2011-2012 University Information Technology Services

Mission

University Information Technology Services (UITS), with offices on the IUB and IUPUI campuses, is responsible for the continued development of a modern information technology environment throughout the university in support of IU’s vision for excellence in research, teaching, outreach, and lifelong learning. This environment comprises resources and services that support the academic and administrative work of the university. Computing tools include a variety of timesharing computers, hundreds of public-access, Internet-connected workstations, all equipped with current software, and a number of supercomputers. Interconnecting these resources is a high-speed network that links computers of many types and sizes in a complex, interactive web. Under the leadership of the Office of the Vice President for Information Technology, UITS is centrally responsible for implementation of Empowering People, Indiana University’s Strategic Plan for Information Technology Strategic Plan, available at http://op.iu.edu. Activities reported here reflect the goals, objectives, and implementation activities of this plan for the 2008-09 fiscal year.

Goals and Objectives

Accelerating IT-intensive Research and Scholarship (Empowering People, Recommendation 15)

Campus Planning Theme: Research, Scholarship and Creative Activity

Secondary Goals:

Sub Unit:

Time Frame: July 1-2011-June 30, 2012

Actions taken for 2011-2012:

Community source initiatives. IU has been a leader in the Kuali suite of software (http://www.kuali.org/), whose integrated systems continue to revolutionize university business. As of February 2012, this system logged 2,100 unique users at IU and more than 2,500 proposals had been routed and approved. KFS was integrated with Kuali Coeus in September 2011.

IU is a participant in the collaborative development of Kuali People Management for the Enterprise (KPME), a comprehensive human resources and payroll system for higher education, non-profits, and municipal organizations. At IU the Time and Attendance 1.1 and Leave Management 1.5 modules are scheduled for summer 2012 release, providing improved user interfaces and a streamlined approval process. UITS partnered on Kuali Student (KS) and Kuali Rapid Application Development (KRAD), a web developer’s framework that integrates with other modules of the Kuali Rice middleware.

IU is creating an integrated, next-generation Knowledge Management System (KMS) for advanced self-service IT support. It will augment IU’s KB capabilities with wikis, crowdsourcing, community-source software, and service-oriented architecture. The KMS is a foundation for a larger set of support projects (Kuali IT Support) that could include ticketing systems, online software distribution systems, network configuration systems, system notification systems, and others. Collaboration features will allow sharing code and content. KMS will be hosted on IU’s Intelligent Infrastructure.

Life sciences research. Researchers working with the new wealth of gene sequence information will gain from IU’s $1.5-million grant to establish the National Center for Genome Analysis Support (NCGAS). http://opsitnews.iu.edu/news/page/normal/19895.html

Massive data. The Extreme Science and Engineering Discovery Environment (XSEDE) is replacing the decade-old TeraGrid with an advanced and powerful collection of integrated advanced digital resources, especially critical to researchers in such fields as earthquake engineering, materials science, medicine, epidemiology, genomics, astronomy and biology. http://opsitnews.iu.edu/news/page/normal/19166.html

Technologies provided by the Center for Research In Extreme Scale Technologies (CREST) will help research to address challenges from the ever-increasing volume of digital scientific research data, paving the way for breakthroughs in science and engineering. http://opsitnews.iu.edu/news/page/normal/20301.html

For IUPUI researchers, the IU-Penguin Computing agreement means access to powerful shared computing resources in a secure environment. Individuals and organizations can share the resources of large computing systems without individually purchasing and maintaining the costly equipment. http://opsitnews.iu.edu/news/page/normal/20208.html

UITS is contributing to the design and implementation of an open source, interactive, data analysis and visualization tool ParaView (www.paraview.org), which allows data-intensive, general-purpose scientific visualization to scale from the desktop to I/O systems and CAVES, and out to the grid.

Grid and extreme-scale computing. Through its involvement in XSEDE and the Open science Grid (OSG), IU plays a major role in creating and operating a national cyberinfrastructure. Awards made to IU related to XSEDE and its predecessor, the TeraGrid, exceed $10M. The Center for Research In Extreme-scale Computing (CREST) is developing high-performance computing platforms capable of exascale computations (thousands of PetaFLOPS, thousands of times larger than today’s largest supercomputers. UITS, WIYN, and others are developing the ODI-Pipeline, Portal, and Archive (ODI-PPA) for the One Degree Image (ODI), a 1-gigapixel camera for a telescope at Kitt Peak National Observatory, AZ.

Researching next-generation networks. IU continues to research network paradigm based on software-defined networking (SDN).

The Indiana Center for Network Translational Research and Education (InCENTRE) at IUPUI is researching ways to make SDN networks more interoperable, to promote wider adoption. The Network Development and Deployment Initiative (NDDI), a partnership with Internet 2 and Stanford, will yield an Internet2 service called Open
Science, Scholarship and Services Exchange (O3SE), which will support a range of projects, including climate modelling and the Global Environment for Network Innovations (GENI) project.

Local networking advances will benefit researchers at IUPUI and beyond as they make progress toward the next-generation Internet2.

- New GENI project grants totaling $2.3M support the university’s efforts to build, test, and support faster, cheaper computer networks and affirm the state’s investment in creating more high-tech network jobs in Indiana. These support: a) IU’s partnering in creating MOXI, the Midwest OpenFlow Crossroads Initiative that will provide CIC member institutions with an OpenFlow-based network infrastructure; b) the development of OpenFlow training for network administrators; operation of a 24/7/365 GENI service desk. MOXI is a partnership of the Indiana University Global Research Network Operations Center (GlobalNOC) and the Committee on Institutional Cooperation (CIC).

- Indiana is the first state to launch a high-speed, 100-gigabits-per-second (Gbps) network link dedicated to research and education. Monon100 is 10 times faster than the current network link, allowing scientists and medical researchers to quickly share the massive amounts of data created by modern digital instruments such as gene sequencers, powerful microscopes or the Large Hadron Collider. Monon100 runs from Indianapolis to Chicago, linking the Indiana GigaPoP with Internet2, a national research and education network. [http://it.iu.edu/archive/Index_5.html](http://it.iu.edu/archive/Index_5.html)

- The National Science Foundation (NSF) has awarded $800,000 to the IU-operated Research and Education Networking Information Sharing and Analysis Center (REN-ISAC) to develop new capabilities to collect and share cybersecurity threat data and intelligence. InCNTRE is also leading the $1.3M GEMINI project, a data measurement infrastructure for GENI, and the Phoebus open source network accelerator.

IU is one of seven universities piloting the Internet2 Innovation Platform, the nation’s fastest network supporting "Big Data," and the first open, national-scale testbed of SDN and OpenFlow standards. The platform, coupled with transcontinental 100G technology, is expected to advance national R&E leadership and lower costs in higher education.

**Cybersecurity.** The National Science Foundation (NSF) has awarded $800,000 to the IU-operated Research and Education Networking Information Sharing and Analysis Center (REN-ISAC) to develop new capabilities to collect and share cybersecurity threat data and intelligence.

[Hasan receives top NSF award](http://newscenter.iupui.edu/SS572/IUPUI-Researcher-Received-Top-NSF-Award)

[IUPUI's Scott Deal named Internet2 IDEA Award winner](http://newscenter.iupui.edu/53577/Internet2-Names-IDEA-Award-Winners-From-University-of-Virginia-IUPUIESnet-UC-San-Diego-and-Columbia-University)

[IU physicists in the thick of results at Large Hadron Collider](http://newsinfo.iu.edu/news/page/normal/20651.html)

[Indiana launches new ultra-high-speed network](http://ualtsnews.iu.edu/2012/01/31/indiana-launches-new-ultra-high-speed-network/)

[IU awarded $2.3M for computer network innovation](http://ualtsnews.iu.edu/2011/12/15/iu-awarded-2-3m-for-computer-network-innovation/)

[Event marks new I-Light connections at 21 Ivy Tech facilities](http://ualtsnews.iu.edu/2011/10/31/event-marks-new-i-light-connections-at-21-ivy-tech-facilities/)
IU chosen to lead high performance research network between US and China

See also “Access to Network Resources”

Evidence of Progress for 2011-2012:

Activities planned for 2012-2013:

Continuing the partnership with Penguin Computing will ensure IU researchers have access to on-demand services that provide the benefits of cloud computing in a secure environment preserves IU's control over its intellectual property, and provides cost economies over commercial CI facilities.

Access to Network Resources (Empowering People, Recommendation 2)

Access to Network Resources
Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2010 - June 30, 2011

Actions taken for 2011-2012:

With a National Science Foundation (NSF) $9.2-million award, UITS will continue to partner in the development of the TransPAC3 network connection to Asia, and lead a new connection to Europe, named ACE – America Connects to Europe. These will enable additional research and collaboration opportunities for the IUPUI community.

The United States Unified Community Anchor Network (U.S. UCAN), to be constructed by UITS and partners with $62.5 million in federal stimulus funding, links regional and state research and education networks across the nation. The Global Research Network Operations Center (GlobalNOC) at IUPUI and IUB provides network management and engineering services.

Worldview, a real-time network visualization tool developed by UITS network specialists in the GlobalNOC, headquartered at IUPUI, received an Internet2 Driving Exemplary Applications (IDEA) award.

I-Light (http://www.ilight.net), now connects every Indiana public and private college to a high-speed network at least 20 times faster than a home Internet connection. IU and Purdue manage I-Light; UITS is responsible for I-Light operations at the GlobalNOC.

Users of Android handsets now have access to IU mobile services thanks to a free mobile platform for Android developed for UITS by students in the Kelley School of Business Masters in Information Systems.
http://newsinfo.iu.edu/news/page/normal/17120.html

Owners of smart phones or other mobile devices can now access an array of IU services at IU Mobile at m.iu.edu. A free-fee iPhone- and iPod Touch-friendly version is available through the Apple App Store.

The IUPUI core network upgrade began in May 2011. The upgrade is essential to support current and future networking needs for both voice and data connections and to improve the reliability of the campus network.
http://uits.iu.edu/page/bacy

See also “Accelerating IT-intensive Research and Scholarship”

Evidence of Progress for 2011-2012:

- IU Mobile provides 20 unique services. Along with news and alerts, a directory, and OnCourse, these include direct access to:
  - Availability of computers in Student Technology Centers
  - Emergency contact information
  - Search tool for searching the UITS Knowledge Base
  - Bus schedules (on the Bloomington campus) and campus maps
  - Additional services based on input from the IU community

The number of users of IU Mobile across the university has grown from 7,112 in FY 2009-10 to 28,000 in 2010-11.

Expanded network connectivity means more access to researchers and resources. Developments in mobile services meet the need for access any time, anywhere, to those resources. And by engaging IU’s deep networking expertise in research and development partnerships that expand national and international networks, IU helps expand the network foundation for collaboration and research.
Activities planned for 2012-2013:

- IU Mobile continues to seek user input on services to which the university community would like mobile access. Users can provide feedback via the website at m.iu.edu and via the mobile app. The new Kuali Mobility Enterprise platform under development will move to HTML5, eliminating the need for device-specific apps.

At IUPUI, the connectivity of the majority of buildings and services, and the data center itself, will be migrated to the new Juniper campus and data center routers. This will allow for higher bandwidth capacity and network growth.

A consortium of 16 TeraGrid members, including IU (represented by UITS staff), is working on a replacement for the TeraGrid project, which more than 10,000 scientists leveraged over a decade-long period, completing thousands of research projects, at no cost to the scientists. The Extreme Science and Engineering Discovery Environment (XSEDE) will be the most advanced, powerful, and robust collection of integrated advanced digital resources and services in the world. UITS networking staff and the IU GlobalNOC will provide network monitoring services and handle backup operations management, IU Associate Dean Craig Stewart will lead the campus bridging efforts, making services easier to use. A $121.1-million NSF grant to the consortium will fund the XSEDE project for five years.

Access to Network Resources (Empowering People, Recommendation 2)

**Campus Planning Theme:** Research, Scholarship and Creative Activity
**Secondary Goals:**
**Sub Unit:**
**Time Frame:** July 1, 2011 - June 30, 2012

Actions taken for 2011-2012:

UITS has signed a contract with CrownCastle International for a cellular distributed antenna system to increase cellular capacity outdoors and indoors on IU campuses. With the proliferation of smart mobile devices, it is essential to provide robust cellular services to complement the WiFi network.

The growth of digital information, estimated at an annual 40%, and an accompanying growth in demand, have made broadband, or high-speed data access and transmission, the "infrastructure challenge of the early 21st century." IU was at the forefront of initiatives that addressed that demand by connecting more Indiana higher ed institutions to I-Light, installing a high-speed, 100Gbps connection to Internet2, and creating a national 100Gbps research network. Through successive expansions of the I-Light network, 63 Indiana institutions now have Internet access, including 21 Ivy Tech campuses recently connected through an I-Light/Zayo Bandwidth partnership, funded by a $25.1-million US Commerce Department award. With the 2012 launch of the Monon100 network between the Indiana GigaPOPs and Internet2, Indiana became the first state with a 100 Gigabit link able to handle today's massive datasets. The Global Research Network Operations Center (GRNOC), which manages I-Light, will also extend the high-speed broadband initiative in Pennsylvania, providing engineering, operations, and service desk support to PennREN, the Pennsylvania Research and Education Network.

