Mission

University Information Technology Services (UTS), 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. The information technology environment that UITS provides comprises tools 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 the IU Information Technology Strategic Plan, available at http://www.indiana.edu/~ovpt/strategic/. Activities reported here reflect the goals, objectives, and implementation activities of this plan for the 2004-05 fiscal year.

Goals and Objectives

Access to Network Resources

Access to computing and network services, on and off campus (Recommendation 2, IU Information Technology Strategic Plan)

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2007 - June 30, 2008

Actions taken for 2007-2008:

IU upgraded communications services to increase efficiency and ease of use, and created new services that offer new functionality. With the upgrade to Exchange 2007, IUPUI users experience a new Outlook Web Access interface with document access, out-of-office features, and instant search. Exchange 2007 supports Windows Mobile 6.0 devices, provides 500BM default mailboxes, and integrates with the UniCom project.

The UniCom project is designed to improve productivity and collaboration. It will converge the formerly disparate services of voice, video, audio, instant messaging, file sharing, calendaring, and data and deliver them to the desktop in one consistent user interface.

IU is partnering with Nortel and Microsoft to UITS developed a new notification system that can reach faculty, students, and staff on all eight campuses within minutes. The "IU-Notify" initiative is part of the university-wide mechanism for communicating everything from weather delays to more urgent news. The system will help manage emergency situations via up-to-date communication, which helps minimize the spread of misinformation, provides direction, and maintains order.

I-Light continues to benefit inter-campus connectivity and connectivity to the commodity Internet. The I-Light network, Indiana's statewide optical fiber network for higher education, continued to grow with 15 major network connection points or nodes at Indianapolis, Anderson, Muncie, Marion, Fort Wayne, South Bend, Gary, West Lafayette, Terre
Haute, Richmond, Sellersburg, Vincennes, Evansville, Bloomington, and Kokomo. Capacity utilized climbed by 51%.

The Wireless Project implementation stage is complete, with wireless coverage available in all academic facilities at IUPUI and installations in campus apartments, medical facilities, and remote locations at IUPUI. The number of wireless access points increased by 5%, to 602.

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Evidence of Progress for 2007-2008:

A long-term coordinated and coherent communication infrastructure plan will result in higher bandwidth allowing for innovation in research and instruction; support for voice, video, and data over a converged network; improved economics of a converged network; improved management capabilities; and enhanced security and policy capabilities.

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Activities planned for 2008-2009:

A 10-year comprehensive technical and financial plan is under development for IUB and IUPUI communications infrastructure for the delivery of voice, data, video, and multimedia. The plan should cover the wire plants, wire closets, wireless access capabilities, switches, and routers.

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Community Engagement

Informatics and Communications Technology Complex

**Campus Planning Theme:** Civic Engagement

**Secondary Goals:**

**Sub Unit:**

**Time Frame:**

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Actions taken for 2007-2008:

The technology-rich Informatics and Communications Technology Complex (ICTC) at IUPUI provides essential tools for scientific research, technical support, teaching, and learning that will help build a stronger economy in Indiana by supporting university and statewide IT initiatives.

IBM and IU entered a public-private partnership to establish the Future Technology Solution Design Center in the ICTC at IUPUI to develop new applications based on cell processor technology. IBM’s $2M investment in the Future Technology Solution Design Center in the ICTC represents an important public-private partnership for developing products that use advanced cell chip technology, especially useful in medical imaging and research. The IUPUI location will help bring people and technology together to help advance Indiana.

IU’s work with geographic information system (GIS) software won a Special Achievement in GIS Award at the 27th Annual ESRI International User Conference.

Through IU’s partnership with the Indiana Office of Technology, IU provides backup data center space and network connectivity to the state through the data center at IU Bloomington and the I-Light high-speed network. This partnership provides critical redundancy, saves money for the state, and serves as a basis for further partnership and collaboration between IU and the state.

Throughout the year, UITS worked with university academic and service units at such community events as the Indiana
Evidence of Progress for 2007-2008:

The Informatics and Communications Technology Complex continues to draw thousands of visitors each year to the IUPUI campus, including legislators, technology professionals, business professionals, international visitors, undergraduate and graduate students, and school-age children.

Activities planned for 2008-2009:

The ICTC will continue to be a site for engaging the community of IT. Videos to facilitate tours of the IU Global Research Network Operations Center and the Advanced Cyberinfrastructure Facility are available to communicate technology initiatives to visitors from the sciences, government, and private industry.

- Digital Libraries and the Scholarly Record
  (Recommendation 9 of the IU Information Technology Strategic Plan)
- Convenient and reliable access to a comprehensive and coordinated collection

**Campus Planning Theme:** Best Practices

**Secondary Goals:**

**Sub Unit:**

**Time Frame:**

Actions taken for 2007-2008:

As a member of the Committee on Institutional Cooperation (CIC), IU is a partner in the CIC-IT collective agreement with Google to digitize the most distinctive collections across all its libraries, up to 10 million volumes, as part of the Google Book Search project. One of the largest cooperative actions of its kind in higher education, the library digitization agreement will digitally scan and make searchable public-domain and in-copyright materials according to copyright law. For IUPUI library patrons, the agreement means vastly increased access to library collections across the Big Ten and Chicago. It also means increasing IU’s digitization efforts on a scale otherwise impossible, saving the university millions of dollars and accomplishing in a few years what would otherwise have taken decades.

The IdeA (IUPUI Digital Archives) open access archive welcomes submissions of preprints, working papers, theses, dissertations, student capstone projects, and more. It serves as an open-access archive for IUPUI and its related research communities and as an outlet in scholarly communication. It employs the DSpace open source software (freeware) created by MIT. Materials included in IdeA will receive wider dissemination than if they depended on publication in scholarly journals. See https://idea.iupui.edu/dspace/.

