2006-2007 University Information Technology Services

Section	Document Name
Fiscal Health	• UITS.pdf

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. 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/~ovpit/strategic/. Activities reported here reflect the goals, objectives, and implementation activities of this plan for the 2006-07 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, 2006 - June 30, 2007

Actions taken for 2006-2007:

Continued increase in the use of local, high-speed, off-campus Internet Service Providers has resulted in decreased use of the IUPUI modem pools, resulting in cost savings that UITS uses to further advance the high speed network. The total number of IUPUI buildings on the network stands at 72. All HP4000 series switches are being replaced with HP5400 series switches. Some 612 new data jacks were installed during 2006, bringing the total number of active Ethernet jacks to 30,344. Of these, 21,612 are capable of supporting up to 100Mbps. I-Light continues to benefit inter-campus connectivity and connectivity to the commodity Internet. The Wireless Project implementation stage is complete, with wireless coverage available in all academic facilities at IUPUI. More than 591 VPN-secured access points are installed at IUPUI. Installations will continue in campus apartments, medical facilities, and remote locations at IUPUI. See http://www.indiana.edu/~uits/telecom/data/waps.html.

Evidence of Progress for 2006-2007:

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. Additional information is available at http://projects.uits.iu.edu/.

Activities planned for 2007-2008:

The university will continue the deployment of outdoor wireless connectivity and work to further reduce the campus dependence on modem pools. A 10-year comprehensive technical and financial plan will be developed 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.

▶ **Community Engagement**

⊗ Informatics and Communications Technology Complex
Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit:
Time Frame:

Actions taken for 2006-2007:

The technology-rich Informatics and Communications Technology Complex (ICTC) at IUPUI provides essential tools for scientific research, technical support, teaching, and learning that support university and statewide IT initiatives. In March 2007, the Indiana Geographic Information Council recognized three Indiana University staff members for developing a user-friendly mechanism for downloading files from the Indiana Spatial Data Portal (ISDP), a repository of Indiana geospatial data. David Heald, database analyst, and Stephanie Snider, GIS specialist (University Information Technology Services) and Nathan Eaton, information services manager (IU's Indiana Geological Survey) received the Indiana GIS Award during the Council's annual conference. The Indiana University Center for Applied Cybersecurity Research (CACR) hosted the Indiana Higher Education Cybersecurity Summit in April 2007 at the University Place Conference Center. (For more detail, see the discussion under "Security, Privacy, Intellectual Property.") Along with sharing best practices among colleagues in higher education, UITS demonstrates its commitment to sharing knowledge through outreach. In June, representatives from the UITS Research Technologies Division and from the Student Technology Centers offered a computer class as part of the IUPUI Minority Engineering Advancement Program (MEAP). The program is part of a week-long set of activities for 7th and 8th grade minority students that are interested in math and science, and possibly engineering careers. During the class, participants assembled technology components to build a computer. Throughout the year, UITS worked with university academic and service units at such community events as the Indiana State Fair and International Science and Engineering Fair. In preparation for the Indiana State Fair, IU's Advanced Visualization Lab partnered with the Indiana Historical Society to illustrate historical Indiana photographs. During IU Day at the Indiana State Fair (August '06) UITS staff presented advice to fair-goers on how families can feel safe from online predators, viruses, identity scams and other threats that exist on the Internet. IUPUI also partnered with IU Bloomington to provide a scientific and technology presence at the Indiana State House to promote life sciences research and development in Indiana. The interactive exhibits developed by the Pervasive Technology Labs continued to be an educational and cultural tool at the Indiana State Museum and the Indianapolis Museum of Art.

Evidence of Progress for 2006-2007:

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. Among visitors for the 2006-07 year were

representatives from the Central Indiana Corporate Partnerships, Ivy Tech Community College, University of Wisconsin-Milwaukee, Moi University in Eldoret, Kenya, and Sun Yat-Sen University School of Medical Science in China. Such visits have garnered research and educational opportunities internally and externally. For example, in spring 2007, juniors and seniors enrolled at the the Indiana Academy for Science, Mathematics, and the Humanities, a residential high school for gifted and talented students, received expert advice from the Advanced Visualization Lab staff on how to create a virtual environment for a class project. The AVL staff provided guidance and answered questions throughout the experience, and converted finished projects into the Virtual Reality Theater software for navigation in the Virtual Reality Theater on the IUPUI campus. The AVL plans to make this educational outreach an annual program. UITS continues its involvement in public/private partnerships via TechPoint, an organization dedicated to promoting Indiana's high-tech economy; BioCrossroads, the Central Indiana Life Sciences Initiative; and the Indiana Proteomics Consortium. In May 2007, the university was a platinum sponsor for the TechPoint Mira Awards.

