Mission

University Information Technology Services (UITS), with offices on the IU-Bloomington 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. Activities reported here reflect the goals, objectives, and implementation activities of this plan for the five year period, 1998-2003. The plan itself is available at http://www.indiana.edu/~ovpit/strategic/.

Goals and Objectives

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

   - Build a solid foundation of IT infrastructure that will help and enable IU to achieve a position of leadership, and to assure that sound fiscal planning permits the maintenance of this infrastructure at state-of-the-art levels.

   - Campus Planning Theme: Best Practices
   - Secondary Goals:
     - Sub Unit: None
   - Time Frame: Commencing in 1998 and completed in 2000, this pla

Actions taken for 2003-2004:

After little more than two years of progress, implementation of lifecycle replacement funding of basic desktop technology (computers, printers, servers, and common applications) was completed in August 2000, for all University campuses and for 110 schools and service units. More than 10,000 obsolete computers were replaced at a cost of $11M. The replacement value of the inventory was calculated at $20M. Faculty and staff desktop computers were upgraded so that 15,000 computers are now less than three years old. A $6M annual equipment replacement fund has been established for academic and administrative units on University campuses, with the units and UITS sharing management and supervisory responsibility. IU entered a Preferred Partnership with Dell Marketing that offers the University community the opportunity to purchase workstations, laptops, and multimedia machines at more than $500 below standard educational pricing, and discounts up to 13% below educational rates on the full catalog of Dell computers, printers, and handhelds. Additional detail is provided in the UITS Accomplishments Report for FY 2003-2004, to be linked at http://it.iu.edu.

Evidence of Progress for 2003-2004:

Very substantial savings for the University continue to be realized through leveraging mass purchasing power to realize the lowest prices. After this period, the University’s five-year forecasting obligations. Negotiations with the Dell
the lowest workstation and notebook prices in meeting lifecycle funding objectives. Negotiations such as the Dell Preferred Partnership have resulted in the purchase of more than 37,800 machines by University schools and departments, realizing savings of more than $15.7M over standard educational pricing. The remarkable success of IU’s Microsoft Enterprise License Agreement has continued. Signed originally in 1998 and renewed for an additional year, the agreement enabled the distribution of more than 592,000 copies of Microsoft software. In April 2003 the University and Microsoft entered into a new agreement that makes Microsoft’s most popular software available for a further three years across the University at no increase in cost. In 2003, IU also extended a deal with Macromedia to make its popular Web development software package available to students, faculty, and staff for two more years. Along with agreements with other software vendors, including Symantec, Oracle, SPSS, and others, these agreements result in savings for faculty, staff, and students of more than $100M. In addition, the common base of software and hardware allows for improved service to users. Along with gaining the University national attention, the successful implementation of lifecycle funding should greatly enhance the ability of the whole University community to make full instructional, administrative, and research use of IT.

Activities planned for 2004-2005:

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

☐ IU should implement as soon as possible a new Student Information System in a way that integrates identified best practices in providing services to students and is adaptable to future changes. This objective is further divided to encompass Student Information Systems, Human Resources Management System, Library Information Systems, Fiscal and Procurement Systems, and Departmental Information Systems.

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit: None
Time Frame: 1998-2004

Actions taken for 2003-2004:

Work continued on the Student Information System (SIS) project, including rolling out most of the remaining SIS modules. Phase II, introduced in October 2003, marked the beginning of the major phases in implementing all of the remaining core functions of the SIS. In preparation for the Fall 2004 Semester, this phase supported the all-important construction of the Schedule of Classes within the new system and set the stage for all future work. Also in this phase, a new way to launch the SIS for administrative tasks within IU’s OneStart portal was implemented for current and new administrative users in Admissions, Student Records, and other offices. New quick clicks within OneStart allow users to avoid lengthy navigation for commonly used components and save staff time. Students also saw additional self-service functions in their OneStart pages including transfer credit services and financial aid links to national and federal Web sites. Late winter 2003 saw the implementation of the Student Registration module, paving the way for Fall 2004 Registration. In October 2003, full electronic routing of E-Docs, a component of the Human Resource Management System (HRMS), became available across IU, automating and streamlining parts of personnel-related processes. The SIRSI Unicorn software that underlies the Library’s Web-based, public interface continues to mature, enabling patrons to check their accounts online and request delivery of library items. (See http://www.iucat.iu.edu/) The Electronic Research Administration (ERA) system provides researchers with an electronic means for developing and submitting research proposals. A prototype of the Human Subjects module was developed in house in 2003 and continued in development in 2004. Other enhancements included a new homepage that eases navigation and a direct link to HRMS. The first ERA report, “The Pipeline Report,” was published in December 2003. Development continued in 2003-2004 on a new Web-based version of TOPS (The Online Purchasing System) that will replace the existing mainframe system. EPIC, the new Unix-based system, slated for completion in late 2004, will be accessible through OneStart and will
Improvements to the OneStart portal included an enhanced user interface that eases navigation and a common inbox for all electronic-document routing which will in time provide one place for users to approve HR E-Docs, purchase requisitions, time-off requests, and the like. New services in OneStart include an integrated Web-based calendar where users can merge class schedules, personal appointments, Oncourse events, and other University events, all in one place. A new classified ads service supports buying and selling, finding roommates, arranging or offering rides, and locating partners for sports. Planned new services include threaded messaging boards, chat, and polls. Such enhancements as mobile access to specific OneStart services via “smart” phones and PDAs are being explored.

Evidence of Progress for 2003-2004:


Activities planned for 2004-2005:

The implementation of systemwide re-engineering of university information systems is proceeding in accordance with the implementation plan detailed at http://www.indiana.edu/~uis/admin:stratplan.html. Timelines for implementation activities are available at http://www.indiana.edu/~uis/admin/timeline.html.

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

☐ 1. The University should develop clear and forceful policies to address the management and protection of information and the security of IT resources.

Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit: None

Actions taken for 2003-2004:

During the year, progress was made on several technology policies the ITPO had distributed for comment. The draft policy on Security of IT Resources (IT-12) will outline who is responsible for securing various technology resources, and will mandate adherence to a published Security Program. In summer and fall 2003, the ITPO stepped up efforts to educate the University community about copyright issues related to file sharing. An extended "emergency incident response team" was established to help handle a series of worm and virus attacks on Microsoft vulnerabilities. The implementation in 2003 of the Enterprise Directory Service and the Web-based Account Management System converted many manual processes to self service and improved account generation and management services.

Efforts were made to improve education about copyright and file sharing. With the cooperation of the Dean of Students offices at the IUB and IUPUI campuses, and in consultation with University Counsel, a new process was put in place that requires those implicated in Digital Millennium Copyright Act notices to take an Oncourse-based copyright tutorial and pass a quiz. Educational efforts on the theme "Are You Legal?" included posters in STCs, campus housing, and apartments; 14,000 flyers; an ad on IU Cable TV; and numerous articles in student publications.

