog would clearly list the services that ITS provides, how those services can be procured and any associated costs. The ITS service catalog will serve as a foundation for a UI technology service catalog (scheduled as an initiative for FY 2014) that will allow the entire University community to see the technology services already available for ITS and non-ITS units.

Initiative 13-18: **Redesign and re-implement the ITS web site with a focus on customer needs**.

The current ITS website is built around the structure of ITS. It requires that a customer understand how ITS is organized in order to find information. The website will be redesigned to focus on the services detailed in the service catalog and around making transparent the operations, goals and projects of ITS.

Initiative 13-19: **Develop a five year budget model for ITS, by service and by unit**.

Due to conservative fiscal management, ITS currently has a solid budget position to tackle many of the strategic initiatives outlined in the first year of the strategic plan. A five year budget model will allow for the optimal use of current capital, assist with future prioritization of projects and determine if options like equipment leasing, cloud-based services, and a review of the current technology fee are in UI's best interests.

Initiative 13-20: **Drive to completion the implementation of the Advisory Group for Information Technology (AGIT)**.

The University does not have a clear view of the resources or personnel it devotes to technology and often is very reactive, rather than proactive, to technology projects. Often products are purchased without a clear understanding of long term costs, impacts on existing processes or a clear view of the priority of a project from an overall perspective. As a result, duplications are created and resources are not utilized in the manner that best serves the University. It is necessary to more closely align technology strategies with the overall institutional goals and mission and AGIT can provide a standard process for maximizing the chance of technology project success.

Initiative 13-21: **In partnership with Center personnel, develop formal five year support plans for technology at the Coeur d'Alene, Boise and Idaho Falls Centers**.

Both ITS and the Centers would benefit from a clear understanding of how ITS can provide assistance and the service levels associated with that assistance. Good planning will allow the Centers to better budget for technology and to improve the service levels that they provide to their students, faculty and staff through taking advantage of what ITS can offer and then focusing efforts on specific services that they are better positioned to provide.

Initiative 13-22: **Identify duplication of technology services at UI and make recommendations on remediation steps**.

During the course of the strategic planning effort, a number of instances have been identified where University units have duplicated services provided by ITS or where ITS is providing a service that could better be provided by a University unit. Collaboration between ITS and UI units will create recommendations that, if implemented, will save money, free valuable personnel time and provide the best possible services to UI.

Initiative 13-23: **Formalize role in research computing**.

The growth and success of Northwest Knowledge Network (NKN) has shown the need for a symbiotic relationship between NKN and ITS in order to successfully provide the computing resources required by researchers. The formalization and clear understanding of this relationship, and a clear delineation of roles and responsibilities, will ensure the best use of UI resources.

Initiative 13-24: **Develop and implement a plan for lean continuous improvement in ITS**.

ITS has already established a record of success in lean continuous improvement. It is now time to take the next step in maturation by imbedding this methodology into our culture in ITS. This will include identifying and prioritizing lean initiatives for the best possible return on the investment of people's time and energy.

Initiative 13-25: **Conduct an internal security audit and build action items into operational and strategic plans**.

As has been mentioned a number of times, security is of the utmost importance. A thorough review of current security resources, practices and vulnerabilities will provide recommendations and result in immediate and long-term actions. Recommendations on intrusion detection systems, intrusion prevention systems, decentralized security and possible changes to the ITS organization structure to put an increased focus on information security should all be included.

Initiative 13-26: **Develop institutional standards for laptops, desktops, scanners and printers and a process for the regular update of the standards**.

University personnel spend a significant amount of time researching, ordering, configuring and maintaining laptops, desktops, scanners and printers. While there are sometimes specific needs for equipment based on science or the software required for a discipline, almost all needs can be met by a standard set of equipment. Not only will standard models prevent the need for research and selection processes but they will also allow for economies of scale in ordering, significantly reduced time in maintenance, better warranties, lower overall costs and quicker turnaround in the event of failures.

Initiative 13-27: **Formalize the role of ITS in the overall UI web presence**.

The web presence of a higher education institution is made up of much more than just its website. Intranets, collaboration tools, mobile applications, mobile websites, instructor websites, student websites and other factors must be considered. To be successful, ITS must understand its role in the overall web presence and ownership of the University domain and, as necessary, ensure that all involved parties understand their respective roles and the interdependencies between them.