The IU IN Harmony project, with support from an Institute of Museum and Library Services grant, provides scholars with some 10,000 digitized pieces of sheet music. Content includes an open source sheet music cataloging tool and a publicly searchable database of music by Indiana composers, arrangers, lyricists, and publishers. The site provides access to the collections of the Indiana University Lilly Library, the Indiana State Library, the Indiana State Museum, and the Indiana Historical Society. See http://www.dlib.indiana.edu/projects/inharmony/

Evidence of Progress for 2007-2008:
The number, variety, and extent of digital library projects proposed and funded will be an important measure of progress and effectiveness.

Activities planned for 2008-2009:

The Digital Libraries Project will continue to leverage IT Strategic Plan resources as matching contributions for future digital library research funding proposals.

Institutional Commitment: Faculty and Staff Engagement
(Recommendation 3, IU Information Technology Strategic Plan)

Faculty engagement and incentive programs

Campus Planning Theme: Teaching and Learning

Secondary Goals:

Sub Unit:

Time Frame: July 1, 2007 - June 30, 2008

Actions taken for 2007-2008:

UITS worked to develop closer dialogue with the IU community and to help UITS target support services more closely to faculty needs. New leadership appointments, including new faculty positions, will provide linkages between faculty and UITS.

In 2007-08 all faculty were migrated to Oncourse CL, IU’s online collaboration and learning environment that supports teaching and learning, committees, projects, research, and portfolios for the Indiana University community. Two new faculty positions provide a bridge between UITS and faculty in their use of Oncourse, and encourage faculty input.

• Helping faculty explore using IT tools in teaching and learning is the faculty liaison with the Learning Technologies division. With the Associate Dean for Learning Technologies, the faculty liaison engages faculty in discussion of Oncourse CL and other teaching and learning tools.

• To support faculty in developing good practices in the use of Oncourse CL is faculty fellow for Oncourse CL.

• The Director, Academic and Faculty Services, in the Teaching and Learning Division, directs the work of the campus centers for teaching and learning and IT Training and Education and chairs the Functional Requirements Committee (FRC) for Oncourse CL and ePortfolio, and the Support and Implementation Team (SIT) for Oncourse CL.

• Providing faculty with more robust support in using classroom technology across IU is the new Manager of UITS Classroom Technology Services, whose group consolidates the expertise of IUB and IUPUI staff. This group will help faculty benefit from the installed, standardized classroom technology package now available in all general-purpose classrooms on IU campuses.

• To support faculty in instructional development projects is the UITS Media Design and Production, which combines the former Media Production organization at IUB and Digital Media Services at IUPUI.

Through the UITS podcasting initiative, instructors can use the Oncourse CL podcasting tool to create and distribute multimedia content. Integration with iTunes U allows broader access to faculty podcasts. The IU Podcast Portal allows browsing of public IU podcasts. The Faculty iPod Program provides support for faculty interested in exploring the effective use of podcasting in teaching and learning.
Evidence of Progress for 2007-2008:

The positions of Associate Dean for Teaching and Learning Information Technologies (TLIT) and Faculty Liaison for TLIT have helped increase direct faculty engagement in discussion about Oncourse CL and other technology tools related to teaching and learning. Each semester, more university faculty use Oncourse CL.

Activities planned for 2008-2009:

In continued support of faculty using IT and Oncourse CL, new faculty and staff appointments described above will help build skills and understanding, and will strengthen the partnership between IT users and the IT organization.

- Staff and faculty support (Actions 4, 8, 10, 16, and 23 of the IU Information Technology Strategic Plan)

  Campus Planning Theme: Teaching and Learning
  Secondary Goals:
  Sub Unit: None
  Time Frame: July 1, 2007 - June 30, 2008

Actions taken for 2007-2008:

The extended team of IT staff at UITS and in schools and departments offers IT help and support via communications and support structures that bring together support providers allied with UITS, departments, and schools.

The UITS/LSP partnership provides user feedback on IT services and support, and on the impact of UITS service decisions. Helping to strengthen this partnership, and building stronger ties with campus technology leadership, is the new Technology Managers’ Council. This group of LSPs and campus IT directors and managers will represent their administrative units and schools in making strategic decisions about improving IT services and support. This group will also advise the Associate Vice President (AVP) of Support. Helping Local Support Providers (LSPs) provide departments with better services is the new LSP Online tool where LSPs share expertise and solve problems with peers via forums, blogs, downloads, and RSS feeds. This resource won a “Best of Category” award in the 2007 competition hosted by the Association for Computing Machinery (ACM) SIGUCCS, the special interest group of university IT support professionals.

The AVP of Support, the Associate Dean for Learning Technologies, and managers and directors in Support and Learning Technologies visited all schools at the core campuses over the summer. These discussions touched on IT initiatives planned for fall, and offered a forum for deans and IT directors to suggest ways in which UITS could better support IT in their units.

The new Executive IT Support team provides 24/7 broad-spectrum IT support for the IU president, VPs, Board of Trustees, and AVPs, IU Counsel, and others. Services encompass everything from configuring Blackberries to providing audio- and video-conferencing support for executives in the US and abroad. This year the program supported 169 users and some 460 devices.

Evidence of Progress for 2007-2008:

Users report high levels of satisfaction with self-study courses. Usage data for 2007-2008 will be available through the
Activities planned for 2008-2009:

Continued training and certification will continue to be provided to technical support and consulting staff who support technology use in departments. This will be done through professional certification programs, locally developed workshops, and self-paced learning opportunities. Attention will be given to developing opportunities for training tailored toward user needs.