Activities planned for 2007-2008:

The ICTC will continue to be a site for engaging the community of IT professionals by hosting community events such as those sponsored by TechPoint and the IUPUI Solution Center. Videos to facilitate tours of the IU Global Research Network Operations Center and the Advanced Cyberinfrastructure Facility (formerly the IU Data Center) 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 2006-2007:

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 (http://newsinfo.iu.edu/news/page/normal/5780.html). At IUPUI the IdeA (IUPUI Digital Archives) project serves as an institutional repository to collect and disseminate IUPUI's scholarly output. Providing an open-access archive for IUPUI and its related research communities, it is a means for IUPUI to address the research community need for new outlet in scholarly communication. It employs the DSpace open source software (freeware) created by MIT. Submissions in digital form include preprints, working papers, theses and dissertations, conference papers, presentations, student capstone projects, faculty-created learning objects, data sets, and more. Scholarly materials included in IdeA will receive wider dissemination than if they depended on publication in scholarly Materials. IdeA also provides a persistent web link to those materials. (See https://idea.iupui.edu/dspace/). The Neil Matthew Photograph Collection, part of the Digital Collections of IUPUI University Library, documents the travels of Neil E. Matthew, a professor at the Herron School of Art at IUPUI. Matthew studied photography at Indiana University under Henry Holmes Smith and since described himself as "the painter as photographic tourist." See http://indiamond6.ulib.iupui.edu/NMphotos/ University Library is also collaborating with the Indiana Supreme Court and the Indiana Historical Bureau to provide online access to copies

of original documents and research materials relating to Indiana's constitutional history (Road to Indiana Statehood). The first phase will make available and fully searchable documents and transcriptions that led to Indiana statehood in 1816. See http://indiamond6.ulib.iupui.edu/isc/.

Evidence of Progress for 2006-2007:

The number, variety, and extent of digital library projects proposed and funded will be an important measure of progress and effectiveness.

Activities planned for 2007-2008:

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, 2006 - June 30, 2007

Actions taken for 2006-2007:

Two professional appointments made in 2006 and 2007 are designed to help improve and enrich faculty experiences with UITS resources and services that support the use of technology in teaching and learning. Anastasia S. (Stacy) Morrone, Ph.D., appointed Associate Dean for Teaching and Learning Information Technologies (TLIT), works with TLIT directors to enhance IT support to faculty through the campus centers for teaching and learning. She also develops, leads, and supports university-wide initiatives related to the effective use of technology, including Oncourse CL, in partnership with academic units and faculty on all campuses (http://uitspress.iu.edu/062906_morrone.html). John Gosney, faculty liaison for TLIT, works with faculty to explore and advocate the best use of technology to enhance teaching and learning (http://uitspress.iu.edu/031907_gosney.html). Also working closely with the campus centers for teaching and learning, he helps bridge the gap between innovative pedagogy and the technology used to support and facilitate it, with a major focus on providing support for Oncourse CL, ePortfolio, and other UITS initiatives. To stimulate the integration of information technology into teaching and learning, the AT&T Fellows Program formerly the SBC Fellows Program, has funded more than 70 innovative technology projects developed by IU faculty and staff across the university (23 at IUPUI) since its creation in 1999. See http://attf.iu.edu/. Fellows mentor other faculty in the use of their innovations, develop best practices, make campus presentations, and participate in the annual AT&T Fellows Summer Leadership Forum. IUPUI fellows participating in the seventh and final Summer Forum included: Rachel Applegate, School of Library and Information Science; Angela McNelis and Sara Horton-Deutsch, Environments for Health, School of Nursing; Dale Roberts, Computer and Information Science, School of Science; and Chris Thomas, Geology, School of Science. The program, which is now complete, was established through a $1-million gift from the Ameritech/SBC Foundation. See http:/attf.iu.edu/ The new UITS Project Site at http://projects.uts.iu.edu, accessible by the university community, provides current information about a variety of ongoing and completed projects. It is hoped that the campuses will find these discussions interesting and engaging.

Evidence of Progress for 2006-2007:

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. In fall 2006, 37% of faculty used Oncourse CL, up from 29% in 2005. By summer 2007, use had increased to 54%. All course sites are now available solely in Oncourse CL. Ten projects were featured during the annual IU AT&T Summer Leadership Forum at the Informatics and Communications Technology Complex in June, 2007. Final reports and examples of good practices in teaching and learning with technology are available on the program web site http://attf.iu.edu/about/goodpract/.

Activities planned for 2007-2008:

In continued support of faculty making the transition to Oncourse CL, the Center for Teaching and Learning (CTL) provided group consultation sessions on Oncourse CL in January 2007, an Oncourse CL tech camp during Spring Break 2007, and intensive workshops throughout summer 2007 that focused on . getting faculty started in Oncourse CL (e.g., roster, resources tool, gradebook, etc.). In addition to traditional workshops based in the CTL, workshops will be offered at schools and departments and will be tailored to the specific needs of faculty. During the last two weeks of August through the month of September, the operational hours of the CTL were extended until 7p.m. to provide increased support for faculty. In spring 2008, the CTL will offer workshops dealing with emerging technologies (e.g., podcasts, blogs, wikis, flash video, second life, etc.) and how to incorporate these applications into the Oncourse CL environment.