The IUPUI Copyright Management Web Center, which attracts more than 2,000 visitors a month, added the following
materials in 2003-04: links to copyright legislation, patent laws, trademark laws, and other areas of intellectual property; key court case summaries in fair use cases; a Copyright Permissions Service with a step-by-step guide to seeking permission to use copyrighted works; new information on the TEACH Act; a TEACH Act checklist to determine compliance; a memorandum of understanding for copyright ownership at IU; updated copyright policies on learning management systems; information about licensing and transfer of copyrights; and information about works in the public domain. (See: http://www.copyright.iupui.edu/)

Evidence of Progress for 2003-2004:

The 2004 UITS User Satisfaction Survey logged a 90.1% satisfaction rate on the IUPUI campus for online account administration services. The number of Digital Millennium Copyright Act (DMCA) notices IU received decreased during the 2003-2004 academic year.


Activities planned for 2004-2005:

The Information Technology Policy Office (ITPO) develops and implements policies regarding the appropriate use of information technology, educates the campuses about technology policies, coordinates investigations of reports of abuse, and coordinates accounts management for centralized computers. In 2003, the Global Directory Services project (including the Central Authentication Service) was moved from ITPO to University Information Systems for better integration of central systems. UITS will collaborate with the Copyright Management Center on developing policies and programs that advance the use of information technology and information resources, especially in areas of teaching and research, while limiting the University's liability exposure regarding intellectual property rights.

2. UITS, with the Committee on Institutional Data and others in the University community, should develop security mechanisms that properly enact institutional policy.
   **Campus Planning Theme:** Best Practices
   **Secondary Goals:**
   **Sub Unit:** None
   **Time Frame:** 1998-2003

Actions taken for 2003-2004:

Units of the Office of the Vice President for IT and CIO continue to improve the security of IU's computer systems. This year ITSO deployed complex automated programs that analyze network traffic for real-time security threats, which lead to selective filtering of a variety of malicious communications before they have a chance to affect users' computers. Many more such sensors are planned, including some to be deployed on regional campus networks. UITS and ITSO partnered on a number of projects to enhance security. These include: development and distribution of a "Get Connected" CD that students are required to apply before they are permitted to connect personal computers to the University network; creation and distribution of a security CD with various tools and programs as well as security patches and infection removal tools; filtering of specific network communications to block the spread of infections; protecting central enterprise systems with formal firewalls; identifying and isolating, via hundreds of network scans, thousands of vulnerable or already-infected hosts, thereby saving tens of thousands of IU computers from infection; developing many online Knowledge Base articles about institutional and personal computer security issues; and
researching firewalls to be placed at the University network borders. A project is under way to speed locating and notifying users or technicians of misbehaving computers to reduce their effect on University operations. Departmental technicians now have more tools at their disposal, and so can more easily manage systems securely; security certification courses developed and delivered by the ITSO are well attended; and users have access to more information about how to secure their personal computers. However, threats continue to increase in frequency, so additional monies and staffing have been allocated to the preparedness effort.

IU’s leadership contributions to cybersecurity in the higher education and in the national cyber infrastructure realms also result in greater security for the IUPUI user community. The Chief IT Security and Policy Officer is a member of the EDUCAUSE/Internet2 Security Task Force executive committee and is on the advisory boards of several higher education security projects. The Advanced Network Management Lab (of the IU Pervasive Technology Labs) conducts research in this area under contracts awarded by various federal government entities. The IU Center for Applied Cybersecurity Research, launched in April 2003, has increased its efforts to facilitate the sharing of security information among faculty, researchers, and practitioners. In February 2003, IU established the first Research and Educational Network Information Sharing and Analysis Center (REN-ISAC) and established a threat-sharing agreement with the (then) National Infrastructure Protection Center (NIPC). The REN-ISAC will provide real-time threat and warning information to organizations involved in research and higher education.

Evidence of Progress for 2003-2004:

At various points over 2003 and 2004, while viruses and worms crippled the networks of many other universities and corporations, IU network performance, as a result of IU’s aggressive response and preventive efforts, was merely slowed occasionally, and fewer computers were impacted. IU is looked upon as a source of best practices for technology-related security in higher education. Indiana University was identified by Richard Clarke (former advisor to several US Presidents in the area of cybersecurity) as the "gold standard" in security operations. Indeed, many of the staff involved in security issues at IU are popular speakers and seminar leaders at various national conferences and events.

Activities planned for 2004-2005:

The Information Technology Security Office (ITSO) provides proactive analysis, development, education, and guidance related to the security of IU’s IT environment, with the objective of a safe and secure atmosphere for the conduct of University business. The Office works closely with the Information Technology Policy Office (ITPO), assisting in investigations of reports of abuse or IT.

2. Access to Network Resources
   (Recommendation 2, IU Information Technology Strategic Plan)

Provide reliable access to computing and network services, on the campus and off

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: 1998 - 2004

Actions taken for 2003-2004:
With the long-standing problem of inadequate modem access on the IUPUI campus solved, service was constantly monitored for quality and maintained so that busy signals were encountered rarely and modem access is, as a normal operating condition, rapid and straightforward. The number of new, on-campus networks continued to grow. At IUPUI, some 2,530 new network connections were activated in 2003, bringing the total to 18,570. With IUPUI now converted to Gigabit Ethernet, 55 buildings have been connected. During the past year, the I-Light network, Indiana’s regional optical fiber network, enabled greater independence in telecommunications through decreased dependence on telecommunication providers. With multiple strands of optical fiber, I-Light increased networking capacity by many orders of magnitude. Wireless Ethernet access also continues to grow at IUPUI. Efforts are now underway to add wireless to the School of Medicine facilities including the Cancer Research Institute, Kranert Institute of Cardiology, Medical Research Facility, and Research Institute. UITS is installing Vivato phased-array antennas at University College, covering the courtyard area to the north and the University Place Conference Center and Hotel food court; and Inlow Hall, pointing west to cover the outdoor areas near University Library as well as minimally covered locations in Engineering/Science and Technology Building (SL), Science Building (LD), and University Library. These devices are expected to be much more cost-effective than individual access points at covering such open areas as dormitories, athletic arenas, and other outdoor areas.

Evidence of Progress for 2003-2004:

In 2003-2004, UITS dial-up modem pool, comprising 1012 one- and four-hour dialup lines, received 4,812,168 calls, with 89.3% of IUPUI users reporting satisfaction with UITS remote connectivity services. As a measure of the impact of I-Light, in August 2002, IU achieved a near four-fold increase in capacity for normal Internet traffic — at no increase in cost — by leveraging I-Light and its connectivity and co-location with the national Internet infrastructure in Indianapolis. Additional data for 2003-2004 are available through the UITS Finance Office, Cost and Quality of Services Report, http://support.uits.indiana.edu/scripts/ose.cgi?apjw.help.