A $62.5M Recovery Act grant supports IU's contribution to constructing the U.S. UCAN 100Gbps backbone linking institutions, community networks, and rural and underserved areas to advanced resources like distance education and telemedicine.

The Extreme Science and Engineering Discovery Environment (XSEDE) is replacing the decade-old TeraGrid with an advanced and powerful collection of integrated advanced digital resources, especially critical to researchers in such fields as earthquake engineering, materials science, medicine, epidemiology, genomics, astronomy and biology. [http://ovpitnews.iu.edu/news/page/normal/19166.html](http://ovpitnews.iu.edu/news/page/normal/19166.html)

Technologies provided by the Center for Research In Extreme Scale Technologies (CREST) will help research address challenges from the ever-increasing volume of digital scientific research data, paving the way for breakthroughs in science and engineering. [http://ovpitnews.iu.edu/news/page/normal/20301.html](http://ovpitnews.iu.edu/news/page/normal/20301.html)

Advancing the international high-speed connectivity available to IUPUI, IU is leading the development of the ACE (America Connects to Europe) network, which provides multi-gigabit bandwidth and services connecting researchers in the US with a broad community of their counterparts in Europe. ACE is part of a collaboration of major R&E networks in Europe and the US that is expanding such services as security, identity management, and operational integration, which will maximize US-EU connectivity, increase collaboration, and decrease costs. The university will continue to forge agreements with publishers of textbooks to help drive down the cost of textbooks. [http://etexts.iu.edu/home.php](http://etexts.iu.edu/home.php)

UITS/OVPIT will continue its practice of leveraging relationships with hardware, software, and services vendors in order to provide an IT environment of abundance. As new technologies emerge and as the university IT environment evolves, UITS/OVPIT will seek new partnerships with vendors and service providers.

Demand for IT resources will increase along with the number of hours per day that users expect access. Abundant resources and unrestricted access are key in empowering people. Goals should be established to ensure 24x7 availability of UITS services and resources. More strategic sourcing may be required, such as the Internet2 Net+ services or from commercial vendors.

Evidence of Progress for 2011-2012:

Activities planned for 2012-2013:

With the recent commitment from the Vice President for Capital Planning and Facilities and the Vice President for Information Technology and CIO, IU is poised to continue physical building improvements that are critical to proceeding with the Network Master Plan.
The current wireless environment will be refreshed in 2012 to address reliability issues and position IU for future enhancements in technology.

Collaboration & Communication (Empowering People, Recommendation 3)

Collaboration & Communication
Campus Planning Theme: Best Practices
Secondary Goals: July 1, 2010- June 30, 2011
Sub Unit:
Time Frame: July 1, 2010- June 30, 2011

Actions taken for 2011-2012:

UIITS continued improvements to videoconferencing systems, including updated equipment and full UniCom integration, toward a seamless and pervasive videoconferencing environment. http://uits.iu.edu/page/axon

UIITS upgraded unified communications—UniCom—to Lync 2011, which combines email, voice mail, instant messaging (IM), video conferencing, enhanced presence, live desktop and file sharing, and remote call control on the desktop. http://uitsnews.iu.edu/2010/04/05/unicom/

UIITS provides and manages the Indiana Clinical and Translational Sciences Institute (CTSI) HUB (http://indianactsi.org), a statewide online resource for translational research collaboration used by 1,700 researchers and led by the IU School of Medicine. In addition to supporting research programs, the CTSI HUB provides collaboration tools like Alfresco Share for file sharing, REDCap for collaborative data management, IUConnect.org for technology transfer, INTRsearch.org for recruiting volunteers for clinical trials, and CTSA2Community.org, which shares best practices for community-engaged health research.

The Indiana CTSI HUB and CTSA2Community (Clinical and Translational Science Awards) are based on HUBzero, a community source research collaboration platform. UIITS is a founding member of the HUBzero Consortium and plays a leadership role in the development of research collaboration portals such as those listed above at IUPUI.

See also “Access to Network Resources.”

Evidence of Progress for 2011-2012:

The improvements UIITS has made to videoconferencing systems, including updated equipment and full UniCom integration, brings the university closer to the strategic plan goal of a seamless and pervasive videoconferencing environment, a goal of the IU strategic plan, Empowering People. http://uits.iu.edu/page/axon

UniCom helps address the strategic plan goal of providing systems and connections to devices that support communication via text, voice, audio, images, video, chat, virtual presence to increase productivity, and helps dissolve barriers of location. In the reporting period, across the university, UniCom hosted more than 9,000 conferences and more than 6 million instant messages.

The number of conference calls placed at IUPUI in FY 2010-11 rose to 7,017 over 5,366 in FY 2009-10.

No telephone directories were printed at IUPUI in FY 2010-11, down from 7,025 in FY 2009-10.

More than 100,000 people across the university, and more than 1,000 at IUPUI now use Lync as their telephone service.

Activities planned for 2012-2013:

Videoconferencing solutions will continue to be tested, with a future goal of accommodating 3G wireless video.

The continued deployment of Lync provides a new model for delivering phone services integrated with other collaboration technologies.

Collaboration & Communication (Empowering People, Recommendation 3)

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2011- June 30, 2012

Actions taken for 2011-2012:

Telecollaboration services have become foundational on all IU campuses. Standard high-definition videoconferencing, streaming, and data collaboration tools are widely available in conference rooms and classrooms, and from personal desktops. All UIITS conference rooms and regional campus units include high-definition videoconferencing equipment and monitors. Thirty new, high-end Cisco telepresence units have been installed across seven IU campuses. All eight campuses are equipped with rooms enabled for videoconferencing or telepresence for a total of 401 rooms across the university. Tandberg Movil was adopted to complement desktop connections to videoconferences via the IU video bridge. Movil is independent of IU’s user credentials so allows access to guest lecturers or non-IU students.
Success in telecollaboration depends on cooperation and teamwork among video, audio, phone engineers, and local support providers. A new Collaboration Technologies group helps facilitate that cooperation in videoconferencing, telepresence, audio and video streaming, and through support of Adobe Connect services for IU's distance education, research, and administrative activities.

Additional collaboration resources include SharePoint, the university-wide web collaboration and content management system (WCMS), and Box at IU, a centrally supported document storage and collaboration environment. Box, an Internet2 Net+ service, provides IUPUI faculty and researchers with cloud-based storage accessible by web, desktop sync, and mobile device apps. Box is recommended for personal files and some university data, but not for sensitive data or data that falls under such laws as FERPA, FISMA, GLBA, and HIPAA. [http://box.iu.edu](http://box.iu.edu).

For more on the use of classroom collaboration technologies, see section 14.

IU's web presence is the first point of engagement for countless internal and external audiences, a source of information, and a gateway to systems, resources, and services.

[IU simplifies online collaboration with Box at IU](http://uitsnews.iu.edu/2012/05/14/iu-simplifies-online-collaboration-with-box-com/)

**Evidence of Progress for 2011-2012:**

**Activities planned for 2012-2013:**

Additional attention will be given to integrating into unified communications document sharing features and tools that are popular with students, such as Skype. To advance the university telecollaboration infrastructure, IU should take the following steps: 1) Pursue strategic partnerships within and external to IU. 2) Develop and adhere to comprehensive telecollaboration standards that take into account everything from room design to the technologies themselves. 3) Continue integration with other services delivered to the desktop to advance "pervasive" telecollaboration. 4) Refine a support model for telecollaboration services across the university. 5) Develop high-end telecollaboration services, or telepresence.

**Campus Planning Theme:**

**Secondary Goals:**

**Sub Unit:**

**Time Frame:** July 1, 2010 - June 30, 2011

**Actions taken for 2011-2012:**


The Gerald L. Bepko Internship Program provides students on the Indianapolis and Bloomington campuses, especially those from underrepresented minorities, with opportunities to work with IITS staff on information technology projects. [http://www.indiana.edu/~uitshr/services/jobs/Intern.html](http://www.indiana.edu/~uitshr/services/jobs/Intern.html)


**Evidence of Progress for 2011-2012:**

**Activities planned for 2012-2013:**

**Campus Climate for Diversity**

**Campus Planning Theme:** Campus Climate for Diversity

**Secondary Goals:** July 1, 2010 - June 30, 2011

**Sub Unit:**

**Time Frame:** July 1, 2010 - June 30, 2011
Actions taken for 2011-2012:


The Gerald L. Bepko Internship Program provides students on the Indianapolis and Bloomington campuses, especially those from underrepresented minorities, with opportunities to work with UITS staff on information technology projects. http://www.indiana.edu/~uitsh/services/jobs/intern.html


Evidence of Progress for 2011-2012:

The success of the Gerald L. Bepko Internship Program is reflected in the fact that in 2020-11, some 20 internships are being offered on the IUPUI and IUB campuses. (http://www.indiana.edu/~uitsh/services/jobs/intern.html)

Activities planned for 2012-2013:

UITS will continue its successful programs in engaging students from traditionally underserved populations in activities that acquaint them with opportunities in information technology and related fields.

Diversity

Campus Planning Theme: Campus Climate for Diversity
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2011 - June 30, 2012

Actions taken for 2011-2012:

Actions taken for 2011-2012:


The Gerald L. Bepko Internship Program provides students on the Indianapolis and Bloomington campuses, especially those from underrepresented minorities, with opportunities to work with UITS staff on information technology projects. http://www.indiana.edu/~uitsh/services/jobs/intern.html

see also Enhancing Student Success, Empowering People, Recommendation 10.

Evidence of Progress for 2011-2012:

Activities planned for 2012-2013:

UITS will continue its successful programs in engaging students from traditionally underserved populations in activities that acquaint them with opportunities in information technology and related fields.

Engagement Beyond Through IT Leadership (Empowering People, Recommendation 11)

Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2009 - June 30, 2010

Actions taken for 2011-2012:

- The university signed a six-year enterprise license agreement with Campus Management Corp. to deliver its constituent relationship management (CRM) Talisma-CampusCRM™ software for
Evidence of Progress for 2011-2012:

- Initiatives involved with collecting ewaste continue to attract members of the IUPUI and Indianapolis communities.


Activities planned for 2012-2013:

- Initiatives to collect ewaste will continue in the coming year.
- UITTS will assist in developing a database that the university can populate with the outreach programs it makes available to external constituencies.

Engagement Beyond Through IT Leadership

Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2010–June 30, 2011

Actions taken for 2011-2012:

IU is a member of a new partnership among some 30 research universities called Gig.U, which will bring high-speed Internet connections to local communities, spurring economic growth, investment, and job creation. [http://www.gig.u.org/]

As part of the continuing Lifetime Engagement initiative that supports communication and engagement throughout the lifecycle of IU constituents, an interface between current donor systems and the new Constituent Relationship Management (CRM) system has been established to make Alumni records available in the CRM database. As a prerequisite to opening access to these records for communication and engagement purposes, policy groups have been defining Rules of Engagement and Preference Management functionality. This work is nearing completion.

IU signed a contract with Campus Management Corporation for the joint development of an advancement enterprise system that will be fully integrated with the CRM product and will eventually replace the aging Benefactor system that currently supports IU Foundation and IU Alumni Association activities. System Requirements are being defined. Once completed, the new enterprise system will provide enhanced Prospect and Fundraising Portfolio Management, Volunteer/Members Management, Event Management and mass and targeted communication functionality as well as Gift Administration and Records Management.

In a move hailed as an exemplary collaboration in higher education, IU and Ivy Tech developed an agreement under which Ivy Tech will move a major portion of its enterprise applications equipment to the IU Data Center at IUPUI. [http://newsinfo.iu.edu/news/page/normal/13537.html]

IU President Michael McRobbie presented the University Medal to Lilly Endowment Inc. in recognition of its philanthropic support for higher education and other endeavors important to the state of Indiana. IU's IT initiatives have benefited significantly from Lilly's generosity. [http://newsinfo.iu.edu/news/page/normal/13477.html]

“Security Matters,” a series of radio spots launched by the IU Center for Applied Cybersecurity Research (CACR) in partnership with IU public radio station WFIU, alerts IU and members of surrounding communities to cyber threats, and points to information about protection. [http://wfiu.inspire.iu.edu/news/page/normal/15821.html]

The new website Protect IU provides students, faculty, staff, parents, and others with timely information about physical and online safety and security issues. [http://protect.iu.edu/]

University alumni and other external organizations now have access to affordable IT training as a result of an agreement by the IU School of Continuing Studies, UITS, and the IU Alumni Association. [http://newsinfo.iu.edu/news/page/normal/14088]

Indiana middle- and high-school students were introduced to such IT fields as computer programming, high performance computing, and networking in the "Ready, set, robots!" workshop presented by the IU Pervasive Technology Institute, UITS, and the IU GlobalNOC. [http://newsinfo.iu.edu/news/page/normal/13765.html]

Annual Bepko internships enable computer science students to gain hands-on experience leveraging research cyberinfrastructures to solve real-world research problems. See also "Environmental Stewardship" and "Access to Network Resources."