⊠ 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, 2006 - June 30, 2007

Actions taken for 2006-2007:

In 2006, UITS IT Training and Education provided access to more than 2,687 self-paced NETg courses through its IT Training Online service, including new more interactive courses. Topics ranged from basic IT skills to preparation for certification. Free Microsoft self-study courses in Office applications and basic Windows computing skills were offered as part of IU's site license agreement with Microsoft. Microsoft Office Specialist exams tested beginning through advanced skills in Office applications. The 386 STEPS hands-on computing classes offered at IUPUI attracted a total enrollment of 4,228. The IUPUI JumpStart program, a partnership involving the Center for Teaching and Learning and UITS Media Design and Production, provides instructional design and production support to faculty using technology to enhance gateway courses, general studies degree completion courses, and professional degrees and/or certificates. The program is a part of a larger IUPUI project that aims to transform teaching and learning through the use of technology. For more, see http://uits.iu.edu/scripts/ose.cgi?avml.ose.help Local Support Provider (LSP) Services staff provide advanced consulting and support for Windows and Macintosh workstations and servers; IT security consulting; advanced email and mobile computing support; access to reserved software; access to restricted network and user management tools; technical training; and technical certification opportunities. In 2006 UITS provided LSPs with additional training in technical support and consulting services, and partnered with University Human Resources to provide LSPs with courses on time management, building partnerships, and creating self-reliant users. An online community for LSPs, LSP Online, a centralized database of IT advice and help for general users to refer to. In addition, using LSP Online, Local Service Providers can offer not just better, faster support to the IUPUI community, but they

can also share their own knowledge and experience with support staff peers in a cooperative environment. This resource won a "Best of Category" award in the recent competition hosted by AMC SIGUCCS, the special interest group of university IT support professionals.

Evidence of Progress for 2006-2007:

Users report high levels of satisfaction with self-study courses, at 95.2%. IUPUI usage data for 2006-2007 will be available through the UITS Finance Office, Cost and Quality of Services Report, at http://uits.iu.edu/scripts/ose.cgi?apjw.ose.help#cost.

Activities planned for 2007-2008:

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.

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

⊗ 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, 2006 – June 30, 2007

Actions taken for 2006-2007:

IU's Massive Data Storage System (MDSS), based on the High Performance Storage (HPSS) software, provides 4.2 petabytes of capacity. In January '07 MDSS was significantly upgraded. now providing 52 tape drives, 500 GB of tape capacity, and 170TB of disk cache. This means researchers can much more rapidly move files to central or local systems. IU's unique structure, with two core research campuses, is a strategic benefit that allows important research data to be mirrored across the IUPUI and IUB campuses. Data are automatically mirrored over the I-Light network, ensuring that often irreplaceable biomedical and other data will not be lost were a disaster to strike one of the university's two Advanced Cyberinfrastructure Facilities. The unique architecture of the MDSS provides a considerable competitive advantage for those seeking research grants that require substantial amounts of storage. This year Biomedical Applications based at IUPUI began providing expert consulting on accessing and managing biomedical data, including providing data access services and engaging in projects to build biomedical data management systems. UITS began taking steps required to enable IUPUI researchers to store and analyze protected health information on UITS research systems. We enacted a change in policy that allows us to not only support but also encourage this kind of data analysis. The Advanced Information Technology Core received continuing certification as a core within the IU School of Medicine (IUSM). Through UITS Research Technologies, the Advanced IT Core offers systems and services for supercomputing, massive data storage, scientific data management, bioinformatics, advanced visualization, and grid computing to researchers in the life sciences, especially those in the IUSM. Planning for migrating the Research Database Complex (RDC) to a new platform began in May '07, with a goal of retiring hardware that is at the end of its life cycle, and replacing it with newer, faster hardware. The first phase of the migration began in June '07; all should be completed by October '07. The system's web front end is also being migrated, from Solaris to Linux, providing more flexibility for web applications and portals.   The NSF-funded Data Capacitor is a 535-Terabyte storage system designed to store and manipulate large data sets at the center of the university's local cyberinfrastructure. It provides researchers with

hundreds of terabytes of fast temporary storage that serves compute resources, visualization resources, archive storage, and scientific instruments. It enables researchers to simultaneously visualize, archive, and compute using the same data set. The $1.72-million NSF grant also funded systems to run web services that help organize and catalog the enormous amounts of data handled by Data Capacitor. IU introduced the file system on March 28, and it went to hardy user status in April. Designed to store intense data bursts coming from modern scientific instruments for short periods, the Data Capacitor complements the home directories and working disk space attached to computational resources, and archival High Performance Storage System, and is attached to both. Among its users is the Center for Computational Biology and Bioinformatics at IUPUI (http://evolution.compbio.iupui.edu/mooney/index.php). The Data Capacitor was at the heart of the effort that earned a team of IU researchers and technologists an honorable mention in the 2006 Bandwidth Challenge at the 2006 Supercomputing conference (SC06) in Tampa, Florida (http://uitspress.iu.edu/120406_bandwidth.html). In April '07 the Data Capacitor Team was nominated as a candidate for the 2007 Mira Awards. See http://datacapacitor.iu.edu/. A new storage service prototype created in 2005 called the Research File System (RFS) enables researchers from all disciplines to access their data from easy-to-use desktop and web-based interfaces anywhere in the world, and to collaborate via file sharing with researchers inside and outside the university.