Research: Computation, Communications, Collaboration (Recommendation 5 of the IU Information Technology Strategic Plan)

Continue a commitment to high performance computing and computation, so as to contribute to and benefit from initiatives to develop a national computational grid

Campus Planning Theme: Research, Scholarship and Creative Activity

Secondary Goals:

Sub Unit:

Time Frame: July 1, 2007-June 30, 2008

Actions taken for 2007-2008:

IU continues to contribute to an international structure for grid computing, extending the reach of IU researchers and encouraging collaboration. As coordinator of the Open Science Grid (OSG), and supported by a 5-year, $30M NSF and US Department of Energy Office of Science award, IU contributes to an effective distributed facility for researchers from a variety of scientific disciplines. The National Science Foundation in August '07 awarded an IU-led team $1.96M to create a "Polar Grid" of computers to help scientists understand the current and future state of polar ice sheets and the relationship between rising sea levels and global climate change. In October '07, IU was awarded a $1.69M NSF grant for "Open Grid Computing Environments (OGCE) Software for Science Gateways." Pervasive Technologies Lab staff and others will develop software for creating web gateways to online resources, of special help to non-experts in high performance or grid computing. IU is providing the US research community the TeraGrid considerable life sciences data through the IU Centralized Life Sciences Data (CLSD) service. In March, through a new partnership among IU, Purdue, IBM and the Indiana Economic Development Corporation (IEDC), a new supercomputer is being used to support Indiana's economic growth. Officials from both universities and the IEDC will help target businesses that that could use the system to develop new products, solve new problems, and improve profitability.

Evidence of Progress for 2007-2008:

The UITS User Survey for IUPUI reveals high levels of user satisfaction for high performance computing resources, including an overall near 94% satisfaction rate.

Activities planned for 2008-2009:

IU and partner institutions are planning to deploy customized computers to Antarctica to study the world's shrinking ice sheets. In this NSF-funded Polar Grid project, customized computational resources will allow scientists on site and at remote locations to process field data. New storage platforms recently installed will support collaborative research programs across the TeraGrid and other high-speed networks. IU and Purdue will continue to work together to help the state grow its bio- and life-sciences industries, improve health, and increase the number of physicians trained in Indiana.
Provide advanced data storage and management services for research

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2007-June 30, 2008

Actions taken for 2007-2008:

Leveraging $1.72-million in NSF support, UITS funded the data capacitor, a major contribution to data-intensive computing at IU. IU’s data capacitor helps IU researchers manage the massive volume of data generated by advanced digital instruments, and is a foundational part of IU’s data-intensive computing resources. It provides hundreds of terabytes of fast temporary storage, supporting researchers in astronomy, bioinformatics, x-ray crystallography, proteomics, high-energy physics, library sciences and informatics, and computer science. The data capacitor helped an IU-led team win first place in the international competition for leading-edge, high-bandwidth computing applications at SC07, the world’s largest international conference for high performance computing. The team included partners from the Technische Universitaet Dresden, Rochester Institute of Technology, Oak Ridge National Laboratory and the Pittsburgh Supercomputing Center.

Evidence of Progress for 2007-2008:

The IT User Survey for IUPUI reveals consistently high rates of user satisfaction for massive data storage services, near 91%.

Activities planned for 2008-2009:

More than 350 Terabytes (TB) of new storage platforms to support collaborative research projects mounting the Lustre file system across the TeraGrid and other national high-speed networks will help meet significant demand for easier and faster access to stored research.

Provide broad support for basic collaboration technologies and begin implementing more advanced technologies

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2007-June 30, 2008

Actions taken for 2007-2008:

UITs continued to build IU’s IT research resources through leveraging partnerships, sharing resources with other institutions, and securing grants from funding agencies. IU’s supercomputing and massive data storage systems help sustain faculty exploration and research that is dependent on high performance research and communications. They also help attract top faculty and graduate students to IU. Big Red enables scientific innovations at IU and via the TeraGrid. IU doubled the size of Big Red through an agreement with IBM, who provided three computational scientists to help scholars take advantage of the supercomputer. The 2-TFLOPS AVIDD cluster was replaced with the 7-TFLOPS Quarry supercomputer cluster, which provides faster Intel hardware for research and general Unix computing. Quarry replaced the Steel cluster, which was retired in June 2008. The Research Database Complex (RDC) was migrated to
faster hardware. The upgraded Massive Data Storage System (MDSS) now provides 52 tape drives, 500 GB of tape capacity, and 170TB of disk cache. Data are automatically mirrored across the IUPUI and IUB campuses over I-Light, protecting irreplaceable data from loss. The MDSS provides a competitive advantage for grant seekers who need significant storage. UITS leverages strategic alliances with corporate partners to research applications and products that rely on advanced technologies. The strategic alliance between IU and Sony will focus on applications for high-definition broadcast and media production technologies. Sony and IU will explore academic uses of Sony products and new products to meet specific needs. IBM’s $2M investment in the Future Technology Solution Design Center in the ICTC represents an important public-private partnership for developing products that use advanced cell chip technology, especially useful in medical imaging and research.

Evidence of Progress for 2007-2008:

The UITS annual User Survey reports high levels of satisfaction at IUPUI with advanced technologies services, including 93% satisfaction with high performance computing clusters/distributed memory; 90.8% with Research Storage; and overall 94.7% satisfaction with statistical and mathematical consulting.

Activities planned for 2008-2009:

Continued support for research collaborations will continue through expansion of storage space, including the new 350TB of new storage platforms dedicated to projects that mount the Lustre file system across the TeraGrid network and other high-speed networks. Work will continue on initiatives that stand to spur economic growth in the state of Indiana, including the partnership with the Indiana Economic Development Corporation. The Polar Grid Project, funded by $196M in NSF funds, will help accelerate research into and understanding of the world’s shrinking polar ice sheets.