[5]
Since the inception of the Pervasive Technology Labs in 1999, its successor the Pervasive Technology Institute (PTI) and the Research Technologies Division of UITS have created 437 FTE-years of employment in Indiana (i.e. years of full-time equivalents of employment) as a direct result of grant and contract awards to PTI. Currently 54 employees are affiliated with PTI whose jobs are funded by federal grants and contracts. Of these, 13 are located at IUPUI. For the full report, see http://hdl.handle.net/2022/13559.

Through IT, IU has a multitude of ways to engage with a variety of communities, from advancing network connections to encouraging interest in IT in high school students. In the activities of the past year, IU leveraged particular areas of IT leadership, advancing cybersecurity, encouraging environmental awareness, and providing IT training to the extended IU community.

Activities planned for 2012-2013:

Initial functionality to support Rules of Engagement and Preference Management for Alumni will be implemented and access to records for communication will be available this coming year. A Service Center will be established to assist users in building communication campaigns targeted for Alumni groups and will assist with the maintenance of an enterprise-wide communications calendar. Additionally, development and testing of the new enterprise Advancement System is planned for the coming year.

E-waste collection initiatives will continue in the coming year.

UIITS will assist in developing a database that the university can populate with the outreach programs it makes available to external constituencies.

Engagement Beyond Through IT Leadership (Empowering People, Recommendation 11)

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2011–June 30, 2012

Actions taken for 2011-2012:

Through successive expansions of the I-Light network, 63 Indiana Institutions now have Internet access, including 21 Ivy Tech campuses recently connected through an I-Light/Zayo Bandwidth partnership, funded by a $25.1-million US Commerce Department award. http://newsinfo.iu.edu/news/page/noraml/20129.html

UIITS expertise in geographic information systems (GIS) serves the Indiana Geographic Information Council and the State of Indiana Counties by making accessible more than 20 terabytes of Indiana geospatial data. Datasets in the Indiana Spatial Data Portal (IDSP, http://www.indiana.edu/~gisddata/) include all Indiana US toposographical maps, aerial photos, elevation data, and digital, high-resolution aerial photographs of the Indiana’s 92 counties. These images are used in such business and government areas as homeland security and emergency management.

The Indiana Clinical and Translational Sciences Institute (CTSI) will use a $500K National Institutes of Health grant to increase the technical and human resources fighting cancer at IU Health Arnett Hospital in Lafayette, IN. The work is a collaboration of the IU Melvin and Bren Simon Cancer Center and the Oncological Sciences Center at Purdue. http://newsinfo.iu.edu/news/page/noraml/19713.html

The fourth annual e-Waste Collection Days event engaged the Indianapolis, Bloomington, and South Bend campuses and surrounding communities in collecting some 1.8M pounds of disused electronic products, http://iewaste.indiana.edu/

Indiana University's Summer of Networking internship program, which provides students with hands-on, practical training from the university's acclaimed network engineering staff, has received a two-year, $270,595 grant from the National Science Foundation. The grant will enable IU to expand the program and continue focusing on preparing students for the high-tech job market. http://ovpitnews.iu.edu/news/page/noraml/19029.html

A Collaboration and Engagement Support group maintains an ongoing program of K-12 outreach activities as part of the missions of UIITS and the Pervasive Technology Institute. This serves as a foundation the PTI research centers can build upon in implementing grant-funded outreach activities. The group has opened a search for a manager, whose duties would include coordinating K-12 outreach activities by OVPIIT and UIITS.

UIITS is a partner with the IU Alumni Association and the IU School of Continuing Studies in an information technology training association that provides affordable IT workshops to businesses, organizations, and IU alumni. The association is part of IU mission of outreach to the people of Indiana, and was created after an alumni survey expressed a need for accessible IT training.

[Students and Web Professionals Pledge to Overhaul Four Non-profits' Web Sites in Just 48 Hours]

[IUPUI students design online games for the Indiana State Museum
http://informatics.iupui.edu/news/students-design-online-games-for-the-indiana-state-museum/]

[IUPUI Informatics first to participate in Gen Con Educational Partners

[GlobalNOC's Worldview on display at Smithsonian Folklife Festival
http://uitsnews.iu.edu/2012/06/27/globalnocs-worldview-on-display-at-smithsonian-folklife-festival/]

[IU receives 2012 CIO 100 award
http://newsinfo.iu.edu/news/page/normal/22498.html]

[Brad Wheeler named Tech Innovator and one of 2012's Doers, Dreamers and Drivers
http://uitsnews.iu.edu/2012/03/06/brad-wheeler-named-tech-innovator/]

See also “Environmental Stewardship” and “Access to Network Resources.”

Evidence of Progress for 2011-2012:

Through IT, IU continues to offer a multitude of ways to engage with a variety of communities, from advancing network connections to encouraging interest in IT in high school students. In the activities of the past year, IU leveraged particular areas of IT leadership, advancing cybersecurity, encouraging environmental awareness, and providing IT training to the extended IU community. UITS will aggressively pursue federal funding for citizen science and informal education in science – both of which have clear value to society and which may be growth areas in federal funding in the future.

Activities planned for 2012-2013:

UITS will aggressively pursue federal funding for citizen science and informal education in science – both of which have clear value to society and which may be growth areas in federal funding in the future.

Enhancing Student Success (Empowering People, Recommendation 10)

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2009 - June 30, 2010

Actions taken for 2011-2012:

- The university is a partner in the development of "Opendoc Matterhorn," a webcasting platform that supports the delivery of educational content to video-and-audio sharing sites such as YouTube and iTunes, allowing flexibility in its use. (http://www.baylor.edu/newsmedia/releases/2009-07-28_matterhorn.shtml)

- UITS made ITHelpLive chat 2.0 available 24x7, and implemented the chat icon on Student Technology Center desktops at IUPUI and IUB.

- In August 2009 IU launched a four-month project to gauge interest in lynda.com, the online video-based IT learning library. (http://itspress.iu.edu/news-page/normal/11671.html)

- UITS launched IU Mobile, a web service designed for smartphones and other mobile devices that provides online access to news and information about all university campuses, including Oncourse, the university's collaboration and learning environment.
Students broaden their knowledge of UITS IT services and resources at the September 2009 Make IT Happen TechFest. [http://newsinfo.iu.edu/news/page/normal/11726.html](http://newsinfo.iu.edu/news/page/normal/11726.html)

As part of Sony's invitation to the university to be a "First Wave" participant in a new Sony scholarship program, five students who met certain financial and academic requirements were awarded a Sony VAIO notebook computer and additional technology. [http://newsinfo.iu.edu/news/page/normal/11818.html](http://newsinfo.iu.edu/news/page/normal/11818.html)

A November 2009 iPhone conference provided attendees with an overview of the technologies available for iPhone web applications and heard developers discuss their experiences creating iPhone applications. [http://newsinfo.iu.edu/news/page/normal/12418.html](http://newsinfo.iu.edu/news/page/normal/12418.html)

UTIS released the "Computer Guide" (computerguide.iu.edu) to minimum hardware recommendations to help students navigate the university's negotiated discounts with vendors. [http://newsinfo.iu.edu/2009/03/12/computerguide-recommendations-flips-and-deals/](http://newsinfo.iu.edu/2009/03/12/computerguide-recommendations-flips-and-deals/)

The online IT Training Tips Blog provides users with the opportunity to share solutions and learn from others. See also Awards. [http://newsinfo.iu.edu/2009/07/15/looking-for-interactive-it-tutorials-and-how-to-tips-i-and-it-training-tips/](http://newsinfo.iu.edu/2009/07/15/looking-for-interactive-it-tutorials-and-how-to-tips-i-and-it-training-tips/)

New students visited New Student Orientation in summer 2009 to learn about IT resources, including accounts, no and low-cost software, and special vendor pricing. [http://newsinfo.iu.edu/2009/07/29/its-opens-new-students-to-it/](http://newsinfo.iu.edu/2009/07/29/its-opens-new-students-to-it/)

The Student IT Ambassadors Group at IUPUI continues to flourish. The group has elected officers, built a website, and established a blog. [http://ambassadors.iu.edu/index.php?page=start](http://ambassadors.iu.edu/index.php?page=start)

The new plan for leveraging the undergraduate Student Technology Fee announced in February 2009 means more IT resources for students. [http://kb.iu.edu/data/iydm.html#what](http://kb.iu.edu/data/iydm.html#what)

See also "IT-enhanced Teaching and Learning" and "Financial Stewardship"

Evidence of Progress for 2011-2012:

- The new plan for leveraging the undergraduate Student Technology Fee announced in February 2009 has meant more IT resources for students. [http://kb.iu.edu/data/iydm.html#what](http://kb.iu.edu/data/iydm.html#what).

See also "Evidence of Progress" in the section "Human and IT Co-development."

Activities planned for 2012-2013:

- The new plan for leveraging the undergraduate Student Technology Fee will continue to make more resources available for students.

**Enhancing Student Success (Empowering People, Recommendation 10)
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2-11-June 30, 2012

Actions taken for 2011-2012:

In piloting etexts and other digital materials IU seeks a way to drive down the cost of textbooks and make assigned materials more accessible to today's more mobile students, wherever they choose to study. The broad scope of mobile information access through IU Mobile, the coming virtualization of software through iU Anyware, and the etext initiative will help lower physical, logistical, and financial barriers to student learning.

IUPUI students and instructors experience savings and flexibility with the university's eText Initiative. In spring 2012, across the university, 130 class sections, comprising 5,300 students took part. Students saved an average $25 per book or online supplement. Texts from Flat World Knowledge, IU Press, MacMillan, McGraw Hill, Pearson, W.W. Norton, and Wiley are available via CourseLoad software for reading, annotating, and collaborative study on almost any computer, tablet, or smartphone device. [http://etexts.iu.edu](http://etexts.iu.edu)

Students, faculty, and staff have on-the-go access, from any personal device, to hundreds of software applications through iU Anyware, the university's cloud-based application virtualization service. The service is delivered to all university campuses, which saves students from installing software on individual devices or finding labs that host the applications they need. [http://iuanyware.iu.edu](http://iuanyware.iu.edu)

Students using IU Mobile benefit from the release of IU's new Kuali Mobility Enterprise. The move to the industry leading HTML5 standard means that IU information services can be developed once for all mobile devices and can adapt to the size and capabilities of each device.


To meet multiple learning preferences, new IT training formats include online webinars, one-on-one coaching, hybrid workshops with hands-on training, online office hours, and self-study materials. and the IT Training Tip Idol. All UITS workshop materials are available for free download.
Evidence of Progress for 2011-2012:

IU has made progress in delivering student-centric IT applications and systems that support academics, administrative tasks, and student life. IU’s Online Admissions Application improves the student experience while saving the university money. Compass facilitates the process of applying for and awarding scholarships, meaning IU is able to award more scholarships, which helps attract and retain outstanding students. Student Information System eDocs eliminate paper forms, reduce manual effort, and expedite transactions. IU FLAGS gives students early alerts to lapses in their academic performance, so they can quickly get back on track. As an example of the efficiency of integrated systems, the eText Request eDoc is Integrated with SIS for student registration and fee collection, letting students see which e-texts their classes will use, and with Oncourse for eText delivery via Courseload. IU’s Student Activities Management and Tracking software helps students manage and track their participation in activities outside the classroom in student organizations, leadership activities, and community engagement.

Activities planned for 2012-2013:

Early work on a new student portal is now part of the larger Academic Roadmap Initiative. A Roadmap steering committee and campus representatives continue to define the scope and deliverables for the Roadmap, which is expected to include a new student portal.

A strategic student communication plan is underway that incorporates branding, coordinating outreach across the campuses, leveraging multiple media and groups such as the Student Ambassadors to convey messages, technology fairs, and ongoing assessment. Faculty awareness of UITS communications can help them reinforce those messages.
At the enterprise level, a proposal is under review that outlines objectives that affect student services, from admissions through financial aid, grades, and graduation, and that would allow IU to offer degree programs across varying calendars. If the proposal is approved, other projects beyond those involving SIS and Oncourse are likely to emerge.

Enhancing Student Success (EP Recommendation 10)

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2010 - June 30, 2011

Actions taken for 2011-2012:

- As part of the continuing roll-out of the Lifetime Engagement Constituent Relationship Management (CRM) product, the IUPUI Undergraduate Admissions office migrated to the current version of the Tailsma product in August 2010. Undergraduate admissions for School of Engineering and Technology and Kelley School of Business went live with this functionality a few months later. These offices along with several other campus admissions offices are currently using this product to send and recruit prospective students. Data were added to the CRM for IUPUI Admissions in summer 2011.

Students who attended the Adobe Days event at IUPUI learned popular uses of Adobe tools and resources that aid in teaching, learning, innovating, and enhancing digital lifestyles. [http://uitsnews.iu.edu/2011/03/22/adobe-days-at-iu](http://uitsnews.iu.edu/2011/03/22/adobe-days-at-iu)

In piloting extents and other digital materials IU seeks a way to drive down the cost of textbooks and make assigned materials more accessible to today’s more mobile students, wherever they choose to study. The broad scope of mobile information access through IU Mobile, the coming virtualization of software through IUAWARE, and the extent initiative will help lower physical, logistical, and financial barriers to student learning.