Evidence of Progress for 2006-2007:

The UITS User Survey for IUPUI reveals high levels of satisfaction with research and academic computing services, including roughly 94% satisfaction with massive data storage.

Activities planned for 2007-2008:

The Research Database Complex will move form Sun hardware to IBM hardware, with an accompanying increase in size available in FY2006/2007, with a significant increase in database storage to 50 terabytes. The Big Red cluster will also provide significant storage resources with 260 terabytes of temporary file storage.

⊗ 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, 2006 – June 30, 2007

Actions taken for 2006-2007:

The National Science Foundation goal for the TeraGrid is to make U.S. scientific research more productive and to enhance the international competitiveness of the nation's scientists. In October '06 IU and institutional partners received a 5-year, $30-million award from the National Science Foundation and the U.S. Department of Energy Office of Science to support expansion of the Open Science Grid, or OSG, and extend operations activities managed by Indiana University. The OSG will create a "petascale data infrastructure" that supports petabytes (millions of gigabytes) of data, to be used by scientists around the world. A critical concept behind the OSG is the use of many, many computers worldwide to analyze the data in these petabyte data stores. As the coordinator of Grid Operations for the Open Science Grid, IU will be a leading contributor in the management and growth of an effective distributed facility for researchers from a variety of scientific disciplines. IUPUI researchers stand to gain from the expanded cyberinfrastructure of the OSG for research and scientific discovery. http://www.opensciencegrid.org/?pid=1000128. IU's Big Red supercomputer, delivering more than 30 TFLOPS, has become one of the most heavily used systems on

the TeraGrid. In April '07 UITS made its newly upgraded, more than 1.8PB research data archival storage system, available to TeraGrid users. The largest-ever allocation of TeraGrid storage space was that made to the Linked Environments for Atmospheric Discovery (LEAD), to use IU's archival storage system. LEAD makes meteorological data, forecast models, and analysis and visualization tools available to anyone who wants to interactively explore the weather as it evolves. LEAD will also take advantage of IU's Big Red supercomputer to analyze that data. For more about LEAD see http://lead.ou.edu.

Evidence of Progress for 2006-2007:

IU's TeraGrid resources automatically report usage to the TeraGrid central accounting database. TeraGrid allocations are awarded as service units; use of resources at each site decrements the balance of service units available to a specific project. TeraGrid users can select to use resources at a particular site, or use a roaming allocation at multiple sites depending upon availability of cycles and software. On the AVIDD clusters, 2200 TeraGrid accounts have been created, an increase of 900 accounts from the previous fiscal year, with additional accounts created each quarter as new allocations are awarded.

Activities planned for 2007-2008:

Supported by a grant from the National Science Foundation, the IU-led Open Grid Computing Environment (OCGE) project team is developing software that will allow new groups of users to develop their own powerful gateways. See www.collab_ocge.org.

☒ 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, 2006 – June 30, 2007

Actions taken for 2006-2007:

IU's Big red and Quarry supercomputers both serve the university community. Quarry is a seven teraflops IBM HS21 BladeCenter cluster. Quarry will be particularly valuable to researchers in the IUPUI School of Engineering and Technology. Big Red, an IBM e1350 BladeCenter Cluster, was named the fastest supercomputer among all US academic institutions and the 23rd fastest supercomputer in the world in a July 2006 list of the world's most powerful computer systems (http://newsinfo.iu.edu/news/page/normal/3660.html). Big Red provides powerful and sophisticated high performance computing facilities for IUPUI life scientists and for researchers in biomedicine, astronomy, informatics, and computational physics. Big Red is particularly useful to researchers in the Center for Computational Biology and Bioinformatics. It is a key piece in the analysis of proteomic and metabolomic data, and compounds found in living cells. It is funded in part by the METACyt Initiative, which was created by a grant from the Lilly Endowment Inc. With its support for computing that involves massive amounts of scientific data, Big Red also plays a critical role in the university's strategy for supporting innovation and economic growth, including the continued development of Indiana's growing life sciences economy. In spring '07 IU doubled the size of Big Red. Under the agreement with IBM, IBM will provide support and maintenance for three years and send three computational scientists to help scholars adapt their research to take advantage of the supercomputer. In addition, IBM is establishing a $2-million technology design center within the Informatics and Communications Technology Complex at IUPUI. This center will conduct research on advanced uses of cell processors, which have advanced graphics capabilities and are useful in medical imaging and research. This development puts IUPUI researchers in close touch with IBM's leading researchers of the cell processor

research. This development puts IUPUI researchers in close touch with IBM's leading researchers of the cell processor. The planned retirement of the AVIDD system began in May '07 as originally scheduled, with users migrating to Big Red or the TeraGrid. Portions of the system remained online until mid-July. In April '07 UITS hosted the annual LinuxFest, an awareness-raising event about the open source operating system. Held in the Atrium of the Informatics and Communications Technology Complex on the IUPUI campus the event featured talks by invited speakers; presentations about the UITS data capacitor project, messaging services, and the distributed storage services group; and exhibits from a variety of vendors. See http://www.ussg.iu.edu/linuxfest/#info. The Advanced Visualization Lab's (AVL) facilities in the ICTC are of significant use to IUPUI researchers. The AVL and the IU School of Medicine are working together to dramatically improve analysis of breast cancer patient data. Tools for 3D visualization of MRI scans enable researchers to better understand the structure of tumors and how they relate to their blood supply.