Activities planned for 2004-2005:

Commercial offerings and new communication technologies such as digital subscriber line (DSL) service and cable modems continue to enable UITS to move away from a position of providing user dialup services toward facilitating agreements between users and commercial vendors. UITS will continue to leverage the power of IU’s 100,000-member community to secure the market’s best rates and services. For more detail, see the UITS Accomplishments Report for FY2003-2004, to be linked at http://it.indiana.edu.

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

1. Establish appropriate incentives and support so that faculty and staff are encouraged in the creative use and application of information technology for teaching, research, and service.

   Campus Planning Theme: Teaching and Learning
   Secondary Goals:
   Sub Unit: None
   Time Frame: Through 2004

Actions taken for 2003-2004:

The IU SBC Fellows Program provides support for faculty projects in the effective integration of information technology into campus and distance education. The program calls upon innovators to serve as faculty mentors to others in their discipline and to demonstrate the benefits of information technology in teaching and learning.
disciplines through offering workshops or departmental consultations in coordination with the teaching and learning centers on IU campuses. The program also collects the fellows’ findings and draws upon their expertise for the benefit of colleagues throughout IU and beyond. For more about the program, see http://sbcf.iu.edu/.

Evidence of Progress for 2003-2004:

In October 2003, the IU/SBC Fellows program, in its fifth year, granted 14 awards to University faculty, four of whom were from IUPUI, for a total of $176,280. The Fellows showcased their projects at the fourth annual IU/SBC Summer Leadership Program. Projects included: ‘visualization learning modules’ that help teach methods of displaying information visually; research into the effectiveness of using virtual reality to train surgeons; a mathematics lab where non-majors apply skills to a variety of disciplines; a Web-based system to give radiology students practice in interpreting radiology images; the digitization and Web delivery of the Ars Femina collection of musical scores written by women; a certification program in evaluating therapeutic outcomes; a project integrating traditional instruction with existing technologies into a wireless, educator-oriented electronic environment; and a "virtual field trip" system that can capture complete visual data of an area.

Activities planned for 2004-2005:

Efforts will continue to support faculty in their use of IT in teaching, research, and service through the provision of grants and fellowships offered in specific areas.

☐ 2. Staff and Faculty Support (Actions 4,8,10,16, and 23 of the IU Information Strategic Plan)

Campus Planning Theme: Teaching and Learning

Secondary Goals:
Sub Unit: None
Time Frame: 1998-2004

Actions taken for 2003-2004:

In 2003-04 LSP Services and University Human Resource Services again partnered to present the Local Support Provider Professional Development Series, which included training on finding resources, building partnerships, handling multiple priorities, handling change, and creating self-reliant users. LSP Services provided Mac OS X EdCert Training to 18 IUPUI and 45 IUB LSPs, taught 25 Microsoft Education Certification Program (EdCert) classes to an audience of 250 LSPs and technical staff from all campuses, and hosted 18 information sharing/user group meetings at IUB and IUPUI attended by some 600 participants. The Unix Systems Support Group (USSG) certified 22 students in Unix system administration, offered online education through the Unix Systems Administration Independent Learning (USAIL) program (http://www.ussg.indiana.edu/usail/), which generates some 200,000 hits a day, hosts monthly Unix Users Group meetings, and hosts the annual LinuxFest, which draws hundreds of students, faculty, and staff to learn about open source concepts and software. More than 70,000 CDs of Thomson (formerly NETg) self-paced learning modules were distributed across the University, up from last year’s distribution of 17,000 CDs. More than 15,000 students, faculty, and staff have taken the courses online.

Evidence of Progress for 2003-2004:

Additional IUPUI usage data for 2003-2004 are available through the UITS Finance Office, Cost and Quality of Service Report.
Activities planned for 2004-2005:

Actions 8, 10, 16, and 23 call for the continued training and certification of technical support and consulting staff to support technology use in departments. This can be done through professional certification programs, locally developed workshops, and self-paced learning opportunities. LSP Services works closely with LSPs and other UITS service providers to ensure the successful implementation of new services, provides third-tier support for Exchange/Outlook users on all campuses, helps support mobility computing, and provides for-fee, on-site assistance with departmental servers. See the TLIT Implementation Plan for more information on these actions: http://www.indiana.edu/~uits/tlt/iub/stplan.html#Toc490534907.

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

1. Faculty Support for Teaching and Learning with Technology (Action 11)
   Campus Planning Theme: Teaching and Learning
   Secondary Goals:
   Sub Unit: None

Actions taken for 2003-2004:

The Center for Teaching and Learning (CTL) has created an online faculty development module series called “Teaching in Support of Student Success.” The series includes modules on learning theory, course design, classroom management, active learning, inclusive teaching, assessment strategies, plus the new “Teaching Online” module, which was designed to introduce faculty to concepts, ideas, and strategies for developing and teaching an online course. The Teaching in Support of Student Success series is available at http://www.opd.iupui.edu/tsss.

In May 2004, the CTL again offered the highly successful Jump Start Program for 12 faculty members from a wide range of disciplines. Over 30 online courses have been created to date through the Jump Start Program. Recently, the Office of Professional Development awarded the second course transformation grant program. This grant is modeled after the work of the National Center for Academic Transformation and is intended to provide support to departments in exploring how instructional technology can be used in dramatically different ways to produce both cost savings and improved student learning.

Evidence of Progress for 2003-2004:

The CTL continues to improve services for faculty and academic units on teaching and learning issues, multimedia, Web applications, and instructional design. In FY 2003-2004, CTL conducted 2,380 consultations. However, as a result of the larger Jump Start and course transformation projects, smaller workshops have been reduced, resulting in 34 workshops this year.

Activities planned for 2004-2005:
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. Additional implementation details are available at http://www.indiana.edu/~uits/tit/sub/stplan.html#_Toc490534906

2. Web-based Course Services and Infrastructure (Actions 12, 18, and 19)

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None

Actions taken for 2003-2004:

One of the University’s most-used information systems, Oncourse allows faculty and students to use current Web-based teaching and learning resources and multimedia content in a single, consistent Web interface. Responsibility for Oncourse development and operation continues to be a joint effort of the TLIT and UIS Divisions of UITS. The Group Manager of Online Development continues to lead Oncourse development efforts. In 2003, two key grants were awarded to IU from Melon to ensure Oncourse continues to be a successful venture. Oncourse CL will build on in-house expertise and take advantage of new technologies and enterprise resources while leveraging community source benefits to reduce the total cost of operation and enhance functionality. As part of this new plan, Indiana University joined the Open Knowledge Initiative (OKI), a collaborative effort involving several universities to build open source, standardized modules for course management systems that will ensure the IUPUI user community access to the best in course management systems. The OKI initiative will develop long-term standards that will provide economic advantages to the University and provide users with access to applications that are the best of their kind. The current Oncourse system will gradually move to the OKI environment and new modules selected for IU will be added as they are developed. Initially, all changes will be made behind the scenes and in tandem with the current production application. OKI-based changes will be made between now and 2005, with minimal visible changes in the application and without disruption for users.