Indiana University's regional IT departments became part of UITS, creating a seamless, university-wide IT services organization that will expand services at IUPUI. [http://iuspress.iu.edu/news/page/normal/17767.html](http://iuspress.iu.edu/news/page/normal/17767.html)

As an investing partner in the Kuali Student Initiative, and a member of the Kuali Student Project Board, IU will provide resources to support the overall goals of a next-generation student system. [http://iuspress.iu.edu/news/page/normal/13493.html](http://iuspress.iu.edu/news/page/normal/13493.html)

At the annual TechFest information technology fair, IUPUI students learned about the latest in computers, software, and cell phones, and about the range of tech resources and support provided by UITS. [http://www.techfest.iu.edu/](http://www.techfest.iu.edu/)

The UITS Student Ambassadors Program continued to engage students in communicating with their peers about IT, conveying student feedback to UITS, and advancing their leadership skills. [http://ambassadors.uits.iu.edu/](http://ambassadors.uits.iu.edu/)

IUPUI students have access 24 hours a day, seven days a week to a wide range of Call Center applications and services delivered across the IUPUI campus. These include AskIT, emergency response services, events information, and building addresses. The center also serves as the Financial Aid call center, and is receiving high satisfaction scores from students. [http://kb.iu.edu/data/sldx.html](http://kb.iu.edu/data/sldx.html)

The Student Technology Fee continued to provide new IT services and resources for students at IUPUI. [http://kb.iu.edu/data/utyim.html#what](http://kb.iu.edu/data/utyim.html#what)

See also "IT-enhanced Teaching and Learning," "Human IT Co-development," "IT Infrastructure and Fiscal Planning," and "Access to Network Resources."

Evidence of Progress for 2011-2012:

- UITS consultants provided 1,224 instances of in-room consulting or services to residents in the IUPUI residence halls. Campus In-room Residential Consulting and Residential Technology Centers consulting received a 99.8% user satisfaction score.

The number of student logins into the Student Self-Services area of the Student Information System across the university grew from 5,178,126 in FY 2009-10 to 6,047,211 in FY 2010-11, with a user satisfaction rating of 94.2%.

IT resource fairs and awareness events, with an IUPUI satisfaction rating of 93.3%, help students stay informed about IU’s IT resources, learn about their application in university work, and discover ways that UITS can support that use. Expanded Call Center services and a growing number of applications developed for mobile devices provide IUPUI students with more convenient access to IUPUI campus resources and information.

Activities planned for 2012-2013:

- Development of the Kuali Student Initiative will continue.

Event Management functionality for the IUPUI Undergraduate Admissions Office for campus visits will be implemented in 2011-12.

Enhancing the Value of Institutional Data (Empowering People, Recommendation 9)

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2009 - June 30, 2010
Actions taken for 2011-2012:

- IU and its partners released Kuali Rice 1.0. This is the core infrastructure for all Kuali applications, including Kuali Financial System 3.0, Kuali Cores 2.0, and Kuali Student. (http://uittspedia.iu.edu/news/page/item/122651.html)

- A new partnership, Rice Investing Partners, which includes IU, provides a governance structure, funding model, and dedicated resources for continued operation. (http://uittspedia.iu.edu/news/page/item/10737.html and http://kuali.org/rice/)

- Work continued on the Kuali Cores Financial Systems, with the ID Billing, Daily Balancing, and other enhancements put in place in May 2010.

- IU and collaborators launched the Kuali People Management for the Enterprise project in August 2010 for the development of an enterprise human resources and payroll system for higher education was launched in August 2010.

- UITS continued work as a partner in the Kuali Cores (KCo) project, which will replace the university Electronic Research Administration (ERA). Kuali Cores release 1.0 (July 2008) included core functionality, proposal, and budget modules. (http://uittspedia.iu.edu/page/item/10351).

IU is among a group of leading academic research libraries that are partnering in the Kuali Open Library Environment project to develop software created specifically for the complex business management and workflow operations of academic and research libraries. (http://uittspedia.iu.edu/2009/11/20/university-wide-library-environment-actually-foundation-projects/)

Evidence of Progress for 2011-2012:

- IU President McRobbie announced in December 2009 that the university achieved $13-million in one-time cost reductions from IU’s partnership with Kuali Financial Systems to create an open-source financial system.

Activities planned for 2012-2013:

- Work will continue on Kuali software development.

Enhancing the Value of Institutional Data (Empowering People, Recommendation 9)

Campus Planning Theme: Best Practices

Secondary Goals:

Sub Unit:

Time Frame: July 1, 2011–June 30, 2012

Actions taken for 2011-2012:

To bring its enterprise business reporting and decision support capabilities (Business Intelligence Tools) up to standard, IU has recommended updating the core data model to one based on hierarchical groups or dimensions. The work involves joint commitment between the functional and technical teams representing each system (Financial Information Systems, Student Information Systems, Human Resources Management Systems, and so on) and UITS enterprise decision support specialists. Existing business rules are being incorporated into the new data structures to ensure consistency and accuracy. Work is progressing incrementally to avoid interfering with current reporting activity. A university-wide Business Intelligence taskforce with representation from all areas of the university, the IU Foundation, Alumni Association, and IU Medical Center is overseeing the work, establishing executive and general institutional sponsorship and support, and building support from the IU user community.

Work is also underway across IU to digitize and store all kinds of university assets, including teaching and learning content, scholarly events, and creative works, including legacy content and physical objects.

IU is in the vanguard of developing solutions for preserving, storing, and curating digital scholarly content.

- The IU Libraries/UITS is a founding partner in the Digital Preservation Network (http://digitalpreservationnetwork.org/) being developed by more than 30 US research institutions. This initiative will offer a managed solution for large-scale digital preservation that leverages next-generation Internet2 network capabilities.

- The Libraries at IUPUI and IUB have hired two new e-science librarians to focus on data publishing and curation workflows and policies, working with staff from UITS and the Data to Insight Center.

- The release of Kuali Open Library Environment OLE 0.3 in November 2011 provides IUPUI librarians with an easy-to-use system for selecting, acquiring, and describing library information resources that link with enterprise business processes; improving information management resources across higher education research libraries; and faculty and staff made significant contributions to Kuali OLE. (http://uittspedia.iu.edu/news/page/item/10324.html)
Evidence of Progress for 2011-2012:

Enhancements made to the tools for managing administrative data enable the university to use that data more effectively and efficiently. As an investing partner and participant in open source initiatives, IU continues to advance the development of student systems and refine the software for managing digital collections.

Activities planned for 2012-2013:

Federated Identity positions the university for a future of cloud-based services and extended collaborations. IU has federated access with such significant service providers as lynda.com, the CIC collaboration wiki, the National Institutes of Health, EDUCAUSE, Gartner Group and the National Student Clearinghouse.

Guidelines for how IU’s information will be controlled, accessed, and used are essential to information management at IU. Role-based access control (RBAC) is an important goal for the Committee of Data Stewards and many IU areas. It can save staff time while helping manage access to sensitive systems.

Work will continue on data modeling.

The IU cyberinfrastructure gateway will provide an interactive, GUI-based environment that users will perceive as single, unified data storage and management infrastructure. For non-sensitive, “lab-centric” research data, plans call expanding the use of the Intelligent infrastructure to improve overall security and disaster resilience.

Kuali Identity Management (KIM) shows potential in data access. A planned virtual directory product will aid in identifying and managing roles for RBAC. A planned implementation of an enterprise proxy server will support existing access to library materials until these vendors support a true federated identity system.

Other work involves an portal for student-facing services that will draw on and complement work for other student-facing systems, including the IU Roadmap, the FLAGS early-alert system, academic advising tools, co-curricular activities, and Student Information Systems (SIS). Work continues on the Kuali OLE (Open Library Environment) interface, integrating frameworks such as the Kuali Rapid Application Development (KRAD), and collaborating with other Kuali user experience groups to provide a consistent experience across modules.

Enhancing the Value of Institutional Data (EP Recommendation 9)
Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2010 - June 30, 2011

Actions taken for 2011-2012:

IU’s new research management tool, Kuali Coeus, which replaced the university’s Electronic Research Administration, became ready for faculty and administration use. http://newsinfo.iu.edu/news/page/normal/17793.html

As an investing partner in the Kuali Student initiative, and a member of the Kuali Student Project Board, IU will provide resources to support the overall goals of a next generation student system. http://uitspress.iu.edu/news/page/normal/14493.html

Greater access to digital library resources will be made possible through IU’s leadership of the Kuali OLE (Open Library Environment) project, and an $2.38 million Andrew W. Mellon Foundation grant to develop open source software to manage digital collections. http://newsinfo.iu.edu/news/page/normal/12849.html

See also “IT-enhanced Teaching & Learning” and “Recapturing the Scholarly Record.”

Evidence of Progress for 2011-2012:

- Enhancements made to the tools for managing administrative data enable the university to use that data more effectively and efficiently. As an investing partner and participant in open source initiatives, IU continues to advance the development of student systems and refine the software for managing digital collections.
- Thanks to the deployment of a new version of the slashtmp file sharing facility, faculty and staff can now securely share files that contain critical data elements such as personal health information. This enables the IU community to make better use of data.

Activities planned for 2012-2013:

- Work will continue on Kuali Student and Kuali OLE.

Environmental Stewardship (Empowering People, Recommendation 6)

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame:
Actions taken for 2011-2012:

- The IUPUI Recycling Committee provided an opportunity for the IUPUI community to dispose of household recyclables, hazardous waste, and e-waste at its seventh annual Tox Away Day on April 9, 2010. (http://newscenter.iupui.edu/3911-Opportunities-to-Dispose-of-Toxic-and-Electronic-Waste)

- The Indianapolis community, including businesses, nonprofits, educational institutions and individuals were invited to dispose of electronic waste during the IU and IUPUI Electronic Waste Collection Days on April 30 through May 2, 2010. (http://newscenter.iupui.edu/3911-Opportunities-to-Dispose-of-Toxic-and-Electronic-Waste)

- The release of the online telephone directory at phonebook.iu.edu as part of the university’s “Go green” campaign is expected to advance the university’s sustainability efforts, and offers more complete information than its printed counterpart. (http://newscenter.iu.edu/2009-09-22-its announces green campaign for campus directory)

- The IU Intelligent Infrastructure (IUI) developed by UITS continues to contribute to the university sustainability efforts by reducing power and electrical requirements. (http://uits.iu.edu/page/iupui)

- The Go Green Gadget is available for download on IUware so users can set power savings options on their computers and track savings.

- UITS provided feature articles on sustainability to the IUPUI publications, The Look.

Evidence of Progress for 2011-2012:

- eWaste clean-up efforts resulted in the recycling of 500,000 pounds of e-waste.

- The IU Intelligent Infrastructure now hosts 1,300 virtual machines, and growing.

Activities planned for 2012-2013:

- Planning is underway for the next eWaste Collection Days.

UITS will continue to help promote high standards of environmental stewardship by communicating about energy-efficient computing practices and paper-saving measures.

Environmental Stewardship

Campus Planning Theme: Best Practices

Secondary Goals:

Sub Unit: 

Time Frame: July 1, 2010 - June 30, 2011

Actions taken for 2011-2012:

- UITS promoted ways to conserve paper through the "Print Less, Go Green" campaign. https://stoweb.stc.indiana.edu/public/GoGreen/STCPrintLess.cfm

- The Indianapolis community -- including businesses, nonprofits, educational institutions, and individuals -- was invited to dispose of electronic waste during the UITS-sponsored 2011 IUPUI Electronic Waste Collection Days. http://events.iupui.edu/event?event_id=4627

- No phone directories were printed in the reporting period. The IU community now uses an entirely online directory at phonebook.iu.edu, which replaces all printed directories and includes such functionality as search and reverse lookup. http://www.tmnet.com/submit/2010/10/15/506959.htm

- The IU Intelligent Infrastructure (IUI) of virtual platforms and storage developed by UITS continues to contribute to university sustainability efforts by reducing power and electrical requirements. It now comprises 934 virtual servers. http://uits.iu.edu/page/vgv

- The Go Green Gadget is available for download on IUware (iuware.iu.edu) so users can set power saving options on their computers and track savings. http://uitsnews.iu.edu/2010/11/08/sustaining-sustainability/

- See also “IT Infrastructure and Fiscal Planning”

Evidence of Progress for 2011-2012:

The move to a paperless phone directory, the reduction of paper use in the Student Technology Centers (STCs), the repeated messages of conservation in initiatives from enews to electronic waste collection events all combine to advance a culture of awareness in the university and surrounding communities.

- Development of the online directory has eliminated the production and distribution of an average 42,000 phonebooks annually across the university.

- Between 2009 and 2011, public Electronic Waste Collection Days at IUPUI, IUB, and IU South Bend netted more than 1.8-million pounds of electronic waste from the campuses and their surrounding communities. All materials were processed for resale; nothing went into the landfill.

UITS has adopted green approaches to printing reports and documents. Large documents, such as workshop reports, are now routinely published electronically through iu ScholarWorks and made available as print-on-demand through Amazon CreateSpace.