Evidence of Progress for 2006-2007:

The UITS User Survey for IUPUI reveals high levels of satisfaction with research and academic computing services, including 93.1% satisfaction with high performance support; and 96.4% satisfaction overall for research computing.

Activities planned for 2007-2008:

Big Red will continue to enable scientific innovations at IU and, via the TeraGrid, throughout the nation. Big Red will also play a major role in the TeraGrid, the National Science Foundation's flagship effort to create an advanced national cyberinfrastructure. Summer '07 plans call for replacing the 2-TFLOPS AVIDD cluster used for small parallel jobs with a 7-TFLOPS cluster called Quarry. IU's newest supercomputer, Quarry offers IUPUI researchers newer, faster replacement Intel hardware for research computing as well as the general Unix computing environment. Quarry will also serve replacement hardware for the Steel cluster, which will be retired in June 2008.

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

⨂

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2006-June 30, 2007

Actions taken for 2006-2007:

Microsoft Corporation and the Research and Education Networking Information Sharing and Analysis Center (REN-ISAC) formed an alliance that extends the Microsoft Security Cooperation Program to include higher education institutions in its cooperative security activities. IU IT security staff will be part of a Microsoft analysis team, formed by REN-ISAC, which will be a conduit for sharing information on vulnerabilities, exploits, and fixes. IU will benefit from the protection and response information and the university will serve as the path for this defense information to higher education as a whole. See http://uitsnews.iu.edu/?p=842 The IU Center for Applied Cybersecurity Research (CACR) hosted the Indiana Higher Education Cybersecurity Summit in April 2007 at the University Place Conference Center. The summit, presented with support from Purdue University, University of Notre Dame, and Valparaiso University, brought together information assurance and other IT professionals and faculty from Indiana's universities and colleges and other public institutions to share best practices, research, and trends in cybersecurity. In 2006 the university began working to develop an event notification system, now known as IU-Notify, to provide a means of notifying the IU community and affiliates in the event of an emergency. The events at Virginia Tech added impetus, and the NTI Group,

Inc., was selected as the vendor in July '07. (For more, see http://uits.iu.edu/scripts/ose.cgi?aviy.ose.help) In a move to enhance information technology security, in October '06 UITS increased the minimum number of characters required to log in to IU systems from 8 characters to 15, with a maximum of 127. The new so-called passphrase allows for strong, lengthy passwords that are naturally complex, easier to remember, and provide better security. See http://kb.iu.edu/data/acpu.html. For National Cybersecurity Awareness Month in October '06, a link to the UITS National Cybersecurity Awareness Kit for colleges and universities at http://itpo.iu.edu/education/ncamkit.html was posted on the US Department of Homeland Security web site of resources for higher education (http://www.dhs.gov/xprevprot/programs/gc_1158611596104.shtm). Materials included a planning checklist, posters, and guidelines for determining how to use the materials effectively. For more on IT security-related outreach initiatives, see the section titled "Community Engagement" earlier in this report. In April '07 The National Security Agency (NSA) granted Indiana University "center of excellence" status for the university's commitment to the protection of digital information from hackers and other Internet-savvy troublemakers. Partially in response to reports by the Recording Industry Association of America (RIAA) of increased activity in illegal music downloads, the university put in place a progressive program of quizzes and tutorials to help educate the university population about copyright infringement. The incidence of second offenses has dropped considerably since the university put the program in place. Of the 353 RIAA notices received, only 17 of them have been second offenses, and none of them have been third offenses. A broad-based educational web site provides information on how to avoid illegal file sharing (see http://filesharing.iu.edu/).

Evidence of Progress for 2006-2007:

Awareness of the importance of protecting sensitive institutional and personal data has increased as a result of various educational campaigns. Moving to private IPs those computers that host internal data has reduced the threat of Internet attacks. The IU National Cybersecurity Awareness Month Kit has been used by a number of other institutions as part of their own awareness activities. For continued updates, see the UITS Projects Site at http://uits.iu.edu/scripts/ose.cgi?aviy.ose.help

Activities planned for 2007-2008:

IU is planning to join 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 as well as services. See http://www.incommonfederation.org/ Development of IU-Notify will continue, with a policy/strategy group being formed to discuss policy and privacy issues.