Security, Privacy, Intellectual Property
(Recommendation 10 of the IU Information Technology Strategic Plan)

Campus Planning Theme:
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2007-June 30, 2008

Actions taken for 2007-2008:

The free and secure exchange of information is a prerequisite in academe. In supporting that freedom IU continues to refine its own security practices while helping to advance security awareness and best practices locally and nationally. In efforts to improve security online security online and on campus, UITS continued its campaign to encourage the IU community to switch from easily cracked passwords to passphrases, with reminders in e-news, on plasma screens, and via posters and mailings. The "IU-Notify" emergency communications system will communicate updates via phone calls to office, local home and/or cell phones, and to university and external email accounts. IU-Notify joins other communications systems to be deployed for urgent communications, described at the IU emergency preparedness site at http://www.indianauniversity.info. IU has joined InCommon, the first nationwide US identity management federation for higher education. InCommon eliminates the need for researchers, students, and educators to maintain multiple, password-protected accounts by providing single sign-on for online content and services. IU continued to promote best practices in IT security among professionals, through public outreach, and through a corporate alliance. The IU Center for Applied Cybersecurity Research (CACR) hosted the 2007 Indiana Higher Education Cybersecurity Summit at the IUPUI University Plaza Conference Center with speakers from Purdue University, University of Notre Dame, and Virginia...
University Place Conference Center, with support from Purdue University, University of Notre Dame, and Valparaiso University. Information assurance and other IT professionals and faculty from Indiana universities and colleges and other public institutions shared best practices, research, and trends in cybersecurity. The IU Research and Education Networking Information Sharing and Analysis Center (REN-ISAC) and Microsoft have formed an alliance to enhance network security measures in higher education. The alliance will extend Microsoft’s Security Cooperation Program to include higher education institutions.

Evidence of Progress for 2007-2008:

Increasing awareness of and compliance with university and national IT security standards and practices will indicate that the various security campaigns, news stories, and security-targeted events are being successful in instilling best practices in IT security across campus populations.

Activities planned for 2008-2009:

On-campus activities include the following: A new web site collects security tips at keepITsafe.iu.edu. A new wireless network, IU Secure, does not require VPN and is based on a new authentication framework that is more stable and secure. A new source of protection against hacking is new software called Identity Finder, which locates sensitive data. The university IU-Notify alert system is enabled to provide emergency alerts via phone, email, cell, and text message.

- Solid Foundation of IT Infrastructure and Sound Fiscal Planning (Recommendation 1, IU Information Technology Strategic Plan)
- Solid Foundation of IT Infrastructure and Sound Fiscal Planning (Recommendation 1, IU Information Technology Strategic Plan)

Campus Planning Theme:
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2007-June 30, 2008

Actions taken for 2007-2008:

In 1999, Indiana University set the goal of implementing a fully-funded lifecycle replacement model for information technology. IU is the first large, public, higher education institution in the nation to have achieved that goal. The accomplishment has enabled the university to leverage buying power and negotiate excellent pricing for hardware and software, a benefit that has also extended to IU faculty, students, and staff for personal purchase. Since deployment of the lifecycle funding model, estimates indicate the university has saved more than $15 million above the standard educational pricing through negotiated hardware prices, and more than $111 million through software agreements. The accomplishment has greatly enhanced faculty and student opportunities to make full use of information technology for learning, instruction, administration, and research. Windows Vista, the new Microsoft operating system, featuring the Aero user interface, is available to students, faculty, and staff at no or steeply discounted prices. Vista on DVDs is available at campus bookstores for a nominal charge.

Evidence of Progress for 2007-2008:

Success of this initiative is evident in the continued savings realized by the university and by the durability of the initiative.
itself, over the past 10 years.

Activities planned for 2008-2009:

The university will continue its relationships with preferred vendors who offer better-than-commercial pricing on the fundamental IT tools. The purview of lifecycle funding will be examined as the second IT Strategic Plan is strategized for implementation. The plan calls for members of the IU community to receive IT equipment that more closely accommodates the kinds of work they do.

Support for Student Computing
(Recommendation 8 of the IU Information Technology Strategic Plan)

A model for student technology support

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2007 - June 30, 2008

Actions taken for 2007-2008:

A new position of Associate Vice President (AVP) for Support recognizes the fundamental role IT support plays in enabling the student community to use IT effectively in their academic work and university lives. Students can receive information about UITS systems and services of interest to them on their desktops through the improved IT Notices, which they can customize by user preference. Using ITHelpLive, Windows users can receive IT help in real time from a UITS consultant, who can, in some cases, offer remote assistance (see https://ithelplive.iu.edu/). IU’s Knowledge Base (KB) hosted more than 18-million hits, and the Online Support Environment hosted some 7-million accesses. Students have access to lower-cost technology tools through UITS partnership agreements with software and hardware vendors. The renewed IU-Microsoft agreement provides students some of Microsoft’s most popular products at no cost from IUware Online, or at low cost from campus bookstores. A new strategic alliance between IU and Sony Electronics will allow students, faculty, and staff on all IU campuses, as well as alumni, to take advantage of special prices on select Sony consumer electronics products, including HD broadcast and production products, such as studio and field cameras, the XDCAM HD line of optical disc-based camcorders and decks, and more. IUPUI students enjoyed a wider choice of email systems this year when UITS added two new hosted email options — Imail, powered by Microsoft, and Umail, powered by Google. These provide Web 2.0 features, including personal web space, calendar, and blogs, and increased email storage space up to 100MB per student.

Evidence of Progress for 2007-2008:

In 2007, the IT Support Center located at IUPUI and IUB received 4,977 walk-in contacts; 48,590 email contacts; and 38,561 phone contacts; and 6,470 ITHELPLive chat sessions. IT Training and Education offered 380 class sessions at IUPUI. The Knowledge Base logged more than 18 million hits during the year.