Evidence of Progress for 2003-2004:

Oncourse continues to see a dramatic increase in users each semester. In Fall 2003 student usage grew to 81%, up from 77% in Fall 2002, while faculty use grew to 74%, compared to 67% in Fall 2002. The 2004 UITS User Satisfaction Survey logged a 93.5% satisfaction rate for Oncourse at IUPUI and IUB.

Activities planned for 2004-2005:

In December 2003, IU co-founded an open source initiative called the Sakai Project. The Sakai Project allows IU and other core member institutions – University of Michigan, Stanford University, and MIT – to pool resources and focus on building one set of tools to be used at all core partner institutions. The project also offers IU a unique opportunity to exchange intellectual property with other institutions of higher education while improving the local installation of Oncourse and reducing costs. Oncourse hardware has continued to perform well over the last fiscal year and continued maintenance and upgrades are scheduled for November 2004 to ensure consistent performance and reliability that the IUPUI user community has come to expect.
3. Digital Media and Web Development (Actions 13, 14 and 20)

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: 2000-2004

Actions taken for 2003-2004:

A new IUPUI-based advanced multimedia production studio is equipped with cutting edge equipment to support multimedia development, including video and audio editing systems, scanners, software for capturing lecture-format instruction, Web servers, CD and DVD authoring and duplicating systems; modeling and animation software, and digital still cameras. In Summer 2003, DMS partnered with the IUPUI Center for Teaching and Learning to complete nine IUPUI Online courses, with an additional eight courses delivered in Summer 2004. DMS provided video duplicating services in support of Community Learning Network and Kelley School of Business courses and for the IU School of Medicine. DMS staff accompanied IUB geologists to south-central Oregon, serving as a video production crew to document field research in conjunction with a NASA-funded Astrobiology Institute. The resulting footage will be edited into a pilot segment for a full-length documentary and is the first University project to use HDTV technology. The DMS crew will continue to work alongside researchers to capture field research findings in high-quality format for use in documentaries and in the classroom. DMS produced orientation videos for both the IUB and IUPUI campuses and produced a DVD honoring those involved in the construction of the new ITC building, as well as many other projects.

Evidence of Progress for 2003-2004:

Throughout 2003-2004, Digital Media Services continued to adopt and implement Web standards to ensure the accessibility and code-elegance of the pages developed by the unit. This approach has had a profound positive effect on Web projects for university courses as well as departmental projects. The video production staff continued to develop new digital television skills, including high-definition video and post-production in various video modes. DMS staff have been invited to demonstrate ground-breaking work at various conferences. Additional data for 2003-04 is available in the Finance Office Report on Costs and Quality of Services: http://support.uis.iu.edu/scripts/ose.cgi?apjw.help.

Activities planned for 2004-2005:

In 2003, UITS launched the first phase of the Digital Media Services (DMS) plan, which focuses on expanding support for the design, development, and management of interactive Web-based content and digital multimedia in teaching and learning. DMS provides services in design, media creation, programming, Web hosting, software evaluation and testing, distribution and access, and project management. DMS works closely with other University staff, including Local Support Providers (LSPs), as they assist faculty and staff in performing their own digital media work and in developing Web content. DMS also complements the instructional design and assessment services offered in the campus centers for teaching and learning.

4. Excellence in Classroom Instructional Technology (Actions 21 and 22)

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: 1998-2004
Actions taken for 2003-2004:

Forty-seven type III classrooms were added in 2004 for a total of 82 installed technology classrooms at IUPUI. Planning continues for additional Type III/IV Classrooms, and implementation of these plans will be associated with the pilot phase of the new classroom services model in 2004-2005.

Evidence of Progress for 2003-2004:

IUPUI has implemented lifecycle replacement of equipment in fixed technology classrooms and acquired additional computers and LCD projectors for circulation to meet increased faculty demand. Fixed technology supported 1,414 class sessions at IUPUI during the 2003-2004 fiscal year, and mobile technology supported 5,243 sections. Results from the annual UIITS User Satisfaction Survey suggest that 91.8% of the users of all classroom technology are satisfied with the quality of service.

Activities planned for 2004-2005:

IUPUI has continued to engage the support and input of schools, faculty, and the campus Learning Environments Committee in planning and installing instructional technology upgrades in classrooms. Project planning is coordinated with the Office of the Registrar and Campus Facility Services. The model for supporting instructional technology at IUPUI is under review.

☑ 5. Cost and Quality Analysis for Classroom Technology

Campus Planning Theme: Teaching and Learning

Secondary Goals:
Sub Unit: None

Time Frame: This plan commenced during the 2001-2002 planning.

Actions taken for 2003-2004:

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.

Evidence of Progress for 2003-2004:

Through standard UIITS assessment measures of activity-based costing and user satisfaction, the goal is to see improved satisfaction achieved as well as cost containment. More detail is available through the UIITS Finance Office, Cost and Quality of Services Report, at http://support.its.iu.edu/scripts/ose.cgi?apjw.help.

Activities planned for 2004-2005:

A redesigned model for supporting instructional technology at IUPUI, which will include reduced costs related to providing mobile technology support in classrooms, will be developed in phases beginning FY 2004-2005. 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 approach to classroom technology support.
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.

6. Evaluation and Assessment (Actions 24, 25, and 26)

Campus Planning Theme: Teaching and Learning

Secondary Goals:
Sub Unit: None

Actions taken for 2003–2004:

The TAG program awarded more than $68,000 to 14 winners from IU core and regional campuses. Winners turned in midterm reports in December 2002. In June 2003, they submitted final project reports and presented a poster session along with the SBC Fellows at a Summer Leadership Forum. In 2002, the University focus shifted to looking for new strategies to support assessment through exploring the e-portfolio capabilities of Oncourse. IU’s ePortfolio is an assessment-based design that provides a mechanism for cataloging and assessing evidence of their learning. It enables individual and large-scale institution assessment, and provides a means for users to build presentations (Web pages) of their evidence.

Evidence of Progress for 2003–2004:

An increase in faculty efforts to assess and document the role and effectiveness of technology in teaching and learning will be among the primary indicators of success.

Activities planned for 2004–2005:

A Technology Assessment Grant (TAG) Program was launched for projects that focus on the use of instructional technology in teaching and learning. The purpose of these grants is to encourage faculty to study the impact of educational technology on their practices and on student, course, or program outcomes.