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

⌄

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2006-June 30, 2007

Actions taken for 2006-2007:

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 $20.3 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. In January '07 The IU/Microsoft Campus Agreement made Windows Vista, the new Microsoft operating system, featuring the Aero user interface, available to students, faculty, and staff at no or steeply discounted prices. Vista on DVDs is available at campus bookstores for a nominal charge. Since fall 2006, UITS has distributed 2006-07, UITS distributed 46,752 copies of Microsoft Office Enterprise 2007.

Evidence of Progress for 2006-2007:

Very substantial savings for the university continue to be realized through leveraging mass purchasing power to realize the lowest workstation and notebook prices in meeting lifecycle funding objectives. For example, the Dell Preferred Partnership in 206-07 saved university schools and departments $2,781,865 over standard educational pricing. The remarkable success of IU's Microsoft Enterprise License Agreement (MSELA) has continued. Signed originally in 1998, the agreement enabled the distribution in 2006-07 of more than 132,197 copies of MS software, valued at more than $23,26,604. The common base of software and hardware allow for improved service to users. Along with gaining the university national attention, the successful implementation of lifecycle funding enhances the university's ability to fully use the university's information technology resources. Results from the 2007 User Survey record a 98.5% approval rating for the contracts and agreements with vendors that make software available at low or no cost to the IU community.

Activities planned for 2007-2008:

Lifecycle funding of essential technology will continue on an ongoing basis.

▶ **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, 2006 - June 30, 2007

Actions taken for 2006-2007:

A renewed IU-Microsoft agreement allows students to get some of Microsoft's most popular products at no cost from IUware Online or by purchasing software CD's for a nominal charge from campus bookstores (see http://kb.iu.edu/data/aeyd.html). In October '06, Student Self-Service in OneStart became available an additional six hours each day, providing longer access to such services such as registration, drop/add, degree progress reports, grades, unofficial transcripts, bursar billing, and financial aid services. Windows users can chat live with a UITS Support Center consultant about computer problems from the desktop using ITHelpLive. In certain situations, users can also ask the consultant to remotely fix the problem. See https://ithelplive.iu.edu/. The university's annual IT awareness fair, Making IT Happen! provided an opportunity for students at IUPUI in February '07, and across all IU campuses, to learn more about technologies and services available to them on campus, and showcase their own projects to fellow students, the faculty and staff. The UITS podcasting initiative enables professors to provide students with class-related

materials via podcast using the Oncourse CL podcasting tool. The additional medium for accessing course materials provides students more flexibility in study methods. During a February '07 snowstorm that caused the cancellation of many classes, the UITS online environment kept teaching and learning going. The UITS Telephone Call Center supported telephone calls for the university, IU physicians, and medical center hospitals. During that period, the unit received more than 12,000 calls. Support Center staff answered calls as well, with some staff working from home. On Feb. 13, the IU community downloaded more than 2,700 software packages via IUware—more than any other day that week. Some staff and faculty kept their scheduled meetings and teleconferenced via a home phone or cell, or responded to requests via email. Some UITS staff worked three consecutive days—at 12 to16 hours a piece—without leaving campus.

Evidence of Progress for 2006-2007:

In 2006, the IT Support Center located at IUPUI and IUB received 41.367 walk-in contacts; 34,748 email contacts; and 17,427 phone contacts; and 2,406 ITHELPLive chat sessions, logging satisfaction levels of 96%. The Knowledge Base logged nearly 22-million hits during the year with user satisfaction rates of 94.3%. IU is now delivering Knowledge Base services to the IU Global Research Network Operations Center and research and development partners such as Sakai and the TeraGrid. 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 2007-2008:

In June 2007 a project was launched to provide students with choices for email, beyond the current option Webmail. Along with significant changes in the user interface, students will experience enhanced email functionality, Web 2.0 features (e.g., personal web space, calendar, blogs), and increased email storage space (currently limited to 100MB per student).

▶ **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, 2006 - June 30, 2007

Actions taken for 2006-2007:

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. The appointment of Beverly Teach as manager of UITS Classroom Technology Services will enable the consolidation of staff from IUB and IUPUI and leverage their expertise to provide more robust support for teaching and learning on the core campuses and across the university. UITS Classroom Technology Services provides consultation on classroom design and technology installations and training and support for the use of permanently installed equipment. Since the launch of the IT Strategic Plan, UITS Classroom Technology

Services has worked collaboratively with other units within UITS and other units on campus, including Electronics, Physical Plant, and the University Architect's Office to upgrade the technology in general inventory classrooms, outfitting them with permanently installed equipment and standard interfaces for faculty connectivity and use. By fall 2007, all general-purpose classrooms on IU campuses will have been upgraded.

Evidence of Progress for 2006-2007:

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 2007-2008:

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, 2005 - June 30, 2006

Actions taken for 2006-2007:

Media Design and Production is a new service group comprising the former Media Production organization at IUB and Digital Media Services at IUPUI. UITS Media Design and Production specializes in web, digital audio and video, CD and DVD production, and media conversion and duplication. The group offers consulting and database design in collaboration with UITS Data Management Support. Media Design and Production works closely with the IUPUI Center for Teaching and Learning (CTL) and the IUB Teaching & Learning Technology Centers (TLTC), as well as other centers for teaching and learning on IU campuses, to engage with faculty in instructional development projects. David Donaldson was appointed manager.