Activities planned for 2008-2009:

The new Student Awareness Group seeks to improve student awareness and hence usage of IT tools, resources, services and support. With presences at IT Resource Fairs, campus fairs, and new student orientations, and overseeing
many student-oriented communications, the group provides a continual student perspective on the evolving IT landscape at IU. New email systems will continue to offer students more flexible and robust email services.

Teaching and Learning: Content, Access, Distributed Education (Recommendation 4, IU Information Technology Strategic Plan)

Cost and quality analysis for classroom technology

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: July 1, 2007 - June 30, 2008

Actions taken for 2007-2008:

This objective focuses on analyzing costs and quality for providing and supporting instructional technology at IUPUI. To date, a complete analysis of costs by classroom building at IUPUI has been prepared and projected through 2010. A pilot launch of a redesigned model for supporting instructional technology at IUPUI was begun in 2004. The goal is to reduce or at least contain costs related to providing mobile technology support in classrooms while maintaining the highest levels of service. This new model will create a more holistic response to classroom technology support. It will permit the ongoing lifecycle replacement of classroom technology, and with the implementation of the campus wireless network, informal learning spaces will be addressed. Through the UITS podcasting instructors at IUPUI can use the Oncourse CL podcasting tool to create and distribute multimedia content. Integration with iTunes U allows broader access to faculty podcasts. The IU Podcast Portal allows browsing of public IU podcasts. The Faculty iPod Program provides support for faculty interested in exploring the effective use of podcasting in teaching and learning.

Evidence of Progress for 2007-2008:

To date, multiple mobile PC carts have been assigned to school-based technology support providers for deployment to departmental classrooms. This has reduced the need for mobile delivery of those items in those areas. Additional data for 2006-2007 will be available through the UITS Finance Office, Cost and Quality Services Report, http://uits.iu.edu/scripts/ose.cgi?apjw.ose.help#cost.

Activities planned for 2008-2009:

Work will continue in deploying the new model for supporting instructional technology in classrooms and maintaining the highest service levels.

Digital media and web development (Actions 13, 14 and 20 of the IU Information Technology Strategic Plan)

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: July 1, 2007 - June 30, 2008

Actions taken for 2007-2008:

The Media Design and Production service group comprises the former Media Production organization at IUB and Digital Media Services at IUPUI. It specializes in web, digital audio and video, CD and DVD production, and media conversion and duplication. The group offers creative and technical design in collaboration with UITS Data Management Services.
Evidence of Progress for 2007-2008:

A steady influx of projects and high user satisfaction levels will be among the primary indicators of success.

Activities planned for 2008-2009:

Media Design and Production will continue to provide the university community with an in-house production service specifically attuned to the requirements, logistics, and policies for presentation of multimedia in the IU Information Technology environment.

Evaluation and assessment (Actions 24, 25, and 26 of the IU Information Technology Strategic Plan)

**Campus Planning Theme:** Teaching and Learning  
**Secondary Goals:**  
**Sub Unit:** None  
**Time Frame:** July 1, 2007 - June 30, 2008

Actions taken for 2007-2008:

In 2002, the university adopted a strategy that supports assessment through the development and implementation of an electronic portfolio (ePortfolio) application. As part of the IU learning environment strategy, IU joined the Open Source Portfolio Initiative (OSPI) to develop the ePortfolio in open source code. The ePortfolio toolset utilizes the Sakai framework as a means to implement the project allowing the application to be used independently or implemented as a rich toolset in the Oncourse Collaboration and Learning environment (Oncourse CL). Integrated with the 2.4 release (June 2007) of ePortfolio is the Goal Management Tool (GMT). Using the GMT, goal mapping is now possible from the individual student to program and institutional levels.

Evidence of Progress for 2007-2008:

With the GMT, students will have a comprehensive overview of their educational experience and be able to present and customize that overview to various audiences. Integration with the larger Sakai framework will present opportunities for other enhancements.

Activities planned for 2008-2009:

Continued development of the GMT will provide significant enhancements for rich data mining as it relates to assessment and accreditation needs. ePortfolio development will focus on achieving specific requirements in offering new methods for the assessment of teaching and learning.
Excellence in classroom instructional technology (Actions 21 and 22 of the IU Information Technology Strategic Plan)

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: July 1, 2007 - June 30, 2008

Actions taken for 2007-2008:

Progress continued in implementing a new service model that reflects the significant reduction in mobile equipment delivery and the increase of higher-end technical support for permanently installed technology classrooms. All classroom buildings have access to wireless network connectivity.

Evidence of Progress for 2007-2008:

In 2007-08, classrooms with fixed technology hosted 4,753 class sessions; those with mobile technology hosted 157 class sections. Total cost decreased 4.7%, while class sessions increased by 4%. User satisfaction held steady at 90%.

Activities planned for 2008-2009:

UITS continues to use a new service model that reflects a reduction in mobile equipment delivery and an increase in higher-end technical support for installed technology classrooms. Furthermore, a plan for deploying document cameras in more classrooms is being developed, and options for capturing podcasts of class lectures is being explored.