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

1. UITS will 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: None

Actions taken for 2003–2004:

The Common File System (CFS) installed in Fall 2002 provides an easy-to-use, Web-based file storage system. With a total capacity of about 1.63TB, this general-use service is accessible from anywhere in the world. Of the 44,313 CFS users, 3,160 are at IUPUI. CFS currently holds about 1TB of data.
IU’s Massive Data Storage System (MDSS) (based on the High Performance Storage System, or HPSS, software) gives faculty, staff, and student researchers at the Bloomington and Indianapolis campuses instant access up to a 1.6-petabyte capacity. The number of users totals 1,057. Of these, 888 are at IUB, 145 are at IUPUI, and 24 are on the regional campuses. Some 76TB of data are stored in HPSS. Of this, 60TB are used by IUB, 15TB by IUPUI, and 130GB by the regional campuses.

With cross-campus data mirroring over the high performance I-Light network that connects IUB and IUPUI, IU’s MDSS is the first disaster-tolerant mass store system anywhere. Automatic duplication of data between Indianapolis and Bloomington (resulting in nearly 160TB of data stored on tapes) assures that biomedical and other data, often irreplaceable, will not be lost were a disaster to strike one of the University’s two machine rooms.

Visual collaboration technologies continue to open new doors for research at IUPUI. The novel design of the AVIDD (Analysis and Visualization of Instrument Driven Data) facility is aimed at a great diversity of sciences, including the life sciences, geophysics, atmospheric sciences, physics, and chemistry.

The UITS Advanced Visualization Lab (AVL) has deployed 11 large-format stereo displays across the IUB, IUPUI, and IUN campuses to support collaborative, multi-site viewing of 3D models, data sets, and environments. In addition, the AVL has installed one fixed and two portable Access Grid Nodes at IUB and IUPUI. The Access Grid is an ensemble of resources including multimedia large-format displays, presentation and interactive environments, and visualization environments that support group-to-group interaction across the grid.

The AVL also developed new software tools to aid in the visualization of information resulting from biological simulations and databases. The PVIn (Pedigree Visualization and Navigation) system enables researchers in the Hereditary Diseases and Family Studies Division of the IU School of Medicine to visualize the collected pedigree databases. The system scales to enable researchers to handle datasets that are beyond the limits of commercial pedigree packages, and allows new ways of browsing and generating queries. Tree3D is a system for visualizing phylogenetic trees that result from computational analyses of genetic sequence data.

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Evidence of Progress for 2003-2004:

The UITS User Survey for IUPUI reveals high levels of satisfaction with research and academic computing services, including 98.5% satisfaction with bioinformatics support, 92.5% satisfaction with Unix workstation support services, and 100% satisfaction with services for high performance computing. Additional data for 2003-2004 are available through the UITS Finance Office, Cost and Quality of Services Report, http://support.uits.iu.edu/scripts/ose.cgi/apjw.help.

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Activities planned for 2004-2005:

The UITS Research and Academic Computing Division will continue implementation of strategic plan initiatives outlined in its plan available at http://www.indiana.edu/~rac/stratplan/stplan.html. The NSF-supported Analysis and Visualization of Instrument Driven Data (AVIDD) Facility Distributed across the IUPUI, IUB, and IU Northwest campuses is an important new tool for processing data generated by large scientific instruments and is a major resource for research and teaching at IUPUI. The system has an aggregate capacity of 2.2 TeraFLOPS, 0.5 TB RAM, and 10 TB disk space and was ranked 50th in the June 2003 Top500 list of the world’s largest supercomputers (http://www.top500.org/). The AVIDD facility provides a means of managing and visualizing vast amounts of data.

2. UITS will provide advanced data storage and management services to researchers.
Actions taken for 2003-2004:

IU’s Massive Data Storage System (MDSS) is based on the High Performance Storage System (or HPSS) software. During 2003, the MDSS was expanded with funding from the Indiana Genomics Initiative, with the addition of higher-capacity tape drives, for a total capacity of nearly 1.6 petabytes. The amount of data IU currently has under storage is the largest of any university in the country. Some 1,057 MDSS users store approximately 76TB of data in HPSS.

Infoshare and workshops presented during the year raised awareness among IU researchers and more broadly, of the availability and accessibility of IU’s high performance computing and storage resources. A workshop on the mass storage system, held in October 2003, was designed for current and prospective faculty, staff, and graduate student users of the MDSS and Common File System (CFS) service.

With cross-campus data mirroring over the high performance I-Light network that connects IUB and IUPUI, IU's MDSS is the first disaster-tolerant mass storage system anywhere. Automatic duplication of data between Indianapolis and Bloomington (resulting in nearly 160TB of data stored on tapes) assures that biomedical and other data, often irreplaceable, will not be lost were a disaster to strike one of the University's two machine rooms.

Evidence of Progress for 2003-2004:

The number of CFS users at IUPUI currently stands at 2,216, with the annual UITS User Survey registering satisfaction levels of 89.1%. Additional IUPUI usage data for 2003-2004 are available through the UITS Finance Office, Cost and Quality of Services Report at: http://support.uits.indiana.edu/scripts/ose.cgi?apjw_help.

Activities planned for 2004-2005:

UITs will continue to enhance central facilities and support for computationally intensive applications, as well as access to research software. Details about this implementation plan through 2003 are available at http://www.indiana.edu/~rac/stratplan/stplan.html.

3. UITS will 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: None

Time Frame: 1998-2004

Actions taken for 2003-2004:

The 646-processor IBM SP, one of the most powerful university-owned computers in the US, features 644 gigabytes of distributed memory and more than a TeraFLOPS in peak processing speed. An IBM Shared University Research (SUR) grant award in September 2002 allowed the expansion of the Research SP’s high-performance GPFS file systems to a total disk capacity of almost three terabytes. An additional IBM SUR grant award in May 2004 expanded
systems to a total disk capacity of almost three terabytes. An additional NSF/DOE grant awarded in May 2004 expanded the Power4 node to 32 processors and 192GB of memory. This increased disk and memory supports particularly researchers affiliated with the Indiana Genomics Initiative. For more details see http://www.indiana.edu/~uits/business/rcqs0203iupuibasic.htm.

The Research Database Complex (RDC) comprises two Sun V1280 systems with 12 CPUs and 96GB of memory each, dedicated to Oracle database use, and a Sun V880 system with 4 CPUs and 8GB of memory serving as the Web interface for the database servers. The RDC supports Oracle database applications, GIS applications, research applications requiring Solaris, and research applications requiring 8GB or more of real memory. The complex is used by IUs leading database researchers and serves several large biomedical and GIS datasets.

The nine-node Steel cluster provides a general-purpose Unix computing environment for academic use, serving particularly instructional and general-purpose computing. It provides a platform for learning research-related skills that range from programming and scripting to Web publishing.