Activities planned for 2012-2013:

Planning is underway for the next eWaste Collection Days.
UITs will continue to help promote high standards of environmental stewardship by communicating about energy-efficient computing practices and print reduction measures.

(8) Environmental Stewardship (Empowering People, Recommendation 6)
Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2011 - June 30, 2012

Actions taken for 2011-2012:
UITs is a visible and active partner in the university’s environmental stewardship initiative, setting new standards for sustainable construction, leveraging IT to support and promote sustainability, and establishing policies and practices that help advance a culture of energy conservation, sustainability, and waste reduction.

IU’s two newest IT structures, the Data Center and Cyberinfrastructure Building (CIB) at IU Bloomington, model energy efficient building design and construction. The bunkered design of the Data Center helps insulate IU’s physical IT assets from extremes of heat and cold.

The Indianapolis community -- including businesses, nonprofits, educational institutions, and individuals -- was invited to dispose of electronic waste during the UITs-sponsored 2011 IUPUI Electronic Waste Collection Days. Between 2009 and 2011, public Electronic Waste Collection Days at IUPUI, IUB, and IU South Bend netted more than 1.8 million pounds of electronic waste from the campuses and their surrounding communities. All materials were processed for resale; nothing went into the landfill.

Virtualization. Technology, once viewed as a massive consumer of energy, is now part of the solution. IU’s enterprise and desktop virtualization solutions net efficiencies and abundance across the enterprise and on the desktop and establish a sustainable model for future growth.

Intelligent Infrastructure (II). Some 2,000 virtual systems and storage replace physical enterprise systems and school and department servers, saving space and paring the cost of hardware, maintenance, and power. It allows for balancing resources and mirroring content across campuses, contributing to business continuity and disaster recovery.

CEV. For the desktop, the Client Enterprise Virtualization (CEV) initiative is centralizing and virtualizing the delivery of desktop applications and operating systems, freeing up computing resources. Windows and other operating systems can run on virtual machines even on underpowered devices. CEV allows for the standardization of software releases and provides a simple method to deploy to all covered devices. CEV allows for the central management of the desktop, allowing IT to better support and manage a wider range of devices.

Storage. The central SharePoint service complements CEV, providing an IU cloud-based universal document store and collaboration resource for IU schools, departments, employees, and graduate students.

e-Procurement. IU Purchasing is a partner in conserving resources. A new Institutional purchasing policy encourages investing in energy-efficient products. Purchasing uses e-catalogs to find computers and monitors ranked at least Silver by the EPA’s Electronic Product Environmental Assessment Tool.

e-Waste. Recycling is becoming a routine practice. The successful annual e-Waste Collection Days event, now in its fourth year, has engaged the Bloomington, Indianapolis, and South Bend campuses and surrounding communities in collecting some 1.8M pounds of disposed electronic products.

[Informatics team on mission to help Greek Island promote tourism, culture and sustainability

Evidence of Progress for 2011-2012:

The move to a paperless phone directory, the reduction of paper use in the Student Technology Centers (STCs), the repeated messages of conservation in initiatives from e-news to electronic waste collection events all combine to advance a culture of awareness in the university and surrounding communities.

UITs will continue to help promote high standards of environmental stewardship by communicating about energy-efficient computing practices and print reduction measures.

Activities planned for 2012-2013:

Planning is underway for the next eWaste Collection Days.
UI TS will continue to help promote high standards of environmental stewardship by communicating about energy-efficient computing practices and print reduction measures.

Financial Stewardship (Empowering People, Recommendation 4)

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit: 
Time Frame: July 1, 2010 - June 30, 2011

Actions taken for 2011-2012:
The development of client virtualization services and new software licensing agreements provide cost-effective resources for the university community.

Progress continued on a three-year plan to leverage undergraduate Student Technology Fees (STF) to enhance IT resources for students and achieve cost efficiencies. Resources funded by the STF are summarized below in “Evidence of Progress.”

See also “IT Infrastructure and Fiscal Planning,” “Enhancing Student Success”

Evidence of Progress for 2011-2012:
• By leveraging the STF, the university continues to improve the IT resources available to IUPUI students. Below is a summary of resources provided by the STF:
  • 34 STC locations with 963 seats, including 16 computer classrooms (12 PC, 4 Mac)
  • Four new collaborative environments in the lower level of the Engineering building

PCs and Macs located in the new STC location in the Multicultural Success Center (UC101), which contains a collaborative environment, space and power for mobile users, and soft seating. By leveraging the STF, the university continues to improve the IT resources available to IUPUI students. Below is a summary of resources provided by the STF:
• 34 STC locations with 963 seats, including 16 computer classrooms (12 PC, 4 Mac)
• Four new collaborative environments in the lower level of the Engineering building
• PCs and Macs located in the new STC location in the Multicultural Success Center (UC101), which contains a collaborative environment, space and power for mobile users, and soft seating
• Upgraded instructor station technology in all UITS computer classrooms to include a standardized environment matching general Inventory classrooms
• Laptop lockers in the Campus Center food court for secure storage and charging of laptops

Use of the UITS-developed Intelligent Infrastructure (II) has grown to 72 servers that host some 1,600 virtual machines, providing cost efficiencies to 24 university departments, and advancing sustainability practices. II also allows clients more agility in planning resources and contributes to the university’s “green” efforts.

Activities planned for 2012-2013:

A partnership with Liberal Arts and campus administration is under way to provide four new state-of-the-art classrooms and a new location for the University Writing Center in the former bookstore area of Cavanaugh Hall. The STF will help fund student technology in these locations.

Financial Stewardship
Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit: 
Time Frame: july 1, 2010 - June 30, 2011

Actions taken for 2011-2012:
The development of client virtualization services and new software licensing agreements provide cost-effective resources for the university community.

Progress continued on a three-year plan to leverage undergraduate Student Technology Fees (STF) to enhance IT resources for students and achieve cost efficiencies. Resources funded by the STF are summarized below in “Evidence of Progress.”

See also “IT Infrastructure and Fiscal Planning,” “Enhancing Student Success”
Evidence of Progress for 2011-2012:

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Activities planned for 2012-2013:

A partnership with Liberal Arts and campus administration is underway to provide four new state-of-the-art classrooms and a new location for the University Writing Center in the former bookstore area of Cavanaugh Hall. The STF will help fund student technology in these locations.

Financial Stewardship (Empowering People, Recommendation 4)

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2011-June 30, 2012

Actions taken for 2011-2012:

The development of client virtualization services and new software licensing agreements provide cost-effective resources for the university community.

Use of the UITS-developed Intelligent Infrastructure (II) has grown to 72 servers that host some 1,600 virtual machines, providing cost efficiencies for 24 university departments, and advancing sustainability practices. II also allows clients more agility in planning resources and contributes to the university’s “green” efforts.

IUPUI students and instructors experience savings and flexibility with the university’s eText initiative. In spring 2012, 130 class sections comprising 5,300 students took part. Students saved an average $25 per book or online supplement. Texts from Flat World Knowledge, IU Press, MacMillan, McGraw Hill, Pearson, W.W. Norton, and Wiley are available via CourseLoad software for reading, annotating, and collaborative study on almost any computer, tablet, or smartphone device.
http://etexts.iu.edu

Students, faculty, and staff have on-the-go access, from any personal device, to hundreds of software applications through IUanyWARE, the university’s cloud-based application virtualization service. The service is delivered to all university campuses, which saves students from installing software on individual devices or finding labs that host the applications they need. http://iuanymware.iu.edu

Evidence of Progress for 2011-2012:

Activities planned for 2012-2013:

A partnership with Liberal Arts and campus administration is underway to provide four new state-of-the-art classrooms and a new location for the University Writing Center in the former bookstore area of Cavanaugh Hall.

UITs will continue to model rigorous financial management and transparent accounting and reporting of IT expenditures. As well, we will work more vigorously to demonstrate and infuse this culture of rigor and transparency to other university units.

Human and IT Co-development (Empowering People, Recommendation 6)
Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame:

Actions taken for 2011-2012:

- The widespread use of the elearning program lynda.com prompted IU to sign a three-year contract for the software, providing 24/7 access across the university.

- UITS released a Knowledge Base wiki that allows users to comment and create entries to the KB [http://uitsiu.edu/page/amd]

- The IU Mobile service that enables smartphones to access university information asks for feedback, giving users a way to request additional services for IU Mobile and to make suggestions for the continued development of the service. [http://uitsiu.edu/2009/09/03/iu-mobile-to-help-smartphones-access-iu-information/]

Evidence of Progress for 2011-2012:

- The KB Wiki moved from prototype to Enterprise Confluence.

- UITS, in partnership with schools and departments, has begun enhancing IT hardware and software resources available to students. New resources enabled by the STF transition include:
  - Computers: 239 new computers update older machines. 3 computers (4 PC, 1 Mac) are on each Campus Center level, 1 seat per level is ADA compliant. There are 31 STC machines in Cavanaugh Hall common area, 1 new Mac InfoStations in the CTC Lobby, and InfoStations in the Taylor Hall basement. Laptop checkout is available in the Campus Center for student organizations.
  - Work area: There are 15 STCs, with 468 seats, including 2 Mac classrooms and 5 additional PC classrooms (146 seats) and a new collaborative classroom in Business/SPEA 3001 (BS) with 21 student PC workstations and 1 instructor workstation.
  - Software: More than 150 software applications standard on STC machines, including the full suite of Microsoft and Adobe software available through IU’s enterprise licensing agreements, and more statistical and mathematical software.
  - Printers and printing: A printing allocation for undergraduates for up to 650 pages, in several STCs, 20 new printers to update older machines, printers in the Campus Center Theater Level and 2nd and 3rd levels, and a large-format scanner in Enslen Hall.
  - To help students use and find IT resources: Expanded STC consulting services, Printer Locator and Seat Finder applications, and an IU Mobile application for phones and other handheld devices.

Other new resources: A printing allocation for up to 650 black and white pages per semester at no additional charge, a new printer and five new STC stations with more than 150 applications in the Theatre Level of the Campus Center.

Activities planned for 2012-2013:

- A website with complete information about Empowering People, including opportunities for community input and feedback, is now live at ep.iu.edu. Its timeline of accomplishments reflects many resources and services that benefit the IUPUI community.

- Work on planning and installing STC resources for students will continue.

- UITS will continue to develop services for IU Mobile, based on feedback from users. [http://uitsiu.edu/2009/09/03/iu-mobile-to-help-smartphones-access-iu-information/]

Human and IT Co-development

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: july 1, 2010- June 30, 2011

Actions taken for 2011-2012:

- The university continues to take part in helping shape the IT environment that best supports the university. Following is a selection of initiatives that involve collaborations between UITS and faculty and staff.

- Etexts. Student and faculty feedback in pilots of digital texts will help determine what kinds of books and software users prefer and which ones offer important functionality such as annotation and collaboration. A website keeps the community current on discussions and developments. [http://etsiu.edu/blog/news/continuing-the-conversation.php]

- iPads in the classroom. Faculty Learning Communities (FLCs) are testing iPads as shared, collaborative, classroom devices and their effect on student engagement and learning effectiveness. [http://uitsiu.edu/page/azxc]
Mobile Information. The IU Mobile web service that enables smartphones to access university information encourages user feedback and input on the addition of new features and ways to improve the service.  http://m.iu.edu

Lynda.com. Positive user reaction to a pilot program with e-learning provider lynda.com prompted IU to sign a three-year contract extension that grants all students, faculty, and staff with fee-free access to the lynda.com Online Training Library.  http://newsinfo.iu.edu/news/page/normal/15046.html

KB wiki. Using the UITS Knowledge Base (KB) Wiki, also known as the IU Knowledge Commons, members of the IUPUI community can provide the KB with comments and content. This project will help determine whether the tools and configuration facilitate contributions to the KB that users value. The outcome will help influence the evolution of the KB.  http://uaps.iu.edu/page/asxml

IT training tips blog. The IT Training Tips blog, providing users with an online forum for sharing, discussing, and commenting on tips and tricks in information technology, makes discussing IT an interactive, community-based activity. Because any user can take part, the blog widens the scope of expertise and experience available to the IU community.  http://itrainingtips.iu.edu/

Evidence of Progress for 2011-2012:

By engaging user input into new IT initiatives, IU increases the likelihood that adopted programs will be effective, and will reach more of the IUPUI population.

The IT Training Tips blog received 91,000 page views in FY 2011-12, up about 400 over 2009-10. IT Training self-study materials, including the blog, achieved a user satisfaction score of 96.2%.

UITS Instructors provided 1,145 hours of Instructor-led IT training in 327 class sessions at IUPUI in the reporting period through STEPS workshops and certificate series, for a satisfaction score of 96%.

The Knowledge Base wiki moved from prototype to Enterprise Confluence.

By making hundreds of courses aimed at varying skill levels available via the web, lynda.com makes learning convenient for a broad cross-section of the IUPUI community.

The IT Training Tips blog received 91,000 page views in FY 2011-12, up about 400 over 2009-10. IT Training self-study materials, including the blog, achieved a user satisfaction score of 96.2%.

