

The University of Texas Libraries
Information Technology Vision Plan
2009-2010

A. Summary of Requests

We request funding for: 1) upgrade and replacement of essential components (desktop computers) of the library information technology infrastructure used by University students in the course of their research and studies, and 2) replacement and extension of our instructional laptop program used in several branches for teaching library courses and for student research.

Desktop computers	\$138,000
Laptop computers	\$60,000
Total Requested Amount	\$198,000

B. Needs and Proposed Use of Funds, 2009-2010

Thanks in part to past ITAC funding, our efforts to develop and maintain a robust infrastructure for delivering digital information to students via web-based resources have reached a sufficient level of maturity for the Libraries to move those costs to base funding.

Our current needs are directly related to successfully leveraging this investment to meet the changing needs of our students as they adopt and adapt to emerging technologies. As online resources increase and expand (both content and services such as email and instant messaging based reference assistance), we observe that students are heavily dependent on library-based access to these resources. Increasingly, they are using portable technology, especially laptop computers, to access these resources and to collaborate with each other. Students working individually and in groups throughout the library expect to access web-based resources without leaving their work space or breaking away from their study group. Similarly, if they need to communicate with librarians, through such services as Ask a Librarian, with faculty, or with colleagues in another location, students expect to be able to do these things from portable devices. With the increased study space and connectivity provided through the renovation of PCL 2.500, there has been a marked increase in the number of students using electronic resources and working collaboratively in that space.

Consequently, our first priority for ITAC funding is maintaining access to library resources through the existing desktop computers in PCL. Overall, the Libraries maintains 500 desktop computers that are used by students for a full range of library and productivity applications and need to be fully capable and reliable. The full-function machines in the libraries are especially heavily used, often with long waiting queues. These machines are on a four year replacement

cycle and the yearly costs of replacing these machines and their supporting infrastructure is directly related to student research. We request \$138,000 in funding to support the costs of replacing the most dated of these desktop machines and maintaining this critical component of the information technology infrastructure so heavily used by students.

Our second priority for ITAC funding is the replacement and extension of the aging laptop inventory in Branch Libraries in order to continue providing flexible, portable access to Libraries resources and services for students. The 40 current laptops in the Fine Arts Library (FAL) routinely circulate at 100% capacity (some 4,899 circulations to date) and we believe that it is important to upgrade and extend the laptop computer inventory available to students to meet current expectations for modern, flexible technology. We believe that when the AV Library moves into the FAL in August 2009, these laptops will receive even more use. In addition to being heavily circulated, the laptops in FAL are also used to provide classroom library instruction sessions. Last year, FAL taught approximately 20 instruction sessions and 342 students. FAL also uses the laptops for hands on training for staff and faculty as does the College of Fine Arts. Given the wear on the current laptop inventory, without continuing ITAC support, the Libraries may have to consider ending this very popular service or forgo other services to support the portable classroom model in FAL. We request \$60,000 in funding to support the acquisition of laptop computers to extend the availability of portable computer technology for student use in Branch Libraries such as FAL.

The total request for 2008-2009 is \$198,000.

C. Overview of Current IT Programs, Budget, and Infrastructure

The programs provided by the Libraries in support of students and faculty are best characterized as information services. The Libraries provides a broad array of electronic information services that directly support student learning. All of these services require ongoing resources from many different funding sources, as shown below.

1. University of Texas Libraries Vision, Mission, and Goals

Vision

The University of Texas Libraries is the preeminent public university library in the country, providing

- campus information resources (the raw materials of University research and learning) that sustain the intellectual environment required to be a preeminent research institution;
- an evolving technology environment with effective tools and services for the discovery and delivery of information to campus scholars and the citizenry alike;

- an inviting and comfortable space for individual or group study and learning, equipped with appropriate infrastructure;
- experts who teach the skills necessary to master information strategies appropriate to the classroom, laboratory, and lifelong learning;
- staff expertise that strengthens state and national collaborations focused on improving the preservation and dissemination of scholarship and creative works; and
- a talented and diverse staff that fully embraces University values.