The NSF-funded AVIDD (Analysis and Visualization of Instrument-Driven Data) facility has an aggregate compute capacity of about one TeraFLOPS (one trillion floating point operations per second) and an aggregate disk capacity of approximately five terabytes. With clusters located at IUPUI, as well as IUB and IUN, it serves researchers on all three campuses. A 36-CPU cluster at IUPUI is currently dedicated to computer science research projects.

As a member of the 15-university consortium with National Science Foundation support to build the International Virtual Data Grid Laboratory (IVDGL), IU contributed a prototype Tier-2 Data Center, which supports data analysis. The prototype Tier-2 Center is a data analysis facility for physicists who use the ATLAS detector at the CERN Large Hadron Collider, located near Geneva, Switzerland, to search for new forms of matter. IU also runs the International Grid Operations Center, or iGOC, co-located with IUs Global Network Operations Center (NOC) on the IUPUI campus. For more details, see http://tier2.iu.edu/

In September 2003, IU and Purdue University received a $3M National Science Foundation (NSF) grant to create the IP-grid in Indiana the network linkages that will extend the NSF TeraGrid to IU Bloomington, Indiana University-Purdue University Indianapolis, and Purdue West Lafayette. The effort will bring the universities, already connected by the I-Light optical fiber network, into the NSF TeraGrid, a network of half a dozen institutions that provide researchers with tens of teraflops of computing power and more than 1 petabyte of storage capacity. The TeraGrids total storage capacity will soon equal 100 times the entire text and digital content of the US Library of Congress. Researchers will be able to collaborate with colleagues at other institutions in real time, as though they were in the same room or laboratory.

As members of the TeraGrid, IU, IUPUI, and Purdue will provide raw computing power and huge amounts of research data. They will also provide such resources as sophisticated visual displays and specialized software for turning data into three-dimensional images; a dataset of thousands of years of global weather data; a years worth of sales transaction data from one of the worlds largest retailers of use to economists and social scientists; data on chemical reactions; and a crisis grid that allows researchers using simulation software to predict outcomes of natural and manmade catastrophes, and develop plans to contain them.

Evidence of Progress for 2003-2004:

The UITS User Survey for IUPUI reveals high levels of satisfaction with research and academic computing services, including a 100% satisfaction rating for high performance computing services. Additional data for 2003-2004 are available through the UITS Finance Office, Cost and Quality of Services Report, http://support.uits.iu.edu/scripts/ose.cgi?apjw.help.
Activities planned for 2004-2005:

UITS will continue to enhance central facilities and support for high performance computing. Details about this implementation plan are available at http://www.indiana.edu/~rac/stratplan/stplan.html

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

1. UITS should accelerate planning for a converged telecommunications infrastructure that aims to maximize the benefits to IU of this emerging technology direction. It should be accompanied by an aggressive program of testing and trialing of new converged technologies.

   - **Campus Planning Theme**: Best Practices
   - **Secondary Goals**:
   - **Sub Unit**: None
   - **Time Frame**: 1998-2004

Actions taken for 2003-2004:

While VoIP (Voice over IP) is currently judged not mature and cost-effective enough for broad implementation, progress is encouraging and IU continues its involvement in investigations involving other higher education institutions. A UITS staff member co-chairs the Internet2 VoIP Working Group. UITS also participates in the EDUCAUSE Net.edu Integrated Communications Strategies steering committee, which explores the full spectrum of telecommunication issues, particularly mobility. In November 2003, IU hosted a two-day VoIP workshop preceding the Internet2 member meeting. The workshop was attended by more than 70 people, including international participants and was highly successful. Another workshop took place in May 2004. In 2003, IU partnered with Interactive Intelligence, Inc. to develop Unified Messaging and Call Center systems for deployment at IU. IU beta-tested the company’s equipment and guided feature development and prepared to roll out a limited pilot project among University staff—to commence in fall 2004—to further test Unified Messaging.

Evidence of Progress for 2003-2004:


Activities planned for 2004-2005:

The implementation of additional enhancements of the University’s telecommunications infrastructure will proceed in accordance with the implementation plan detailed at http://www.indiana.edu/~uits/telecom/stplan.html.

2. A uniform base level of telecommunications connectivity and standards should be defined, communicated, and where necessary, implemented for all campuses.

   - **Campus Planning Theme**: Best Practices
   - **Secondary Goals**:
   - **Sub Unit**: None
   - **Time Frame**: 1998-2004
Actions taken for 2003-2004:

As the key infrastructure component in IU’s IT environment, telecommunications standards are required to ensure interoperability and high quality network services. Leveraging the solid relationship built between the core campus IT organization and regional campus CIOs, University-wide telecommunications standards continued to be implemented across the institution. Of special significance is the I-Light optical fiber infrastructure connecting IU and Purdue campuses at Indianapolis, Bloomington, and West Lafayette, affording greater independence in telecommunications. With multiple strands of optical fiber, I-Light increases telecommunications connectivity by many orders of magnitude, providing more than enough capacity to meet demand over the next 10 to 20 years. This increased capacity is in addition to existing Internet2 connectivity, and serves the IUPUI campus and its connections to the six regional campuses. I-Light also supports voice communications, e-mail, and videoconferencing between the campuses and is the primary artery for communications between IUPUI, IUB, and Purdue University West Lafayette. I-Light presents countless possibilities for collaborative research and an unparalleled platform for distance education. A second phase of expansion, called I-Light2, was approved by the Indiana Legislature in May 2003. At its annual conference in November 2003, EDUCAUSE chose Indiana University and Purdue University to receive its 2003 Award for Excellence in Networking for I-Light. This prestigious award recognizes strategic, innovative networking programs or practices that improve the quality of campus network services through new or enhanced network architectures, infrastructure, integration, management and/or operational practices. The EDUCAUSE Network Award committee commended the collaboration between university, city, and state entities to create I-Light. In 2004, network engineers on the IUPUI and IUB campuses began design and implementation of a network redesign that better utilizes the high-speed infrastructure shared by the two campuses.

Evidence of Progress for 2003-2004:


Activities planned for 2004-2005:

Activities planned: The implementation of additional enhancements of the University's telecommunications infrastructure will proceed in accordance with the implementation plan detailed at http://www.indiana.edu/~uits/telecom/stplan.html

3. The University should consider implementing a network architecture that separately supports production and advanced network applications.