Faculty support for teaching and learning with technology (Action 11 of the IU Information Technology Strategic Plan)

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: July 1, 2006 - June 30, 2007

Actions taken for 2007-2008:

In support of users, the new position, faculty liaison with the Learning Technologies division, helps faculty explore using IT tools in teaching and learning, who also helps engage faculty in discussion of Oncourse CL and other teaching and learning tools. The new position of Director, Academic and Faculty Services, in the Teaching and Learning Division, directs the work of the campus centers for teaching and learning and IT Training and Education and chairs the Functional Requirements Committee (FRC) for Oncourse CL and ePortfolio. Providing faculty with more robust support in using classroom technology across IU is the new Manager of UITS Classroom Technology Services, whose group consolidates the expertise of IUB and IUPUI staff. This group will help faculty benefit from the installed, standardized classroom technology package now available in all general-purpose classrooms on IU campuses. The Center for Teaching and Learning (CTL) on the IUPUI campus continues to improve services for faculty and academic units on teaching and learning issues, multimedia, web applications, and instructional design. CTL workshops are designed to help faculty develop their skills in teaching with technology. Workshops can also be tailored to meet specific needs and interests. The JumpStart program, now in its fourth year, offers instructional design and production support to faculty as they use technology to enhance gateway courses, general studies degree completion courses, and professional degrees and/or certificates. JumpStart begins with an intensive four-day workshop that focuses on best practices in online course design. The Gateway Scholars program, founded in 2004, helps course coordinators and instructors improve teaching and learning in high-quality courses that are open to the public. A new position of Faculty Fellows was established to
Evidence of Progress for 2007-2008:

The CTL continues to contribute to faculty efforts to introduce technology into teaching and learning. Additional data for 2007-2008 will be available through the UITS Finance Office, Cost and Quality Services Report, http://uits.ui.edu/scripts/ose.cgi?apjw.ose.help#cost.

Activities planned for 2008-2009:

Action 11 calls for a standard level of baseline support for teaching and learning technology for all IU faculty, increasing the opportunities to explore new applications of information technology. The promotion or introduction of technology in courses and disciplines, previously without access to relevant applications or support, is also an important component of the IT Strategic Plan. The overall objective of supporting faculty in their use of technology is further enhanced by second-tier professional course development services provided through Actions 7, 13, and 20.

Web-based course services and infrastructure (Actions 12, 18, and 19 of the IU Information Technology Strategic Plan)

Campus Planning Theme: Teaching and Learning

Secondary Goals:

Sub Unit:

Time Frame: July 1, 2007 - June 30, 2008

Actions taken for 2007-2008:

OnCourse CL allows faculty and students to use web-based teaching and learning resources and multimedia content in a single, consistent web interface. As a member of the Sakai Partnership, the university partnered to create a community-source collaboration and learning environment. IU implemented OnCourse CL 2.4 in spring 2007 with a number of improvements across all tools. OnCourse CL remains receptive to user input and feedback. User comments will continue to be collected, assessed, and translated into development requirements, and the OnCourse CL environment to provide new functionality to improve the teaching and learning experience. In 2007-08, OnCourse CL logged more than 131,000 users across the core campuses. Originally developed through the support of the Andrew W. Mellon Foundation, the Open Source Portfolio (ePortfolio at IU) is part of the larger Sakai project, with its own unique and diverse community development. The ePortfolio project entered an especially ambitious period of development to enhance the platform for innovative advancements across a diverse range of teaching and learning.

Evidence of Progress for 2007-2008:

This OPC process ensures that faculty are strategic partners with UITS in working toward shared goals for teaching and learning with technology. The UITS instructional consultants in the CTL played a key role in the full migration to OnCourse CL that was completed in the fall 2007 semester, including their active participation in the FRC.

Activities planned for 2008-2009:
Faculty members from all IU campuses will continue their participation in the faculty Oncourse Priorities Committee (OPC). The faculty OPC is assisted by a second committee, the Oncourse Functional Requirements Committee (FRC), which includes UITS instructional consultants from the Center for Teaching and Learning. The FRC thoroughly reviews and summarizes all suggestions for Oncourse CL and prepares an extensive report for the faculty OPC. The faculty OPC works through the report, carries on extensive discussion and debate, and then votes on the final set of development priorities for the coming semester.

**Telecommunications: Applications, Infrastructure, Convergence**  
(Recommendation 7 of the IU Information Technology Strategic Plan)

**Advanced network applications**

**Campus Planning Theme:** Research, Scholarship and Creative Activity  
**Secondary Goals:**  
**Sub Unit:** None  
**Time Frame:** July 1, 2007 - June 30, 2008

**Actions taken for 2007-2008:**

IU maintains its leadership in advanced networking through a variety of endeavors. The university, along with Purdue University, led the expansion, management, and operation of I-Light, the statewide higher education network. Through the new nationwide 100Gbps Internet2 Network, managed by the Global NOC at IUPUI, and one of the world’s most advanced and far-reaching educational research networks, researchers at IUPUI can leverage high performance research and education networks around the world. The international TransPAC2 network, also managed at IUPUI, enables researchers to collaborate with colleagues in the Asia-Pacific region in astronomy, molecular biology, high-energy physics, medicine, meteorology, visualization, and computational science. The Global NOC continues to provide the advanced networking infrastructure that supports researchers at IUPUI and collaborators around the world. It also provides engineering and operations services for leading high performance research and education networks, for international connections to US and global research and education networks. Further advancement in managing networks and grids is demonstrated by supporting the Open Science Grid (OSG) on the IUPUI campus through the Grid Operations Center. The OSG is a network dedicated to large-scale, computing-intensive research projects built and operated by a consortium of universities, national laboratories, scientific collaborations, and software developers. As coordinator of the Open Science Grid (OSG), and supported by a 5-year, $30M NSF and US Department of Energy Office of Science award, IU contributes to an effective distributed facility for researchers from a variety of scientific disciplines. The National Science Foundation in August ‘07 awarded an IU-led team $1.96M to create a “Polar Grid” of computers to help scientists understand the current and future state of polar ice sheets and the relationship between rising sea levels and global climate change. In October ’07, IU was awarded a $1.69M NSF grant for “Open Grid Computing Environments (OGCE) Software for Science Gateways.”

**Evidence of Progress for 2007-2008:**

Measures of progress and effectiveness can be found in the faculty’s increased use of the university’s advanced networking capability and in the growth of collaborative activity among researchers in the State. I-Light will continue to improve on Indiana’s position as a national leader in very high-speed networking in support of teaching, learning, research, technology transfer, and inter-institutional collaboration and cooperation -- activities that will help fuel the State’s economy.