Initiative 13-28: **Implement a central code repository for university software development.**

ITS/MIS currently provides a directory-based infrastructure dating to the initial implementation of Banner for managing all software related to our enterprise systems. This infrastructure is long overdue to be replaced with a centrally-managed code repository that can be used by all developers. The absence of such an environment presents a considerable risk to the University. Implementing this repository would also offer an initial opportunity to integrate the processes of the Enterprise and Web Development teams.

Initiative 13-29: **Develop a services review process and phase out the following services currently offered by ITS: Blackberry support, laptop checkout program, support for personal printing devices**.

As technology changes, the need for some services will change or even disappear. ITS needs a process by which its services are analyzed and critical decisions are made about the best use of resources. The three specific projects listed here are key examples of services that are not cost effective and where alternatives exist.

Initiative 13-30: **Shutdown the Luminis "MyUIdaho" portal**.

MyUIdaho has never achieved the significant role envisioned at its implementation. The technology to provide the portal is expensive and very time intensive. Additionally much of the functionality in the portal is available through other software. The project associated with the shutdown of the MyUIdaho portal will consist of identifying critical functionality, ensuring that functionality is available through other systems, working with units to revise documentation and processes, informing UI constituents of shutdown-related activities and then completing the actual shutdown.

Initiative 13-31: Implement first phase of desktop management internal to ITS

ITS has built a robust and reliable desktop management infrastructure which provides services for desktop imaging, software distribution, patch management, desired configuration management and inventory. Providing these services to departments internal to ITS will eliminate redundant services, unify security management, improve asset management, provide the ability to automate the implementing of standardization of hardware and software and serve as a pilot program for rolling this service out to the wider University audience.

Long Term Initiatives:

Currently outside the immediate FY 2013 window of the ITS Strategic Plan, the following projects should be kept on the planning horizon to guide decisions and help determine priorities. As initiatives are completed, the following list of projects, plus any that have been added over the course of the year, will be reviewed, prioritized and added as an initiative.

Initiative	Objectives Supported	Desired Due Date
Banner 9 Upgrade • As planning for this upgrade begins, serious consideration should be given to whether to upgrade the system "as-is" or consider a complete Banner reimplementation with a move towards modified business processes	2,4	FY 2014
Implementation of a University-wide collaboration tool • The implementation of a common collaboration tool will improve security, reduce costs, enhance services and allow for better internal and external engagement between stakeholders.	2,3,4,5,6	FY 2014
Phase 2 of classroom upgrade • Complete the HD upgrade of the second set of ITS-supported classrooms	1,2,4	FY 2014
Implementation of a cost-effective video conferencing solution • Planning and funding development will occur in FY 2013 with implementation in FY 2014.	1,2,3,4,5,6	FY 2014
Implementation of VoIP for the entire university • Planning and funding development will occur in FY 2013 with implementation in FY 2014.	1,2,3,4,5,6	FY 2014
Lead the creation of a UI technology services catalog • Building upon the ITS service catalog created in FY 2013, the UI technology service catalog would include technology services not supplied through ITS. An example might be large research data set storage through NKN.	5,6	FY 2014
Refresh the technology disaster recovery plan • Improvements in disaster recovery will be made through a number of FY 2013 strategic initiatives but a robust plan must be develop that incorporates changes based on cloud computing philosophies and collaboration with other institutions.	4,5,6	FY 2014
Develop a five year plan for bandwidth utilization and costs • As cloud-based services continue to be deployed, much traffic that would have been contained within the UI network (and thus not requiring Internet bandwidth) will now move externally, increasing Internet bandwidth requirements.	1,2,3,5,6	FY 2014
Complete redevelopment of pricing models for ITS services • Some of this work is ongoing, but certain IT pricing models (video conferencing, technology support, web development) incent behavior that increases overall technology costs to UI and limits possibilities for teaching and learning.	4,5,6	FY 2014
Implement security recommendations from the security audit completed in FY	4,5	