The FLC iPad initiative continues to attract more applicants than there are spaces for participants, and will continue its work through the 2011-12 academic year, with a call for new members.

Activities planned for 2012-2013:

UITS will continue to develop services for IU Mobile, based on feedback from users.

Additional FLCs are planned for the health sciences and for Second Life virtual world. The Health Sciences FLC will focus on the use of the iPad in collecting and accessing patient information, in visualizing clinical data, and in understanding complex information and processes.  http://uaps.iu.edu/page/asxml

Human and IT Co-development (Empowering People, Recommendation 8)

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2011-June 30, 2012

Actions taken for 2011-2012:

The achievements in this section share several common qualities. They focus on enhancing effectiveness by hiding complexity while maximizing functionality. They seek to build human engagement with IT as step toward adoption.

IT Training. UITS offers a variety of opportunities for advancing IT skills, from a broad-based program of training classes to internships in general or specific areas. When no-cost access to certain self-study materials from IUware increased usage by 150%, UITS began providing all self-study materials at no cost. A spring 2011 pilot of free workshop enrollments for faculty and staff reflected a six-fold increase in attendance over the same period in 2010. In April 2012, UITS announced that it will continue to provide workshops at no cost for faculty and staff. Other new learning modalities add to the diversity: online webinars offer statewide, one-on-one coaching; blended workshops combine online and hands-on training, online office hours, and self-study material. Leveraging the experience and expertise of the IU community is the crowd-sourced IT Training Tips blog, whose online forum makes discussing IT an interactive community activity.

Faculty Learning Communities (FLCs) provide a safe and supportive environment in which faculty work with their peers to explore, test, and evaluate the pedagogical value of technology such as iPads and Second Life. For more detail, see Section 14.

Support. Question-and-answer services have been expanded through AskIU. A general Information Q&A service from the IU Call Centers is now available through Lync and on IU Mobile. Call Center services are also being leveraged for all campuses, and at IUPUI for Financial Aid.
Leveraging the breadth and depth of expertise in the IU community, UITS piloted the crowdsourcing tool IM an Expert with unified communications and integrated it with AskIU. The platform-neutral tool interconnects members of the IU community for real-time answers to questions on any topic.

Knowledge management is fundamental to information and support services. IT organizations across higher education are developing and disseminating IT information, much of it along parallel tracks. UITS is a leading partner in developing the Kuali Knowledge Management System (KMS), built on and extending IU’s Knowledge base with wikis, crowdsourcing, community-source software, and service-oriented architecture. KMS helps set a foundation for future support projects that could comprise the future Kuali IT Support.

Community input. Student and faculty feedback in e-Text pilots are helping define the functionality users most want, such as annotation and collaboration. The iPad Faculty Learning Community is making important discoveries about iPads as shared, collaborative, classroom devices and their effect on student engagement and learning. Engaging user input in evolving IT resources is a practical way to increase the chances that resources will make sense to users and will meet real needs.

Evidence of Progress for 2011-2012:

By engaging user input into new IT initiatives, IU increases the likelihood that adopted programs will be effective, and will reach more of the IUPUI population.

The IT Training Tips blog received 91,000 page views in FY 2011-12, up about 400 over 2009-10. IT Training self-study materials, including the blog, achieved a user satisfaction score of 98.2%.

[IUPUI professor and students create social work app
http://newscenter.iupui.edu/5654/IUPUI-professor-and-students-create-social-work-app]

[IU continues IT Training workshops at no cost to faculty and staff
http://uitsnews.iu.edu/2012/04/12/iu-continues-it-training-workshops-at-no-cost-to-faculty-and-staff/]

Activities planned for 2012-2013:

E-newsletters. UITS will develop new e-newsletter guidelines that can adapt to changes in the user community. Messaging delivered via a variety of media and multimedia will take into account user role. Information will be delivered at the moment of highest user need or likelihood of action. Ongoing assessment geared at continually improving content and delivery should include leveraging the expertise of Kelley School of Business in performing market analysis, measuring message impact, and creatively marketing news. UITS will also lead in deploying tools to capture evolving metrics and analysis.

IT Infrastructure and Fiscal Planning (Empowering People, Recommendation 1)

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2009-June 30, 2010

Actions taken for 2011-2012:

- The Data Center at IU Bloomington, dedicated November 5, 2009, now houses critical computing, networking and storage equipment that serves all Indiana University campuses via I-Light, Indiana’s high-speed fiber optic network. Connected via I-Light to the data center in the Informatics and Communications Technology Building at IUPUI, it helps ensure continuity of essential and critical IT services for the university community. [http://newsinfo.iu.edu/news-page/nomial/12872.html]

- In July 2010 the university entered into a three-year contract extension with lynda.com, a leading provider of video-based learning, whose 331 courses cover a variety of information technology topics, including the popular Adobe Creative Suite software, for which the university signed a contract earlier in 2009. Microsoft Office, open source software, multimedia, web design, and programming. [http://newsinfo.iu.edu/news-page/nomial/15046.html]

- IU’s agreement with Adobe provides IUPUI with the Adobe Creative Suite software at no cost, including tools for designing across media, web and mobile devices; and for creating video productions, motion graphics, and visual effects. See [http://uitsnews.iu.edu/2010/05/27/adobe/]

- The UITS-developed Intelligent Infrastructure offers clients virtual hosting for IT infrastructure systems and servers, including maintenance, security, and backup services. [http://uits.iu.edu/page/sberry]

- Construction of the Cyberinfrastructure Building (CIB) at IUB continued. When complete, the building will be a sister to the ICTC at IUPUI and a southern anchor of the university’s technology ecosystem in the state
Evidence of Progress for 2011-2012:

- The success of the Intelligent Infrastructure is evidenced by the fact that it now hosts some 1,300 virtual machines (see Financial Stewardship, below.)

- Lynda.com usage gained a 4.75 user satisfaction rating of a possible 5 in the UITS annual User Satisfaction Survey. The past year logged 13,195 unique users. The number of training sessions viewed was 460,341.

- In FY '10, 48,372 Microsoft products were distributed.

- In FY '10 80,000 Adobe products were distributed.

Activities planned for 2012-2013:

CIB construction will continue, with move-in possible by summer or fall, 2011.

IT Infrastructure and Fiscal Planning (Empowering People, Recommendation 1)

Campus Planning Theme:  
Secondary Goals:
Sub Unit:  
Time Frame: July 1, 2011-June 30, 2012

Actions taken for 2011-2012:

The UITS personal cloud service called IUware enables the university community to access IU-licensed software and data storage as an on-demand service—anytime, anywhere, and on any PC, Mac, tablet, or phone regardless of location.

See also: “Financial Stewardship” and “Access to Network Resources”

Evidence of Progress for 2011-2012:

UIITS made progress this year on advancing its IT infrastructure through various means that represent sound fiscal planning and support mobility. Such developments as provisioning software across the university using virtual technology (IUware) advance the IT goal of providing IT resources in abundance. The CIB represents a new standard of environmental and fiscal efficiency, and in continuing the development of the university’s Technology Park East, advances IU’s IT profile.
Activities planned for 2012-2013:

The university will continue to forge agreements with publishers of textbooks to help drive down the cost of textbooks. http://etexts.iu.edu/home.php

UIITS/OVPIT will continue its practice of leveraging relationships with hardware, software, and services vendors in order to provide an IT environment of abundance. As new technologies emerge and as the university IT environment evolves, UIITS/OVPIT will seek new partnerships with vendors and service providers.

Demand for IT resources will increase along with the number of hours per day that users expect access. Abundant resources and unrestricted access are key in empowering people. Goals should be established to ensure 24x7 availability of UIITS services and resources. More strategic sourcing may be required, such as the Internet2 Net+ services or from commercial vendors.

IT Infrastructure and Fiscal Planning (EP Recommendation 1)
Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2010 - June 30, 2011

Actions taken for 2011-2012:

- UIITS is creating a personal cloud service to be called IUAnyWARE, which will enable the university community to access IU-licensed software and digital resources as an on-demand service – anytime, anywhere, and on any PC, Mac, tablet, or smart phone regardless of location. http://opvtpnews.iu.edu/news/page/normal/18827.html

IU researchers will gain from IU’s involvement in the Extreme Science and Engineering Discovery Environment (XSEDE), which is replacing and expanding the TeraGrid project. IU is one of the 16 institutions that is developing what will be the most advanced, powerful, and robust collection of integrated advanced digital resources and services in the world. XSEDE will facilitate transfer of knowledge from XSEDE to UIITS, who aid IU researchers in getting allocations of supercomputer time on the federally-funded national facilities. http://opvtpnews.iu.edu/news/page/normal/19166.html

In response to strategic plan recommendations for reducing the cost of textbooks and providing students with the benefit of today’s digital learning tools, IU continued pilot programs and trials to see what kinds of eTexts and digital materials faculty and students choose to use. Pilots have involved different materials types, companies, publishers, IU campuses, and courses. Spring 2011 town hall meetings engaged faculty, staff and students in discussion opportunities. UIITS staff sit on both eText task forces: the eText Fee Implementation Taskforce and the eText Policy Taskforce, which is chaired by David Lewis, IU Assistant Vice President for Digital Scholarly Communications and Dean of IU Network University Library. The initiative receives support from the Office of the Vice President for Information Technology & CIO. http://etexts.iu.edu and http://etexts.iu.edu/blog/news/continuing-the-conversation.php

Following a favorable University response to a pilot program, IU entered into a three-year contract extension with lynda.com (www.lynda.com), a leading provider of web-based learning, ensuring the university will continue to have access through 2013 to 883 courses and exercise files on a variety of topics, including the Adobe Creative Suite, Microsoft Office, open source software, multimedia, web design, and programming. http://newinfo.iu.edu/news/page/normal/15046.html

The use of the UIITS-developed Intelligent Infrastructure now comprises 72 servers that host some 1,600 virtual machines, representing 24 university departments. http://uiits.iu.edu/page/avwv

Construction of the Cyberinfrastructure Building (CIB) at IU Bloomington nears completion. The CIB is a sister to the ICTC at IUPUI, and a southern anchor of the university’s technology presence in the state. http://it.iu.edu/cib/

See also: “Financial Stewardship” and “Access to Network Resources”

Evidence of Progress for 2011-2012:

- In 2010-11, IUPUI researchers used 7,001,092 CPU hours on the university’s supercomputers, which equates to 27% of the total use for these resources, with a satisfaction score of 95%. The aggregate value of these resources delivered to IUPUI researchers for that period, based on UIITS Activity-Based Costing figures, was $1.2-million.

UIITS made progress this year on advancing its IT Infrastructure through various means that represent sound fiscal planning. Through leveraging agreements with vendors, UIITS provided the IUPUI community with software that can advance IT skills (http://www.lynda.com) and advanced research into and development of a means of provisioning software across the university using virtual technology (IUAnyWARE). Such developments advance the UIITS goal of providing IT resources in abundance. The nearly complete CIB represents a new standard of environmental and fiscal efficiency, and in continuing the development of the university’s Technology Park East, advances IU’s IT profile in the state.

A two-year research study of 22 courses and 1,700 students revealed that 60% of the students surveyed said they preferred the e-textbook to a paper textbook, although this ranged from a high of 84% to a low of 36% depending upon the course. For the full report see http://etexts.iu.edu/files/eText%20Pilot%20Data%202010-2011.pdf

Activities planned for 2012-2013:
The university will continue to forge agreements with publishers of textbooks to help drive down the cost of textbooks. [http://etexts.iu.edu/home.php](http://etexts.iu.edu/home.php)

UIT/S/OUV/PT will continue its practice of leveraging relationships with hardware, software, and services vendors in order to provide an IT environment of abundance. As new technologies emerge and as the university IT environment evolves, UIT/S/OUV/PT will seek new partnerships with vendors and service providers.

**IT-enhanced Teaching and Learning (Empowering People, Recommendation 14)**

**Campus Planning Theme: Teaching and Learning**

**Secondary Goals:**

**Sub Unit:**

**Time Frame:** July 1, 2009 - June 30, 2010

**Actions taken for 2011-2012:**

- The university made significant progress on the strategic recommendation that called for the development of new, flexible learning spaces that encourage collaboration, allow for a variety of learning styles, and provide new software and hardware that supports the work of today’s students, including multimedia.
  
  See also “Financial Stewardship” and “Student Success.”

**Evidence of Progress for 2011-2012:**

- An experimental classroom developed in IT 121 offers collaboration tables, collaborative software and 40” flat-panel displays.
  
  Upgrades to the Student Technology Center in IT 151 include new collaboration environments, multimedia capture devices, and space for mobile technology users.
  
  The learning environment in the BS3000 classroom was enhanced with updated presentation technology, projection screens, and videoconferencing equipment.
  