Evidence of Progress for 2006-2007:

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

Activities planned for 2007-2008:

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, 2006 - June 30, 2007

Actions taken for 2006-2007:

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 2006-2007:

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. Additional information is available at http://projects.uits.iu.edu/.

Activities planned for 2007-2008:

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, 2006 - June 30, 2007

Actions taken for 2006-2007:

Progress continues 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. Since University Information Technology Services (UITS) Classroom Services upgraded 30 additional enhanced technology classrooms at IUPUI with computers and large-screen projection, there are now 148 out of 150 (99%) general-purpose classrooms with permanently installed instructional technology equipment. All classroom buildings have access to wireless network connectivity.

Evidence of Progress for 2006-2007:

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.

Activities planned for 2007-2008:

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 2006-2007:

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. In 2006-2007, the CTL conducted 2211 consultations and 71 workshops with a total attendance of 823. The CTL received requests from all 20 schools located on campus, 113 departments and all 8 campuses of the Indiana University system. In preparation for the transition to Oncourse CL, the CTL conducted 47 workshops with a total attendance of 283 faculty during 2006-2007. IUPUI's JumpStart program offers instructional design and production support to faculty as they create online and hybrid courses. The program includes intensive workshops that focus on best practices in online course design. Since 2003, 59 online courses have been created in the Jump Start program. CTL consultants are also working with faculty from the departments of physics,geography, communication studies, and psychology who received academic transformation grants to create courses and programs that adhere to best practices in online teaching and learning. This project has prioritized efficiency by encouraging faculty participants to repurpose multimedia objects and templates. To this end, a repository has been created for course templates for use by others. In addition to the template repository, standard custom Flash animations are easily repurposed for faculty to be reused with minimal effort.

Evidence of Progress for 2006-2007:

The CTL continues to contribute to faculty efforts to introduce technology into teaching and learning. 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 2007-2008:

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 coourse 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, 2006 - June 30, 2007

Actions taken for 2006-2007:

Oncourse CL, IU´s online collaboration and learning environment supports teaching and learning, committees, projects, research, and portfolios for Indiana University´s community of students, faculty, and staff. Through our participation in the Sakai open source community, we benefit from shared development that allows us to control our destiny while also keeping pace with faculty innovation through a world-wide community of scholars and educational technologists. There are currently over 100 institutional partners in the Sakai community (http://www.sakaiproject.org/). A podcasting tool now available in Oncourse CL supports teaching, learning, and collaboration and is as part of the University´s continuing initiative to bring new technologies to campus. Using this tool, instructors can develop and deliver podcasts in the form of audio lectures, video presentations, and slideshow presentations to supplement class work. After signing an agreement with Apple Computer, Inc., the university launched a pilot of iTunes U, as a means of making podcasts available to students, faculty, and staff. Some podcasts produced by the IU community during the pilot are available in iTunes U. When iTunes U becomes a production service later in 2007, any instructor or site owner in Oncourse CL will be able to publish podcasts to iTunes U. Originally developed through the support of the Andrew W. Mellon Foundation, the Open Source Portfolio (ePortfolio at IU) is now 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. As a powerful tool within the larger Oncourse CL framework, ePortfolio´s greatest potential for change is taking otherwise "transient learners" (those who view learning only in the context of their formal time within the university) and providing tools to help transform them into lifelong learners.

Evidence of Progress for 2006-2007:

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. In 2007, the CTL conducted twice the number of consultations on Oncourse CL than what were conducted the previous year and hosted 73 events related to Oncourse CL with participation in these events just under 350.

Activities planned for 2007-2008:

Faculty members from all IU campuses, including five faculty members from IUPUI, 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 is 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. At a full day retreat, 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, 2006 - June 30, 2007

Actions taken for 2006-2007:

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. In 2006, network engineers from the Global Research Network Operations Center (Global NOC) at IUPUI certified that I-Light was ready to transmit network traffic among universities and colleges across northern Indiana. Nine major network connection points, called "nodes," at Indianapolis, Anderson, Muncie, Marion, Ft. Wayne, South Bend, Gary, West Lafayette, and Kokomo, support the northern I-Light ring. The Internet2 Abilene network and the National Lambda Rail Network (NLR) represent two of the world's most advanced and far-reaching educational research networks and are managed by the Global NOC at IUPUI. The Abilene network was reaching its planned end of life as the Global NOC led the deployment of its replacement, the new nationwide 100Gbps Internet2 Network. Through Abilene – and now the Internet2 Network – researchers at IUPUI can leverage high performance research and education networks around the world. NLR is a major initiative of U.S. research universities and private sector technology companies to provide a national-scale infrastructure for research and experimentation in networking technologies and applications. Recently the Global NOC completed the design and installation of NLRview, a nationwide infrastructure to study network performance and help devise new solutions for intrusions, bottlenecks, and fault isolation. 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. In December 2006, IU announced the first phase of the Chicago-Indiana center, which will enable massive quantities of data to flow from the largest scientific instrument ever built into an international network of computer centers, including one operated jointly by the University of Chicago and Indiana University on the IUPUI campus. The Chicago-Indiana Tier-2 center will serve physicists from around the world. The Chicago-Indiana Tier-2 center is connected to the OSG. The Grid Operations Center performs real time grid monitoring and problem tracking; provides security incident responses and support to users, developers and systems administrators; maintains grid services; and maintains information repositories.