Initiative	Objectives Supported	Desired Due Date
2013. • Immediate security issues will have already been resolved but long term items that required strategic funding or organizational decisions may still exist.		
In partnership with state-wide personnel, develop technology support plans for all UI locations • Building upon FY 2013 plans created for the UI Centers, these support plans will review all UI locations and understand how ITS can help.	1,2,3,5,6	FY 2014
Develop and ITS marketing and communications plan • While FY 2013 will see distinct strides in better advertising ITS capabilities and services, a formal plan will be develop on how to roll out new services and maintain transparent communication with all UI constituents.	5,6	FY 2014
Extend availability of desktop management to the UI community • Extend desktop management services to the UI community. Provide desktop imaging, software distribution, patch management, desired configuration management and inventory to UI. These services will eliminate duplicate services and thus save time and money to the UI.	4,5	FY 2014
Oracle Imaging 11g upgrade/migration • Although stated by the vendor as an upgrade, this is actually a migration to an entirely new Imaging Application. It includes the re-architecture of the platform potentially including new servers, operating systems and databases. Also included will be the re-training of entire user/customer base.	4,5	FY 2014
Develop a computer and data security awareness program • Continue IT's efforts in educating the University community on current and future security issues relating to computers and data, using already-available resources and specifically focusing on understanding the best way to communicate this important information to different constituent groups.	1,5,6	FY 2014-15
Overhaul ITS asset management • Coordinate efforts to consolidate and identify ITS physical and virtual assets (switches, computers, servers, software, maintenance agreements, contracts, certificates, classroom equipment, etc.) to aid in security, stewardship of resources and long-term budgeting.	5	FY 2014-15
Implementation of next-generation UI network • This is the implementation of a faster internal network and a robust wireless network with the capacity and security to act in place of future wired network expansion.	1,2,3,4,6	FY 2014-15
Implement a full service center methodology for customer support • Customers should not have to know whom to contact within ITS based on the type of request. One place to contact, with an immediate routing to the appropriate person in ITS, will minimize the time to satisfy a request.	4,5,6	FY 2015
Implement a formal project management office (PMO) and project portfolio management for all technology projects	1,4,5,6,7	FY 2015

Initiative	Objectives Supported	Desired Due Date
• Project portfolio management will allow for improved prioritization on institutional projects and resource utilization and is a logical extension to the work of AGIT. The PMO will provide trained experts to lead successful technology projects identified by AGIT.		
Lead a process to develop a technology education center to provide technology training to students, faculty and staff • Technology utilization often suffers due to a lack of training. With technology available in so many areas and supported by so many different UI groups, it is necessary to organize efforts to reduce redundancy and maximize technology expenditures.	4,5,6	FY 2015
Develop five year plan for data storage and backups • The FY 2013 data storage and backup projects have provided the necessary time to allow cloud services to mature and bandwidth charges to hopefully decrease. This planning effort will lay out the future of data storage and backups for UI.	1,2,3,4,5	FY 2015
Lead the development and implementation of an overall reporting and business intelligence plan • ITS will need to develop the skills and/or relationships to take on the initiative of helping UI define its reporting needs and providing the tools necessary to meet those needs.	1,5,6	FY 2015

Measures of Success:

It is critical that ITS measure the success of its operations and the completion of the strategic initiatives contained in the plan. There are many ways to measure success, but in order to create benchmarks that allow us to track our continued progress, the following measures will be monitored by the CIO, all members of ITS and hopefully by our customers:

Measure	FY 2012 Baseline	FY 2013 Target	Responsible Party
On-time delivery of strategic projects • Scope clearly defined at project inception • Scope delivered within defined timeframe	0%	90%	Assigned leads
Number of new project requests that go through the AGIT review process	0	3	Ewart
ITS Directors with established MBOs	0	4	Ewart
Student completion percentage of TechQual Survey	24%	28%	Davidson
Faculty/Staff completion of TechQual Survey	52%	52%	Davidson
TechQual questions for which students rate us below the zone of tolerance	0	0	Lanham
TechQual questions for which faculty/staff rate us below the zone of tolerance • Some are out of our control	5	4	Lanham
ITS Lean events completed	4	12	Wood
Complete a business day fail-over of the primary Internet service to ensure that the backup service worked as expected.	0	1	Jemes
Employees/positions with outdated ROJDs	27	5	Ewart
Project plans created and measured for major initiatives that have gone through the AGIT process and for which ITS has been identified as the owner.	0	100%	Borchers

Creating and tracking quantitative measures of success is a new concept for ITS. In FY 2013 we will focus on on-time delivery of the strategic initiatives outlined in this plan. Over the course of FY 2013, ITS will work to better understand the type of measures that, if tracked, will help us to improve performance. Examples to be considered include:

- First contact problem resolution – how well do we anticipate and train to solve customer needs?
- Reduction in certain contact types – what steps are being taken to proactively prevent issues rather than reactively solving them?
- Improvements (time, steps, dollars) based on lean events – is lean doing what we hope?
- System and infrastructure uptime – how well are we maintaining our core technologies?
- On-budget project delivery – are we estimating and delivering well?