**Activities planned for 2008-2009:**
Pervasive Technologies Lab staff and others will continue to develop software for creating web gateways to online resources, of special help to non-experts in high performance or grid computing.

**Converged telecommunications infrastructure**

**Campus Planning Theme:** Best Practices  
**Secondary Goals:**  
**Sub Unit:** None  
**Time Frame:** July 1, 2007 - June 30, 2008

Actions taken for 2007-2008:

IU made significant improvements in its university communications infrastructure, upgrading services to increase efficiency and ease of use, and creating new services that offer new functionality for better contact. Improvements in email in 2007-08 and on the drawing board are designed to support easier access to email systems, and provide users with more features and functionality. UITS upgraded Microsoft Exchange 2003 to Exchange 2007. Improvements include a new Outlook Web Access interface with document access, out-of-office features, and instant search. Exchange 2007 supports Windows Mobile 6.0 devices, provides 500BM default mailboxes, and integrates with the UniCom project. In this project, IU is partnering with Nortel and Microsoft to deliver voice, video, audio, instant messaging, file sharing, calendaring, and data to faculty, staff, and student desktops in one consistent user interface. This project is designed to improve productivity and collaboration by converging these formerly disparate services, and by presenting standards-based communications in a secure manner. Implementing standards-based, advanced communication tools will improve productivity, creativity, and collaboration by providing a converged platform of telephony, email, instant messaging, audio and video conferencing, and mobility. Clients may continue using their existing phones or move to a fuller featured voice-over-IP phone. They will also be able to use OCS to integrate with Outlook for presence management and to initiate instant message chats, group chats, voice calls, or video conferencing.

Evidence of Progress for 2007-2008:

Implementing standards-based, advanced communication tools will improve productivity, creativity, and collaboration by providing a converged platform of telephony, email, instant messaging, audio and video conferencing, and mobility. Clients will also be able to use OCS to integrate with Outlook for presence management and to initiate instant message chats, group chats, voice calls, or video conferencing. Additional information is available at [http://projects.uits.iu.edu/](http://projects.uits.iu.edu/).

Activities planned for 2008-2009:

By deploying Microsoft Office Communications Server alongside a Nortel CS2100 PBX switch and software, IU will move to an IP-based communication solution. This software-based unified communications system will bring voice, video, and data together in one unified desktop.

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University Information Systems

**Campus Planning Theme:** Best Practices  
**Secondary Goals:**  
**Sub Unit:**  
**Time Frame:** July 1, 2007 - June 30, 2008
Actions taken for 2007-2008:

IU continues to add value to its enterprise information systems, which share common, virtualized environments of processing power and data storage. The standardized environment pares downtime and enables faster responses to ever-changing demands. The fall 2007 release of the redesigned OneStart 2.0 included major upgrades to the portal and improvements in rendering content. The redesign incorporated input from focus groups, usability studies, and testing. Easier navigation allows users to quickly find services. The major upgrade of PeopleSoft to Version 9.0 continued with a final production upgrade in February 2008. Improvements include compliance with federal and state regulations for financial aid and tax processing, improved Human Resource Management functionality; better functionality in Student systems, and enhanced development toolset and technologies. IU continues its leadership in developing Kuali Financial, for financial management and reporting, and Kuali Research, a comprehensive research award management system. The Sakai Foundation elected Lance D. Speelman of UITS to its board of directors. He will take part in foundation governance, determine development priorities, and oversee the advancement of all Sakai products. Integrated with the 2.4 release of ePortfolio is the Goal Management Tool (GMT) that allows goal mapping from the student to program and institutional levels. IU's leadership in open source software was showcased at the Open Minds Conference for K-12 educators, which IU co-sponsored with the Indiana Department of Education. The IU Intelligent Infrastructure initiative offers IU departments and units remote access to virtual high performance hardware, security systems, and backup solutions for mission-critical applications and services. Departments gain the flexibility to deploy only the systems they need, with the security of off-site storage and automated backups. New strategies under development will offer central solutions to IU units and departments. A new content management system has been chosen as part of a strategy for a central web hosting and content management services. As part of the initiative, UITS will lead help IU units develop a web presence, creating a rational funding model for teaching and learning about web technologies, improving the IU web search tool, and developing templates.

Evidence of Progress for 2007-2008:

Continued development and use of Oncourse CL and ePortfolio, growth in the use of central solutions, and progress in using the WCMS will signal success in these areas.

Activities planned for 2008-2009:

New strategies under development will offer central solutions to IU units and departments. A new content management system has been chosen as part of a strategy for a central web hosting and content management services. As part of the initiative, UITS will lead help IU units develop a web presence, creating a rational funding model for teaching and learning about web technologies, improving the IU web search tool, and developing templates.

Fiscal Health

The university is reviewing a new Information Technology Strategic Plan that will direct IT initiatives for the years ahead. The President and Trustees are expected to approve the plan shortly. This plan establishes new priorities for UITS. This activity coincides with reductions in the IT budget at IUPUI, so presents a challenge in meeting campus and university goals.

Reallocation Plan

Other Question(s)

1. If you had to implement a budget reduction of 3.5% in your base general fund budget, a) what would be your budget priorities and b) what actions would you take to achieve the reduction?
1. If you had to implement a budget reduction of 5-10% in your unit’s general funds budget, what would be your budget priorities and what strategies would you employ to walk the fine line of maintaining critical operations and investing in your future? Please describe how faculty and other stakeholders will be involved in the decision making process.