Evidence of Progress for 2006-2007:

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 dramatically 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.

Once the entire network is completed, I-Light's ultimate 1,000 miles of fiber will reach into all four corners of the state and will be larger, per capita, than similar networks in neighboring states. In June 2007, an RFP was released with the goal to have the network backbone completed within the 2007 calendar year.

⊗ Converged telecommunications infrastructure
Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit: None
Time Frame: July 1, 2006 - June 30, 2007

Actions taken for 2006-2007:

IU formed a partnership with Nortel and Microsoft in their Innovative Communications Alliance to create a more connected IU community through unified communications. IU began planning for deployment of Nortel's Communication Server (CS) 2100 and Microsoft Office Communications Server (OCS) 2007 to give students, faculty, and staff access to combined telephony, e-mail, collaboration, presence, instant messaging, and desktop services.

Evidence of Progress for 2006-2007:

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. Additional information is available at http://projects.uits.iu.edu/.

Activities planned for 2007-2008:

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. Pilot testing will begin in late 2007.

▶ **University Information Systems**

⊗

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame: July 1, 2006 - June 30, 2007

Actions taken for 2006-2007:

The Student Information System (SIS) enables all 100,000 university students to conduct activities related to admissions, advising, enrollment, financial aid, and other financial processes in a web-based environment. The Human Resource Management System (HRMS) provides services for human resources information including personnel records, benefits, and payroll for the university's more than 35,000 faculty, staff, student workers, and retirees. The SIS and HRMS are

part of the enterprise PeopleSoft application. Actions taken during this reporting period were in preparation for the major PeopleSoft upgrade (version 9.0) scheduled to take place in 2008. The PeopleSoft upgrade project has been underway since early 2006. A $2.5-million Andrew W. Mellon Foundation grant partially supports the development of Kuali Financial Systems, a community source financial system for colleges and universities, in which the university is a founding partner. In October 2006, the Kuali Foundation announced the first release of the Kuali Financial System. Also as part of the Kuali Foundation, IU formed a collaborative community source partnership to build an enterprise research administration system based on MIT's Coeus System. The Kuali Research Administration (KRA) project was launched in October 2006. Developers from the participating institutions are contributing to the development of KRA. The OneStart web-based application portal offers a common front door to online services at Indiana University campuses. Extensive focus groups and usability studies informed a complete redesign of the portal. Developers worked with content providers during 2006 in preparation for the release of OneStart 2.0, scheduled for September 2007. The latest version of Oncourse CL was introduced with a number of improvements across all tools. Anastasia Morrone was appointed Associate Dean for Teaching and Learning Information Technologies to work closely with faculty to set priorities for the continued development of Oncourse CL and the electronic Portfolio. The disaster recovery initiative continues to assess requirements and recovery strategies needed to assure preservation of university systems and data should a disaster strike the IT facilities.

Evidence of Progress for 2006-2007:

Nearly all university constituents are using OneStart to access some functions of their work. In 2006, Indiana joined with MIT and several other institutions to create the next generation system, called Kuali Research Administration (KRA). Faculty use of Oncourse CL and ePortfolio continues to rise. Staff use of Oncourse CL for projects also continues to rise. Additional information is available at http://projects.uits.iu.edu/.

Activities planned for 2007-2008:

The current HRMS eDocs application will be upgraded to provide improved usability. A new Student Center design for student self service functionality will be deployed. The Student eDocs project is creating a series of electronic documents (eDocs) that interface with student, administrative, and faculty processes to reduce the manual effort required to move forms through the various offices for approvals prior to processing. KFS Release 2.0 will include Purchasing/Accounts Payable, Contracts and Grants, Labor Distribution, and Research Administration modules. KRA Release 1.0 will include core functionality, Proposal, and Budget. Active content publishing capabilities for OneStart will be rolled out. Original Oncourse will be retired before fall semester 2007 as Oncourse CL reaches parity. ePortfolio development will focus on achieving specific requirements in offering new methods for the assessment of teaching and learning. A currently licensed emergency planning tool (local server-based Living Disaster Recovery Planning Systems [LDRPS] from Strohl Systems) will be expanded to a web-based, externally hosted version.

Fiscal Health

Reallocation Plan

Other Question(s)

1) *Diversity.* **In the past year (July 1, 2006–June 30, 2007) what actions have you taken and what results have you achieved in retaining and graduating a diverse student body; enhancing diversity in research, scholarship, and creative activity; and recruiting, developing, and supporting diverse faculty and staff?**

2) *International activities.* **Over the past year, in what international projects and activities have your faculty, staff, and students engaged?**

What new efforts have been undertaken to internationalize the curriculum?