  IUPUI students can experience advancements in flexible learning spaces in the new rich media area in University Library, a partnership between the University Library and UIT/S. With a full suite of advanced multimedia facilities, the space allows for IT-enabled teaching and learning innovations, and flexible study spaces for individuals and groups. ([http://newsinfo.iu.edu/news/page/normal/1300.html](http://newsinfo.iu.edu/news/page/normal/1300.html))
  
  The university’s partnership in the development of the OpenEast Matterhorn lecture capture system will grant learners flexibility in accessing lectures through YouTube and iTunes at convenient times. ([http://www.birked.edu/news-media/releases/2009/02/2t_matterhorn.shtml](http://www.birked.edu/news-media/releases/2009/02/2t_matterhorn.shtml))

**Activities planned for 2012-2013:**

- The IUPUI Multicultural Center under development will offer a group-study learning environment with seating for collaborations and individuals.

**IT-enhanced Teaching & Learning (EP Recommendation 14)**

**Campus Planning Theme: Teaching and Learning**

**Secondary Goals:**

**Sub Unit:**

**Time Frame:** July 1, 2010 - June 30, 2011

**Actions taken for 2011-2012:**

- Research and discussion of eTextbooks and the continued testing of the iPad’s potential in the classroom by the Faculty Learning Community (FLC) mobile tablets group is preparing the ground for a more digitally enabled classroom that promotes active, collaborative learning. Involve faculty in exploring, testing, and assessing these resources up front will help ensure that measures to adopt and integrate them are developed in service of teaching and learning.


  Members of the IUPUI community learned about and discussed the potential of eTexts and the university’s plan for adopting them at a town-hall meeting in University Library. ([http://iulnews.iu.edu/2011/02/16/etexts-townhall-meetings/](http://iulnews.iu.edu/2011/02/16/etexts-townhall-meetings/))

- Sixteen IUPUI professors are testing uses of the iPad as a shared, collaborative device in teaching and learning, as members of the Teaching and Learning with Mobile Tablets Faculty Learning Community (FLC). Another FLC is planned that will focus on the instructional uses of Second Life, a virtual world setting. ([http://www.idnews.com/news/story.aspx?id=77829](http://www.idnews.com/news/story.aspx?id=77829))

  The new experimental classroom in IT 121, equipped with collaborative technology and configured to encourage group work, brings a new level of engagement to students. ([http://imagine.iu.edu/articles/fall10/one-less-lecture.html](http://imagine.iu.edu/articles/fall10/one-less-lecture.html))

  The renovated videoconference classroom in ES 2101 represents a new, collaborative videoconference classroom environment. Classroom redesign and technology upgrade were supported in part by a Learning Environments Grant, which supports the creation of innovative, engaging formal and informal learning environments that meet the needs of faculty and students. ([http://eti.iupui.edu/programs/lec.asp](http://eti.iupui.edu/programs/lec.asp))

  Using Adobe’s Digital Publishing Suite (DPS), IU’s Libris application makes a number of IU magazines available to the iPad. ([http://newsinfo.iu.edu/news/page/normal/18679.html](http://newsinfo.iu.edu/news/page/normal/18679.html))
Oncourse system performance and stability improved, due in part to migrating the database to Linux and more effective system monitoring. Support was added for integration with IU Mobile. Increased use of the Assignments 2 and Tests and Surveys Beta tools reflects progress in retiring older tools. Along with bug fixes, many other enhancements were added, including the following:

Tests and Surveys Beta:
- Log of student testing activity
- Improved functionality for migrating from Original Test and Survey
- Clearer display of Statistics
- Events Log ability to capture all submissions
- Section Activity Report
- Better integration with Gradebook
- Average record score
- Ability to specify example of model answer
- Student use of rich text editor

Assignments 2
- Event tracking in Site Stats
- Synchronization of changes for gradebook items linked to a single assignment
- Integration with Portfolio Evaluations
- Feedback Icon
- Integration with Turnitin

Messages & Forums
- Date display to unread messages in threads
- Direct linking to forum message posts
- Email notification of forum posts
- Links to attachments in messages that are forwarded to email
- Instructor ability to email thread author
- Ability to respond to messages on iPad/iPod

Portfolio
- Sorting by column in Presentation tool
- “View all” permission in Presentation tool
- Evaluations Integrated with Assignments 2
- Notification option and updated tool description in Matrices & Wizards
- Ability of invited reviewers, who are not members of site, to access attachments.

See also “Human and IT Co-development”

Evidence of Progress for 2011-2012:
- The continued increase in Oncourse adoption and stability is reflected in the fact that use at the beginning of fall semester 2010 reached more than 30-million hits, an increase of 21% for the same period in 2009. Active courses increased by 5%. Oncourse achieved a 91.2% user satisfaction rating in FY 2010-11.

A two-year research study of 22 courses and 1,700 students reveals that 60% of the students surveyed said they preferred the e-textbook to a paper textbook, although this ranged from a high of 84% to a low of 36% depending upon the course. For the full report see http://etexts.iu.edu/files/eText%20Pilot%20Data%202010-2011.pdf

Instances of client use of Centers for Teaching and Learning (CTL) services grew to 15,375 in FY 2010-11, up from 12,520 in 2009-10, and the number of clients grew to 2,772 from 2,125. Current user satisfaction score stands at 96.7%.

Activities planned for 2012-2013:
- Another Faculty Learning Community (FLC) is planned that will focus on the instructional uses of Second Life. http://www.idsnews.com/news/story.aspx?id=77875

The university will continue to assess options and strategies for effective, efficient, and affordable uses of eTextbooks. UITS will continue to examine the many areas of findings from the FLC iPad studies, which are expected to continue in FY 2011-12.

Development of additional experimental, technology-enhanced classrooms is planned or underway. A multipurpose testing facility in BS 3000 is slated to open in August. A collaborative classroom whose design replicates that in IT 121 will open in January 2012. The collaborative design of the latter will replicate that of the facility in IT 121.

8 IT-enhanced Teaching and Learning (Empowering People, Recommendation 14)
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2011-June 30, 2012
Work is underway on a data utility service for teaching and learning materials that provides storage, ease of use, open sharing, and various kinds of control. Echo 360 has been piloted for course capture and devices installed in 19 classrooms on four campuses. Kaltura is being piloted as an accompaniment to enhance the multimedia capabilities of Oncourse, provide ease of use and access control and support video storage, including student content. The pilot will also evaluate the ability to integrate Microsoft SharePoint with the Kaltura repository.

Students using IU Mobile IU benefit from the release of IU’s new Kuali Mobility Enterprise. The move to the industry leading HTML5 standard means that IU information services can be developed once for all mobile devices and can adapt to the size and capabilities of each device.


IUPUI students and instructors experience savings and flexibility with the university’s eText initiative. In spring 2012, 130 class sections comprising 5,300 students took part. Students saved an average $25 per book or online supplement. Texts from Flat World Knowledge, IU Press, MacMillan, McGraw Hill, Pearson, W.W. Norton, and Wiley are available via Courseload software for reading, annotating, and collaborative study on almost any computer, tablet, or smartphone device.

http://etexts.iu.edu

New IT-enabled classrooms and multipurpose testing center:

- The collaborative classroom in ES 1117 provides six group collaboration tables, each with a large flat-panel display, a dedicated CPU, two laptop connections, collaborative software, and portable whiteboards.
- The renovated space in Cavanaugh 008 due for completion in fall 2012 will provide a new general inventory classroom equipped for collaboration, two composition classrooms with collaboration tables with CPUs and a large flat panel display, a GIS classroom with collaborative software, and the IUPUI Writing Center.
- A newly renovated, multipurpose testing facility in BS 3000 opened in August 2011.
- A new IT-enabled Immersive telecollaboration classroom was created in ICTC 121. It features the Cisco Telepresence Active Collaboration Room café-table seating concept, which inspires movement within the space. Automated camera positioning systems provide point-of-view and “life size” camera imagery.

Faculty support. New members have joined the iPad in Teaching and Learning Faculty Learning Community, which will continue to focus on how mobile tablets, specifically the Apple iPad, enhance teaching and learning across disciplines through the 2011-2012 academic year. The Second Life FLC is conducting discussions “in-world” (i.e., within Second Life) on the contributions of virtual learning environments.

Oncourse enhancements

- Migration from the Original Test and Survey tool is underway in preparation for its decommissioning in August 2012. Replacing it is the new Tests & Surveys tool that provides improved instructor control and enhanced functionality.
- Assignments 2 was integrated with portfolio evaluations and offers integration with Turnitin.com for all course sites.
- Oncourse was upgraded to Sakai 2.7, involving performance enhancements throughout the application.
- Site Setup now allows site owners to set an easy-to-remember alias in place of the auto-generated site ID, especially useful for project and portfolio sites.
- New Oncourse gateway page. The redesigned page delivers continuously updated tech news and a one-stop location for information about new features and enhancements.
- For lecture capture, the Kaltura product is being piloted to augment Echo360 with abundant near- and long-term storage, ease of use across a variety of courses, rigorous access control or open sharing control of materials, and simple import/export/reuse in Oncourse.

[IT pioneer Garland Elmore receives President’s Medal

http://ultsnews.iu.edu/2012/01/30/it-pioneer-garland-elmore-receives-presidents-medal/]

Evidence of Progress for 2011-2012:
Activities planned for 2012-2013:

A second, newly renovated, multipurpose testing facility is slated to open in SL 070 in August 2012.

Leadership in Healthcare Education and Delivery (Empowering People, Recommendation 13)

Leadership in Healthcare Education and Delivery (Empowering People, Recommendation 13)

Campus Planning Theme: Research, Scholarship and Creative Activity

Secondary Goals:

Sub Unit:

Time Frame: July 1, 2010 - June 30, 2011

Actions taken for 2011-2012:

The IU Pervasive Technology Institute is partnering with the Indiana Clinical and Translational Sciences Institute and Cook Medical in creating IUConnet (http://i2iconnect.org), which helps new medical breakthroughs reach the marketplace. [http://newsinfo.iu.edu/news/page/normal/14593.html]

UITC also manages and hosts the Indiana CTSI HUB (http://indianactsi.org), the statewide online portal for translational healthcare research. Included are services that support research administration, research funding, clinical trials recruitment and support, research project development and support, community engagement, analytical resources such as GeneGO and GOBIOM, and collaboration services such as Alfresco Share file sharing and REDCap research data management.

Specialized one- and two-year certificate and master's programs offered by the Regenstrief Institute, the IU School of Medicine, and the IU School of Informatics will increase the number of health information technology specialists in Indiana and nationwide. [http://communications.medicine.iu.edu/newroom/stories/2011/11-regenstrief-programs-targeted-to-alleviate-shortage-of-health/]

Evidence of Progress for 2011-2012:

Activities planned for 2012-2013:

Leadership in Healthcare Education and Delivery (Empowering People, Recommendation 13)

Campus Planning Theme:

Secondary Goals:

Sub Unit:

Time Frame: July 1, 2011 - June 30, 2012

Actions taken for 2011-2012:

University security and privacy policies protect confidential health information. The IU School of Medicine developed additional protections to cover information privacy, security, and recovery in the medical arena. All 97 servers managed by Information Services and Technology Management (ISTM) are now housed in IU's Intelligent Infrastructure, and half of the school's servers outside ISTM purview are now located in the data center. A university workgroup, led by the Associate Vice President of Assurance and Public Safety, conducted a security review in March 2012 of all IUSM departments not supported by ISTM. Also in March the HIPAA Privacy and Security Compliance Council was chartered to develop policies and procedures to assess and maintain compliance with HIPAA and HITECH (Health Information Technology for Economic and Clinical Health).

Delivering healthcare depends on sustaining relationships and communication among healthcare practitioners, researchers conducting clinical trials, hospitals, and networks. A network is in place for providing access to electronic medical records. Several initiatives are building connections and fostering communication between IUSM and the IU Health Physicians Group.

Various collaborative initiatives are supporting the transition of IUSM Practice Plans to IU Health and providing opportunities for collaboration. A jointly managed Simulation Center was opened, network access was modified to allow sharing Grand Rounds and seminar series, and a Clinical Trials Management System under IUSM review should be in place by January 2013.

The Indiana Clinical and Translational Sciences Institute (CTSI) will use a $500K National Institutes of Health grant to increase the technical and human resources fighting cancer at IU Health Arnett Hospital in Lafayette, IN. The work is a collaboration of the IU Melvin and Bren Simon Cancer Center and the Oncological Sciences Center at Purdue. [http://newsinfo.iu.edu/news/page/normal/19713.html]

[Software developed by IUPUI students helps physicians

http://newscenter.iupui.edu/5602/Software-Developed-by-IUPUI-Students-Closes-Gap-for-Physicians-Seeking-Radiologists]
Evidence of Progress for 2011-2012:

Activities planned for 2012-2013:

The sale of the Angel learning system to Blackboard has provided an opportunity for the IUSM to replace its standalone Angel system with the university’s enterprise Oncourse system. Additional work will need to be done as the Centers for Medical Education throughout the state evaluate how to deliver course-specific content developed at one center to students at the others.

By January 2013, all ISTM servers will be supported in the IUB and IUPUI Intelligent Infrastructures. This redundancy will allow complete recovery within 24 hours after a catastrophic event at the Indianapolis data center.

Recapturing the Scholarly Record (Empowering People, Recommendation 12)

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2009 - June 30, 2010

Actions taken for 2011-2012:


IU’s membership in the CIC- and University of California-launched Hathi Trust initiative to create a shared digital repository of library collections will provide IUPUI scholars greater access to digitized materials.