As soon as measures are defined and it is confirmed that data capture is possible, data tracking will commence in order to provide a baseline for new measures in FY 2014.

Tracking our Progress:

In order for the ITS Strategic Plan to continue to drive our efforts, we must ensure that it continues to meet the needs of the University and match the available resources of ITS. This will be accomplished by the completion of the following activities:

Task	Frequency	Responsible Party
Create a point-in-time view of the strategic plan, in PDF, and post on the ITS website	Once, upon implementation	Davidson
Include the ITS mission, vision and values on the ITS website	Once, upon implementation	Davidson
Include the ITS measures of success on the website	Once, upon implementation	Davidson
Include the ITS strategic initiatives on the website	Once, upon implementation	Davidson
Implement a feedback mechanism that solicits input on our status and priorities.	Once, upon implementation	Ewart
Review of strategic initiatives and collected input at the ITS Directors meetings	Monthly	Ewart
Updates to the strategic plan strategic initiatives on the website	Monthly	Assigned leads
Review of unit leader MBOs	Monthly	Ewart
Presentations/demonstrations by ITS employees of successfully-completed projects	Quarterly	Lanham
Review of strategic initiatives with DFA Leadership Team	Quarterly	Ewart
Review of strategic initiatives with AGIT	Quarterly	Ewart
Review of Measures of Success	Quarterly	Ewart
TechQual survey results review and goal setting	Annually	Davidson
Review of mission, vision and values at all-hands ITS meeting	Annually	Ewart
Review and update of SWOT at the unit level	Annually	Directors
Review and update of SWOT at the all-ITS level	Annually	Ewart

Appendix 1: ITS Analysis of Strengths, Weaknesses, Opportunities and Threats

Description:

ITS conducted a thorough SWOT analysis, based on feedback from customers, employees and partners, in order to determine the strategic initiatives in this plan. The SWOT analysis was done individually by each of the units in ITS. Each unit felt that it had its own strengths, weaknesses, opportunities and threats but the following list, while occasionally contradictory with individual unit lists, represents a general consensus.

SWOT Matrix:

	Valuable in achieving objectives	*Detrimental to achieving objectives*
Internal Factors	**Strengths** Knowledgeable, competent staff Desire to provide excellent customer service Strong network infrastructure Award-winning classroom technology support Focus on and delivery of security Focus on stability and availability Excellent problem solving skills Current reserve of financial resources Considerable institutional knowledge across ITS staff Successful track record with formally defined projects Transparent communication of outages Technical teams dedicated to areas of specialty allow for deep understanding of complex technology Established processes and practices	**Weaknesses** Current staffing levels and/or allocations Internal communication External communication of services and abilities Teamwork Planning (currently being addressed) Forward thinking, future view of technology Current funding model for ITS Siloes of project prioritization Inconsistent pricing models for services Operational focus versus strategic focus Lack of sustained focus on UI Center needs Fiscal sustainability of video conferencing model
External Factors	**Opportunities** Cloud-based options for services Collaboration with NKN and researchers New internal and external relationships Be consultative to other units Become involved earlier in technology projects Continued relationship with IRON Standardization in many technology areas Transparency in internal and external communication	**Threats** New and continuing data and system security challenges New and continuing compliance challenges Recruitment and retention of ITS employees Pace of change within UI Siloes of technology within UI Disconnect between customer expectations and available ITS resources Lack of central UI control over technology initiatives Inconsistency in institutional messages New UI policies not effectively communicated

Appendix 2: Related Documents

The strategic planning process for ITS was outlined in a document entitled "ITS Strategic Planning Process v3" and is available for review.

The following documents were created in the self-study process and served as the foundation for the ITS Strategic Plan.

- ITS Front Office Self Study
- ITS Fiscal Operations Self Study
- ITS Enterprise Computing Support Self Study
- ITS Networks, Systems and Communications Self Study
- ITS Management Information Systems Self Study