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit: None
Time Frame: 1998 - 2004

Actions taken for 2003-2004:

IU has maintained its position as a leader in advanced networking through a variety of endeavors. These advanced networks separate advanced research activities from those of the commodity production Internet, providing IU researchers with separate high-speed links to other researchers across the nation and around the world. The IP-grid extends the I-Light optical-fiber network to a TeraGrid node in Chicago via the acquisition of a new optical-fiber connection. The Active Internet2 high-speed network provided at IUPUI continues to provide high-speed...
The Abilene Internet2 backbone network, managed at IUPUI, continues to provide high-performance network services for advanced applications and to serve as a testbed for advanced network capabilities, such as Quality of Service (QoS) standards, multicasting, and more. Abilene provides native next-generation Internet Protocol (IPv6) service, which increases the number of available addresses and along with other improvements, paves the way for a large range of new applications. Abilene provides a 10-gigabit-per-second (10Gbps) optical connection to StarLight, a Chicago-based advanced optical infrastructure. This link enables institutions participating in Abilene to leverage high performance research and education networks around the world that also connect to StarLight. In 2003, Abilene backbone capacity was increased to 10 Gigabits per second (Gbps), giving IUPUI researchers access to one of the world’s most advanced and far-reaching educational research networks. The international TransPAC Network, also managed in the US by the IU Global Research Network Operations Center (Global NOC) at IUPUI enables collaborations between researchers in the US and Asia-Pacific notably in astronomy, molecular biology, high-energy physics, medicine, meteorology, visualization, and computational science. The Global NOC itself continues to play a key role in ensuring the reliable and constant provision of the advanced networking infrastructure that supports the work of researchers at IUPUI and collaborators around the world. Along with operations for TransPAC, the Global NOC also manages AMPATH (connecting education and research networks in Latin America), STAR TAP (which provides the infrastructure at which many international connections link various US research and education networks), and the National LambdaRail (which aims to catalyze innovative research and development into next generation network technologies, protocols, services and applications). In 2003, Indiana University, as a member of the Committee on Institutional Cooperation (CIC), became a founding member in the National LambdaRail (NLR) initiative, a consortium of US research universities and private-sector technology companies dedicated to building a national-scale infrastructure for research and experimentation in networking technologies and applications. NLR is the largest higher-education-owned and -managed optical networking and research facility in the world, with approximately 10,000 route-miles of dark fiber, with an initial four 10-gigabit light waves (or lambda) for research. NLR is the first national infrastructure that will allow researchers to dedicate lambda wavelengths to a set of different problems, giving the community the freedom and flexibility to stress the network in order to identify ground-breaking solutions and applications.

Evidence of Progress for 2003-2004:

Measures of progress and effectiveness can be found in the growth in application and use by faculty of the university’s advanced networking capability and also in the growth of collaborative activity among researchers in the state. Data for 2003-2004 are available through the UITS Finance Office, Cost and Quality of Services Report, http://support.uits.iu.edu/scripts/ose.cgi?apjw help.

Activities planned for 2004-2005:

The I-Light optical fiber network connecting the IUPUI, IUB, and Purdue campuses supports research applications, at the same time as it supports voice communications, e-mail, and videoconferencing. With multiple strands of optical fiber, I-Light increased networking capacity by many orders of magnitude, providing more than enough capacity to meet demand over the next 10 to 20 years. In August 2002, IU achieved a near four-fold increase in capacity for normal Internet traffic—at no increase in cost—by leveraging I-Light and its connectivity and co-location with the national Internet infrastructure in Indianapolis. This increased capacity, which is in addition to existing Internet2 connectivity, is allocated equally among the IUPUI campus and its connections to the six regional campuses, the IUB campus, and the Halls of Residence at IUB. In September 2003, IU and Purdue Universities received a $3M National Science Foundation (NSF) grant to create the IP-grid in Indiana — the network linkages that will extend the NSF TeraGrid to IUPUI, IU Bloomington, and Purdue West Lafayette. The effort will bring the universities, already connected by the I-Light optical fiber network, into the NSF TeraGrid, a network of half a dozen institutions that provide researchers with tens of teraflops of computing power and more than 1 petabyte of storage capacity. The TeraGrid’s total storage
capacity will soon equal 100 times the entire text and digital content of the US Library of Congress. The result will be an optical fiber network fabric that will allow IUPUI researchers to engage in computing grids and share resources, and will further improve their position in competing for federal research grants and other opportunities. A second phase of expansion of I-Light, called I-Light2, was approved by the Indiana Legislature in May 2003. Subsequent implementation could further leverage I-Light within the State, providing a means for improving connectivity within the higher education community, and offering some economic development impact within the telecommunications infrastructure of many State communities.

4. Implementation should begin for a University-wide wireless network.

**Campus Planning Theme:** Teaching and Learning  
**Secondary Goals:**  
**Sub Unit:** None  
**Time Frame:** 2000-2004

**Actions taken for 2003-2004:**

Secure wireless Ethernet access to the IUPUI campus network continued to be implemented and was completed on time and on budget during 2003-04. To prominently mark wireless access points UITS designed a wireless icon to be affixed to signage throughout the campuses. This will allow students, faculty, and staff to identify wireless-accessible classrooms, common areas, auditoriums, and meeting rooms. The primary goal for the future is to provide seamless wireless access across IUB and IUPUI.

**Evidence of Progress for 2003-2004:**


**Activities planned for 2004-2005:**

Wireless continues to increase in importance in University telecommunications. Although IU has some of the best wired campuses in the nation, mobile, wireless computing technology will become more important in the lives of students and faculty on IU campuses in the next decade. Wireless networks will not replace the need for wiring plant infrastructure and the lifecycle modernization of that infrastructure as it ages and new technologies are available for use. Wireless will, however, play a role in augmenting the campus networks, removing the boundaries of buildings and wire jacks for the IU technology-using community. The Virtual Private Network (VPN)-secured wireless network that has been in production since July 2001 provides solid encryption for the wireless link and also requires authentication with an IU Network ID before use of the network is allowed. In 2002, IU took major strides toward a goal of complete wireless access in a VPN-secured environment. In response to the Vice President for Information Technologys June 2002 directive to blanket the University campuses with wireless access, a fulltime Project Analyst was hired to oversee the wireless initiatives for IU. Efforts to complete this initiative of providing stable, robust, and secure wireless access to students, faculty, and staff, are underway.

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

**UITs,** with the departments, schools and campuses, should develop a model for student technology support that provides:
A basic level of support and technology infrastructure to all students;
Advanced support, typically for advanced degree students in graduate and professional programs, that is discipline-specific and may be integrated with the teaching or research activities of a school or department; and
Advanced support to undergraduate students, as needed, especially for stud

**Campus Planning Theme:** Teaching and Learning
**Secondary Goals:**
**Sub Unit:** None
**Time Frame:** 1998-2004

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**Actions taken for 2003-2004:**

Front-line phone support services at IUPUI are available 24x7x365, with the same services offered to all campuses. These extended hours make support services available around the clock. In 2003, the Support Center fielded hundreds of thousands of inquiries and help requests from the University community. With information technology integral to most aspects of University life and work, unconstrained access to support for using IT is critical. In 2003, UITS introduced a new services and support website (uits.iu.edu) that provides a modern, intuitive means of accessing help. The new environment builds on the best of the current support structure, including the Knowledge Base and strong human help presence, to offer help and information year-round, 24 hours a day, that will empower users to make the best use of the University's IT environment. Two new services will be added to the IUPUI Support Center offerings in spring 2005. An online chat service will allow faculty, staff, and students to communicate with a live support agent to answer technical questions. In addition, the IUPUI Support Center will offer a carry-in service next semester to repair and/or install software, recover damaged files, and backup data at very competitive prices.