Mission

The University of Texas Libraries collects, organizes, preserves, and provides access to recorded knowledge and human creativity in support of the teaching and research mission of the University.

Goals

ITAC funding has been critical to the Libraries success in achieving goals for the use of information technology in support of UT's mission. Those information technology related goals are:

- Ensure intellectual and physical access to all collections in campus libraries.
- Advance current information literacy program to develop user competencies in information seeking and critical inquiry, emphasizing point-of-need instruction in online environments as appropriate to various academic disciplines and departmental cultures.
- Develop and maintain a robust digital infrastructure capable of providing multi-channel access to our electronic information at the point-of-need, supported by adequate staff and resources.
- Implement a new suite of digital services that addresses evolving user behavior, improves users' access and control of their digital environments, leverages the Libraries investment in content and existing infrastructure, provides compatibility with campus systems and can adapt to new and evolving digital environments.

2. Current IT Programs

Commercial Web-based Resources

Our licensed electronic information includes approximately 490 online databases and 30,000 electronic journals. We subscribe to these resources remotely and our students access them over the web on the computers in our libraries and on their own computers through wired and wireless networks. Users off-campus use our proxy servers so that they can access these information resources in their apartments and homes—in truth, wherever they can connect to the web with their laptops—just as if they were in a library.

In addition, we serve, host, or link to many other electronic resources including electronic books, electronic theses and dissertations, music, art, data sets and several other resources. Indeed, one of our goals is to purchase information in electronic format in preference to paper and other traditional formats. It is necessary to have usable web pages, servers, networks, and other pieces of infrastructure so that students can best avail themselves of these resources. Spending millions of dollars on electronic resources but not providing adequate infrastructure to the UT community to use those resources would be a vast waste of resources. ITAC funds help support this effort for students.

Desktop Computer Hardware/Software

The UT Libraries provides over 1,000 networked devices in support of student research and instruction through its thirteen branches including several hundred which are directly used by students in the Electronic Classrooms and Reference areas in the Perry-Castañeda Library, the science libraries, and the Art, Architecture and Classics Libraries. These computers allow students to access the library owned and licensed electronic resources from within the library where they have access to the print collection and the reference staff. This is very valuable to the students since the librarians can help students evaluate the quality of information from an increasingly disparate set of materials.

Laptop Checkout

With a valid UT ID students may check out laptops from Perry-Castañeda Library and the Fine Arts Library. Although we no longer have funds for purchasing new computers in our laptop checkout program, we have temporarily been using older laptops which would otherwise be surplus.

Ethernet Connections

Ethernet laptop connections are available in the Perry-Castañeda Library and the Engineering Library.

Wireless Access

UTNet wireless access is available to students, faculty, and staff throughout the Chemistry Library, Classics Library, Engineering Library, Fine Arts Library, Physics Mathematics Astronomy Library, Public Affairs Library and the Tarlton Law Library; and in selected areas of the Architecture and Planning Library, Collections Deposit Library, Fine Arts Library, Geology Library, Life Science Library, Perry-Castañeda Library, and the Harry Ransom Center.

Ask a Librarian

Online help is provided through the Libraries website and provides a virtual help desk for students doing research. "Ask a Librarian" not only provides a way for students to connect with librarians through email, chat, or telephone, but also offers an FAQ and a way to make an appointment with a subject specialist for more advanced, face-to-face research assistance.

Electronic Reserves

Our electronic reserves program provides students with materials faculty members place on reserve for their classes. Again, providing reserves electronically enables students to use the materials when and where they wish without having to wait in line, without having to check them out, and without having to return them in two hours or face fines. And, unlike traditional reserves, multiple students can use one resource simultaneously. The program handles rights management issues, interacts with Blackboard, and enables faculty to basically make their course materials available online over the web with its attendant benefits for students.