Evidence of Progress for 2011-2012:

- By mid-November, the HathiTrust Digital Library will have a full-featured, full-text search service for 4.3 million items. [http://newsinfo.iu.edu/2009/10].

Activities planned for 2012-2013:

- Work will continue on building Hathi Trust holdings and on development priorities.
- UITS will take part in the university’s efforts to explore new models of producing, disseminating, and preserving the scholarly record.

Recapturing the Scholarly Record
Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2010 - June 30, 2011

Actions taken for 2011-2012:

- A new partnership between the HathiTrust Digital Library and the Summon academic search service will bring the searchable text of the HathiTrust’s 8.4-million digital volumes to more than 200 institutions. IU is among the consortium that launched the HathiTrust. [http://chronicle.com/blogs/wiredcampus/hathitrust-makes-text-of-its-digital-library-searchable-through-a-new-partnership/90599]

A new collaborative research center launched jointly by IU and the University of Illinois, along with the HathiTrust Digital Repository, will develop cutting-edge software tools and cyberinfrastructure to enable advanced computational access to the growing digital record of human knowledge. The HathiTrust Research Center will enable open access for nonprofit and educational users to published works in the public domain (as well as limited access to works under copyright) stored within HathiTrust. [http://newsinfo.iu.edu/news/page/normal/18245.html]

Greater access to digital library resources will be made possible through IU’s leadership of the Kuali OLE (Open Library Environment) project, and a $2.38 million Andrew W. Mellon Foundation grant to develop open source software to manage digital collections. [http://newsinfo.iu.edu/news/page/normal/12849.html]

The UITS Electronic Document Storage (EDS) pilot of a document management system combines SharePoint, with its workflow management and metadata tagging features, and KnowledgeLake, with its document-capture capabilities. Current pilot participants are UITS, the Office of the Vice President for Information Technology (OVPIT), and University Counsel. [http://kb.iu.edu/data/basm.html]

Evidence of Progress for 2011-2012:

- IU’s development, with the University of Illinois, and the HathiTrust Digital Repository, of the HathiTrust Research Center (HTRC) is a major step forward enabling advanced computational access to the HathiTrust digital library. The collaborative research center will develop software tools and cyberinfrastructure to enable advanced computational access to the growing digital record. [http://newsinfo.iu.edu/news/page/normal/18245.html]
UITC moved forward with developing SharePoint as an option for workflow management and document storage and retrieval.

Activities planned for 2012-2013:

- IU will continue to contribute to building HathiTrust holdings and developing Kuali OLE, and will continue the Electronic Document Storage (EDS) pilot.
- UITS will continue to take part in exploring new models of producing, disseminating, and preserving the scholarly record.

9) Recapturing the Scholarly Record (Empowering People, Recommendation 12)
Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2011-June 30, 2012

Actions taken for 2011-2012:

IU is in the vanguard of developing solutions for preserving, storing, and curating digital scholarly content.

The IU Libraries/UITC is a founding partner in the Digital Preservation Network (http://digitalpreservationnetwork.org) being developed by more than 30 US research institutions. This initiative will offer a managed solution for large-scale digital preservation that leverages next-generation Internet2 network capabilities.

The Libraries at IUPUI and IUB have hired two new e-sciences librarians to focus on data publishing and curation workflows and policies, working with staff from UITS and the Data to Insight Center.

[IUPUI putting 106 years of black history online]


See also related discussions in Section 15, “Accelerating IT-intensive Research and Scholarship.”

Evidence of Progress for 2011-2012:

Activities planned for 2012-2013:

IU will continue to explore, assess, and develop new models for fiscally sustainable ways of producing, disseminating, curating, and preserving the scholarly record.

8) Security, Privacy, Availability (Empowering People, Recommendation 5)

9) Security, Privacy, Availability
Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2010 - June 30, 2011

Actions taken for 2011-2012:

- UITS deployed a new version of Slashtmp, the facility that allows faculty and staff to securely share files with others within and outside of the university. With this new technology and process collaborators can now securely share files that contain critical data elements such as personal health information.

http://search.iu.edu/

The seventh annual Higher Education Cybersecurity Summit hosted by the IU Center for Applied Cybersecurity Research (CACR) at the University Place Conference Center (UPCC) and Hotel convened many of the Midwest’s leading experts in cybersecurity to discuss the latest in IT security awareness.


New improvements to IU-Notify, including displaying emergency messages on digital signs across the IUPUI campus, are in place and are being developed to improve the scope and speed of communication. http://www.idsnews.com/news/story.aspx?id=79838

IU is one of the only supercomputer centers in the world that has gone through the UIRF mandated risk analysis which enables university researchers to store electronic
personal Health Information (ePHI) on IU’s supercomputers and research storage and database systems. This means that medical researchers can analyze clinical research data on IU supercomputers without first having to “de-anonymize” the data, or make it anonymous. Thus, use of IU’s biggest supercomputers is practical for many researchers, and possible for those who have data that are inherently impossible to de-identify (e.g., pictures of patient faces — one of the sorts of data stored on IU research systems). IU research systems also provide national leadership in the use of federated identities, such as on the Indiana CTSI HUB site that support easy and trusted access to IU’s research IT services.

“Security Matters,” a series of radio spots launched by the Pervasive Technology Institute and the IU Center for Applied Cybersecurity Research (CACR) in partnership with IU public radio station WFIU, alerts IU and members of surrounding communities to cyber threats, and points to information about protection.


UIITS made available to webmasters a Web Site Privacy Notices template and offered infoshares to help with implementation. An archived recording of the infoshare is available at https://protect.iu.edu/privacy/policies/websites.

Evidence of Progress for 2011-2012:

- UIITS routinely communicated with the IUPUI community about best practices in security through Newsbit, Informational posters, participation in annual research and faculty orientation events, specific technology training events, and orientation materials. UIITS established the Protect IU Blog to post timely reminders and tips about Internet and computer security. (http://protect.iu.edu/blog)

Activities planned for 2012-2013:

UIITS will continue its program of outreach and education to increase awareness of security and privacy, and will provide appropriate training at regular intervals for those who interact with sensitive data and resources.

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2011 - June 30, 2012

Actions taken for 2011-2012:

The university policy for protecting technology devices, IT-12, is being revised and updated to include minimum standards for protecting desktop and mobile devices and for protecting institutional data. Mobile devices such as smartphones, tablets, laptops, and removable media present an increased risk. The Mobile Security Committee representing UIITS, the University Information Policy Office, and the School of Medicine drafted a report that made recommendations for improving mobile security at IU. Implementation of many of its recommendations is being planned.

The Protect IU website (protect.iu.edu) serves as a central portal for comprehensive information about safety, security, privacy, and policy; general and IU-specific news, blogs, and tips; and the foundations, structure, and oversight of IU’s privacy and security program. The site augments the IU-Notify emergency notification system lately improved with displays of emergency messages on digital signs across campus to improve the scope and speed of communication. Other means of communication include UIITS e-newsletters, Informational posters, specific technology training events, and the Protect IU Blog (http://protect.iu.edu/blog).

Two annual national events provide occasions to build awareness. The 2012 Data Privacy Day event, broadcast to all IU campuses, provided an overview of FERPA with real-life scenarios aimed at building understanding of how to comply with FERPA at IU. The “12 Domains in 12 Months” is an awareness campaign aimed at building understanding about such areas of information security and privacy as risk assessment, asset management, and compliance. The campaign encourages reviewing one domain per month, studying its resources, and measuring efforts towards meeting its objectives.

Reaching out to practitioners, managers, and policy makers is the IU-hosted annual Higher Education Cybersecurity Summit, promoting IT security awareness of current issues. In hosting the SANS Institute, a provider of IT security training, UIITS extends discounted training to state and local law enforcement, nonprofits, and K-12.

In the domain of business continuity, a project is underway to encourage 80% of all IU departments to complete business continuity plans by October 2013. Two Emergency Management for Higher Education (EMHE) grants from the US Department of Education help support education, tools, and publicity.

Evidence of Progress for 2011-2012:

UIITS routinely communicated with the IUPUI community about best practices in security through Newsbit, Informational posters, participation in annual research and faculty orientation events, specific technology training events, and orientation materials. UIITS established the Protect IU Blog to post timely reminders and tips about Internet and computer security. (http://protect.iu.edu/blog)

Activities planned for 2012-2013:

UIITS will continue its program of outreach and education to increase awareness of security and privacy, and will provide appropriate training at regular intervals for those who interact with sensitive data and resources.
World-class Staff

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2010 - June 30, 2011

Actions taken for 2011-2012:

- At the 15th annual Statewide IT Conference in September 2010, IU's IT professionals, researchers, faculty, and students heard keynotes by VP for IT and CIO Brad Wheeler, Steven Berlin Johnson, and Ze Frank. They also attended sessions on many aspects of IT. [http://uitspress.iu.edu/news/page/normal/15592.html](http://uitspress.iu.edu/news/page/normal/15592.html)

The IT Leaders Program, which offers applied learning of leadership concepts and relationship building practice, is an ongoing opportunity for professional development. Participants come from UITS and schools and departments from all university campuses. [http://morassociates.com/indiana/Indiana2_home.html](http://morassociates.com/indiana/Indiana2_home.html)

See also “Environmental Stewardship.”

Evidence of Progress for 2011-2012:

*Computerworld* magazine's recognizing Indiana University, for the second year in a row, in its “100 Best Places to Work in IT 2011” report acknowledges UITS efforts to provide a high quality of institutional life. IU is one of only five higher education institutions on the list. [http://newsinfo.iu.edu/news/page/normal/18967.html](http://newsinfo.iu.edu/news/page/normal/18967.html)

The IT Leaders Program has graduated nearly 100 participants since it began in April 2007. Graduates of the program developed the Emerging Leaders Boot Camp, the third of which was held at Bradford Woods, June-July, 2011. It brought together 24 IUPUI and IUB UITS colleagues for presentations and projects.

The Cyberinfrastructure Building (CIB) at IU Bloomington is expected to be open to IT staff in August 2011. It will provide IT staff at IUB and IUPUI with space and technologies that encourage collaboration. [http://newsinfo.iu.edu/news/page/normal/19186.html](http://newsinfo.iu.edu/news/page/normal/19186.html)

Activities planned for 2012-2013:

- Additional IT Leadership Program sessions are planned for IT staff in 2012.

Planning for the 16th annual Statewide IT Conference scheduled for September 2011 is underway. Keynote speakers will include IT VP & CIO Brad Wheeler, Brian McDonald of MOR Associates, and Dr. Mimi Ito of the University of California, Irvine.

World-class Staff (Empowering People, Recommendation 7)

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2011–June 30, 2012

Actions taken for 2011-2012:

The IT Leaders Program, which offers applied learning of leadership concepts and relationship building practice, is an ongoing opportunity for professional development. Participants come from UITS and schools and departments from all university campuses. [http://morassociates.com/indiana/Indiana2_home.html](http://morassociates.com/indiana/Indiana2_home.html)

At the 15th annual Statewide IT Conference in September 2011, IU’s IT professionals, researchers, faculty, and students heard featured speakers VP for IT and CIO Brad Wheeler, research scientist Debby Herbenick, leadership guru Brian McDonald and cultural anthropologist Mimi Ito. [http://uitsnews.iu.edu/2011/10/05/watch-statewide-It-videos/](http://uitsnews.iu.edu/2011/10/05/watch-statewide-It-videos/)

Evidence of progress:

IU is an acknowledged leader in several areas of research into IT. Effective publicity can leverage IU’s distinctive strengths as tools for attracting talented staff or partners in leadership opportunities. That leadership then builds on itself. UITS has teamed with University Communications and built relationships with local and national news media to ensure IU's news releases, podcasts, interviews, and publications about these IT achievements receive the widest possible media attention.

Selected areas of IU’s research into IT stand out for repeatedly gaining media attention: Network engineering and research, supporting Big Data with SDN and OpenFlow over 100 Gbps networks; resources for advanced research computing, including XSEDE, FutureGrid, Linked Environments for Atmospheric Discovery (LEAD), the National Center for Genome Analysis Support (NCGAS), and the Center for Research in Extreme Scale Technologies (CREST); community source software including these Kuali systems: Kuali Mobility Enterprise, Kuali Coeus, Kuali Knowledge Management, Kuali OLE for the Enterprise, and Kuali IT Support; and support for digital
content, including HathiTrust and eText initiatives. These have been featured in such leading media as AP, UPI, The New York Times, the Chronicle of Higher Education, ABC and CBS News, PC Magazine, and Campus Technology.

Evidence of Progress for 2011-2012:

Activities planned for 2012-2013:

To retain valuable market skills and ensure IT can meet its commitments to supporting the IU mission, UITS must find ways to reward outstanding and mission-critical performance, either through lump-sum compensation or by implementing the Compensation System Initiative and its provisions for certain in-range salary increases. It is to IU’s advantage for UITS to continue to make clear the opportunities IU and UITS offer: areas of IT leadership, cutting-edge tools, international collaborations, a culture of innovation, and so on.

Fiscal Health

Reallocation Plan

Other Question(s)