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**Evidence of Progress for 2003-2004:**

The following contact data was logged for the Support Center at IUPUI in 2003-04: 7,132 walk-in contacts, 7,000 e-mail contacts; and 44,400 phone contacts. The Online Support systems logged approximately 8 million hits during the year across the University. Additional data for 2003-2004 are available through the UITS Finance Office, Cost and Quality of Services Report, http://support.uits.iu.edu/scripts/ose.cgi/apjw.help.

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**Activities planned for 2004-2005:**

Access to support for students, faculty, and staff will be enhanced with the move of UITS into its new facility, the Informatics and Communications Technology Complex (ICTC) in Summer 2004. The complex houses the campus IT Support Center; IT training rooms; a 24-hour student technology center, including state-of-the-art facilities for multimedia authoring; and a center for assistive technology. This facility places in close proximity the UITS Support Center, technology classrooms for user education, and a new 24-hour Student Technology Center.

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9. Digital Libraries and the Scholarly Record
(Recommendation 9 of the IU Information Technology Strategic Plan)

The University Libraries, with UITS, should provide students, faculty, and staff at all campuses with convenient and reliable access to a comprehensive and coordinated collection of electronic information resources, on the campuses and off.

**Campus Planning Theme:** Best Practices
**Secondary Goals:**
**Sub Unit:** None
**Time Frame:** 1998-2004

[17]
Actions taken for 2003-2004:

The IU Digital Library Program is a collaborative effort of the Indiana University Libraries, the OVPIT, and the University research faculty with leadership from the School of Library and Information Science.

INDiamond Collections (Digital Images And Manuscripts On Demand): Philanthropy Resources Online. PRO is a digital library of primary and secondary sources that supports teaching and learning about philanthropy and the nonprofit sector, supported by the IUPUI Research Investment Fund, ARNOVA: The Association for Research on Nonprofit Organizations and Voluntary Action, the Ford Foundation, the W. K. Kellogg Foundation, and the Center on Philanthropy at Indiana University. PRO provides digital, full-text access to significant but not widely available publications in philanthropic studies. By June 2003 PRO comprised more than 50 publications (including journals, monographs, and essays), amounting to more than 12,000 pages of text. (See http://indiamond.ulib.iupui.edu/PRO/.)

IUPUI Image Collection. This collection of digital images represents the University’s beginnings, history, developments, events, schools, departments, buildings, and people. By June 2003, the collection contained more than 1500 black/white and color images and is updated daily. (See http://indiamond6.ulib.iupui.edu/IUPUIphotos/.)

Climate Data: Indianapolis, Indiana. This site is a product of the IUPUI University Library in cooperation with the Indianapolis-Marion County Public Library (IMCPL). Print copies of data generated by NOAA/ National Climatic Data Center are scanned and displayed in digital format as part of the University’s INDiamond collection. The IMCPL collection also includes similar data for the rest of the State of Indiana. This site features a local dynamic climatological calendar that displays daily high and low temperatures from January 1872 through August 1991; daily precipitation from July 1948 through December 1994; and monthly snow accumulation (October - May), March 1884 through May 1988. (See http://in-ulib-brayton/climatedata/print/home.html.)

The Herron Image Library. This collection currently contains up to 1,000 licensed images of works of art from prehistory through the present for use in teaching and research. Remote access is available with a campus ID and password. Works of art are added as they are licensed. (See http://indiamond6.ulib.iupui.edu/HIL/.)

The Indiana Humanities Council Smart Desktop Initiative. Through a collaboration with University Library, the Indiana Humanities Council (IHC) Desktop provides full-service education Web-based tools that enable Indiana educators, students, parents, and other education stakeholders to analyze education information; access standards-aligned, humanities-rich resources and instructional materials; and collaborate to improve instruction and student learning as well as allow teachers to develop and deliver online classes.

The SDI Resource Module is the digital library of content-rich resources available through the desktop. The standards-based content pool gives teachers fast and direct access to items housed in the digital library or at an off-site content provider’s Web site. This database or digital library will contain lesson plans, humanities-rich resources, and access to the Indiana Academic Learning Standards. Educators in the State will be able to search the database for standards-aligned humanities resources that can be integrated into their lesson plans and classroom activities. (See http://www.ihc4u.org/desktop.htm.)

Work continued on the Cultural Digital Library Indexing Our Heritage (CLIOH) project, which is supported in part by an award from the Institute for Museum and Library Services. CLIOH is a multi-disciplinary initiative to digitally preserve endangered archaeological sites, compiling vast amounts of data — from still photos to virtual-reality tours — that can be accessed through the Internet. For more information, see www.cs.iupui.edu/~clioh.
The number, variety, and extent of digital library projects proposed and funded will be an important measure of progress and effectiveness. Additional IUPUI usage data for 2003-2004 are available through the UITS Finance Office, Cost and Quality of Services Report at: http://support.iuts.indiana.edu/scripts/ose.cgi?apjw.help.

Activities planned for 2004-2005:

The Digital Libraries Project will continue to leverage IT Strategic Plan resources as matching contributions for future digital library research funding proposals. Additional implementation details for this strategic area are available in the Research and Academic Computing Strategic Plan, http://www.indiana.edu/~rac/stratplan/stplan.html.

Fiscal Health

*** Fiscal health report for 2004-05 is attached as PDF file. ***

Reallocation Plan

3. Campus Reallocation Funds. Not Applicable. UITS does not receive any campus reallocation funds.

Other Question(s)

How do you plan to maintain/increase quality in the face of diminishing resources? What processes do you have in place to do this, for example, how are faculty involved in decision-making?

How do you cultivate a climate for diversity -- how do you recruit, develop, and retain diverse students, faculty, and staff? How do you incorporate diversity in the curriculum, in research, in civic engagement?

Five years from now what proportion of your faculty do you expect to be in the following categories: tenure track faculty, clinical faculty, research faculty, lecturers, or other academic specialties (percentages should total 100%)?

Please prepare an EXECUTIVE SUMMARY of no more than one page summarizing your most significant accomplishments of the past year (including items from the period from July 1, 2003 to the present) and the major initiatives you plan to undertake in 2004-05.