Training and Instruction

The Libraries provides 149 computers in seven training rooms for hands-on instruction in the use of online resources. Classes taught are most often offered in conjunction with students' assignments in their academic classes. Online tutorials are available as well so that students can take advantage of instruction sessions at the time and place of need. And UT Libraries works with faculty and TAs to integrate learning modules and information resources (including electronic reserves) into Blackboard portals for classes, securely password protected for members of the class.

3. Infrastructure

It is essential that we deploy an infrastructure that is appropriate to the needs of our students and faculty. We support thousands of faculty members and students and have built a world class digital library facility to meet this demand. As previously noted, while we license access to millions of dollars of commercial, web-based resources, it is essential that we provide the computers, networks, and attendant software in order to bring that information to our students and faculty wherever they may be. This requires trained staff, equipment, and software.

As information continues to be produced only in electronic formats, it is even more important for the University to provide resources that will help us hire the staff we need who can then continue to buy, build and maintain the equipment and software that will enable the access our University requires.

Production and Development Servers

- 20 (194 virtual) Sun Microsystems CPUs running Solaris w/ 224 GB of memory
- Apache web server
- EZ Proxy server (for remote access to licensed resources; EID required)
- MySQL DB server

- Z39.50 DB server
- Nutch indexing and search server
- pmWiki server (hosting various wikis)
- WordpressMU (for hosting various blogs)
- Helix streaming media server (for audio and video delivered over the web)
- Sun One application server
- SFX open url server
- Metalib federated search server
- DSpace Institutional Repository
- 12 Windows servers for application hosting

Production and Development Library Management Servers

- 16 Sun CPUs running Solaris w/ 64 GB of memory
- 2 TB of online storage

Network Attached Storage

- 75 Terabytes of online storage; backed up, secure, highly available

Tape Backup/Archiving Library

- Backup system located in main campus data center, 75 Terabyte capacity
- This system enables us to move very large files to tape for long-term archival preservation
- Tapes are tested and the content migrated to new tape at regular intervals
- Independent of proprietary software

Digitization Center

We produce digital image/text/audio/video from original files. We scan rare and fragile materials (such as the Gutenberg Bible).

- I2S DigiBook overhead scanner for bound books and flat items
- Epson 1640XL/10000XL large format flatbed scanners
- Xerox DigiPath high-speed document scanner
- Nikon CoolScan 4000/5000/9000 slide/transparencies scanners
- DocWorks/METAe software for encoding electronic texts

4. Current and Proposed Funding Sources for IT Programs and Infrastructure

Primary sources of funding for library information technology initiatives are the UT Libraries budget, UT System funds (LERR and UT System Digital Library programs), and other funds (grants, contracts, and other miscellaneous funds). The UT Libraries regular budgets and various revolving funds (including library fines, lost book charges, and printer revenue) fund electronic information resources.

Virtually all equipment (desktop, servers, and connectivity) is funded by one-time capital funds that are requested annually. The Libraries are in the process of building a sustainable funding mechanism to provide consistent life cycle funding for information technology infrastructure, at least at the desktop level. There is no sustainable budget for replacement of servers and other high-cost equipment and networking. Following is a summary of local expenditures in support of Libraries IT infrastructure (excluding the millions of dollars the Libraries pays for the electronic information itself).

Budgeted Funding for Digital Initiatives, 2008-2009

Funding Sources	Salaries	Fringe	MO&E	Total
UT Libraries Budget	\$2,086,903.60		\$503,332.25	\$2,590,235.85
ITAC Funds			\$106,806.00	\$106,806.00
UT System Funds			\$300,000.00	\$300,000.00
TDL Funds	\$342,340.00	\$91,334.00	\$250,000.00	\$683,674.00
Total				\$3,680,715.85

D. Use of 2008-2009 Academic Year ITAC Allocations

In 2008-2009 we received funding to support continued access to library resources through the existing desktop computers in PCL by replacing the most dated of these desktop machines.

These machines are on a four year replacement cycle. With last year's funds, we identified about 170 of the most dated machines and scheduled them for replacement in the 2008-2009 fiscal year.