As a provider of information technology services that are critical to the functioning of the university, UITS engages in ongoing and careful planning of its resources. UITS seeks IT-based efficiencies in delivering critical services, and these provide savings not only for UITS, but for the university at large. UITS routinely seeks new avenues for grant funding and several proposals await review in the year ahead. Alongside these measures, UITS units typically return 5% of their annual budget to the Office of the Vice President for Information Technology (OVPIIT) every year, to create a funding source for new, important initiatives. This provides an ongoing mechanism for addressing rapid changes in technology and user requirements. The Expenditure Review Committee (ERC) process reviews current resources and new needs to prioritize initiatives that receive reallocation funding.

In making decisions in response to budget reductions that impact IT services, UITS will consult with the appropriate campus user communities and leaders, among them the IUPUI Faculty Council Technology Committee, the Budgetary Affairs Committee, and the Academic Affairs and Student Affairs Committees, and review those discussions with the IUPUI Faculty Council Executive Committee. UITS will also review discussions with the IUPUI Deans. For those service changes that could impact students, UITS will consult with the Undergraduate Student Government (USG) and Graduate Student Association (GSO).

2. Please describe current commitments or plans that require multiple year funding, including the amount of funding required and the length of time the initiative’s funding is required.

The new IU strategic plan for IT sets forward 15 major recommendations and 72 actions that will guide IT investments over the next five to 10 years. These cluster around the following main topics: Advancing and maintaining via sound fiscal planning the IT infrastructure of IT devices that support the scholarly and administrative work of the university, including IT resources, communications technology, security, and environmental stewardship; promoting initiatives that advance the ease and effectiveness with which the IU community applies IT resources to its work; and focusing IT on specific “grand challenge” areas in which IU is especially positioned to excel. Examples of specific commitments for which continuing funding will be required include the 10-year technical and financial plan for the IUB and IUPUI communications infrastructure for delivering voice, data, video, and multimedia; and the development of a web content management system for Indiana University that will make managing web sites on IU’s central systems more effective and efficient.

3. How do you intend to use your reserves over the next four years? Please provide the information by fiscal year.

In order to sustain an IT infrastructure that effectively supports the academic and administrative work of the university, UITS must be able to fund new initiatives in a timely fashion, without raising rates. A critical part of the UITS fiscal planning process involves maintaining reserve funding to sustain and replace IT infrastructure and meet other financial obligations. For example, the lifecycle funding process that supports desktop productivity and classroom tools for the university community depends on reserves. Other projects funded largely through UITS reserves include the recent multiminillion-dollar wireless network refresh initiative and the Online Support Environment. As part of its ongoing sound fiscal planning process, UITS will continue to hold reserves for such standing commitments as lifecycle funding, machine replacements, classroom equipment refresh, wire and cable replacement, network upgrades, and other ongoing commitments.

4. How do you define return on investment for diversity efforts in your unit (e.g., numbers of faculty/staff/students recruited and retained, grants received for special studies, new teaching methods or courses, placement of graduates, program reputation)? What are you doing to improve your ROI?

UITs has undertaken various measures to increase efforts at building diversity. These are described below.

Beppo Internship Program. The goal of this program is to hire interns for IT-related projects at UITS to improve the
representation of underrepresented populations in the IT field at large, and the diversity of the applicant pool for UITS in specific. The program began with eight interns in 2002-03, and has grown to 18 in 2008-09. Interns have reported that including this internship on their resumes has greatly enhanced their success in obtaining employment at graduation. Return on investment (ROI) is measured by how many under-represented populations are hired; how many find jobs post-graduation, especially jobs in IT fields; and how many move into UITS or IU IT positions.

Student employment. Key to retaining students (a top priority at IU and at IUPUI), especially those who must work while attending school, is providing on-campus employment. UITS employs large numbers of students. Some 25% of the STC Consultants come from populations regarded as "underrepresented." Many of these students ultimately move into full-time positions at IU. ROI is measured by the numbers of students who receive opportunities for on-campus employment, and who move into full-time positions at UITS/IU concurrent with studies or after they graduate.

UI TS partnership with Informatics. Related to these efforts is the UITS partnership with the School of Informatics, which offers a highly diverse student demographic. UITS staff members work with Informatics students, primarily providing job shadowing opportunities, mock interviewing, and other mentoring services. ROI is measured by the numbers of students who receive opportunities for on-campus employment, and who move into full-time positions at UITS/IU concurrent with studies or after they graduate.

Climate survey. The UITS Work Climate survey administered in May-June 2008 sought staff responses on issues relevant to reinforcing workplace values of accountability, civility, collaboration, engagement, equity, integrity, and respect, among others. UITS continues to invest in stress-free productivity tools, training to improve coaching/staff development skills, improving communication, and flexible work arrangements, along with recruitment/retention/promotion of traditionally under-represented populations. ROI: Results showed a significant majority of staff (96%) were comfortable working with diverse populations, and 85% agree UITS is striving to recruit/retain staff from diverse backgrounds. Ninety percent are satisfied overall working at UITS and 83% would remain at UITS if given comparable opportunities.

Hiring practices that promote diversity. UITS encourages managers and supervisors to strive to hire the best applicants from a cross section of the population. A key goal of UITS Human Resources is to support management in making the best people decisions for the organization, whether in staffing, employee relations, or compensation. ROI: UITS has made strong inroads and gains in hiring and promoting qualified minority individuals with strong qualifications; among them, two new people were hired and four others were promoted to positions of responsibility in sensitive areas such as the Networks, the Support Group, and in Disaster Recovery, a position with university-wide responsibilities. All are highly qualified black males. Specifically, since April 2007, UITS made the following new appointments from underrepresented populations across both campuses: seven Asian women and eight Asian men, and three black and one black woman.

Advancing diversity awareness. UITS staff were invited to attend a training session. "Diversity. Increasing Awareness, Improving Communication. UITS Human Resources has hired an intern (of diverse background) to assist in the research, development, administration, and analysis of a workplace climate survey whose purpose is to assess how well our environment promotes inclusion and the other values espoused in the IUPUI Diversity Vision, Mission and Values document.