

The University of Texas Libraries Information Technology Vision Plan

2005-2006

Summary of Requests

We are requesting continuation funding for two staff members who support our infrastructure and programs to deliver information to students. Following is a budget:

System Analyst	\$43,447
Fringe Benefits	\$15,434
Information Analyst	\$42,768
<u>Fringe Benefits</u>	<u>\$12,830</u>
TOTAL	\$116,479

Overview of Current IT Programs and Infrastructure

Our Vision

We will provide a community of learners with unfettered access to a universe of information, helping to enrich their lives and transform their worlds.

Our Mission

We advance the academic mission of the university and enrich the intellectual life of the people of Texas by fostering information discovery, facilitating teaching and research, nurturing creativity, partnering in the development and dissemination of new knowledge, and contributing to the intellectual growth and fulfillment of the individual.

Our Goals

ITAC funding has been critical to the Library's success in meeting objectives that support long-term goals for the use of information technology in support of our mission. Those goals are:

- to meet the information needs of learners by enriching access to the broadest array of resources

- to provide our students and faculty with the highest quality program of digital information and online services delivery that we can afford

- to provide our students and faculty with a robust and highly available computing platform in support of our digital information and services programs
- to enhance the Library's holdings by producing, collecting and purchasing digital resources and services for UT students and faculty
- to promote resource sharing and continue collaborative programs at the national, regional, state, and campus levels in support of academic learning programs

Programs

The programs provided by the Library in support of students and faculty are best characterized as information services. The Library provides a broad array of services that directly support student learning. All of these services are supported by the IT department and require ongoing resources:

Commercial Web-based Resources

This includes approximately 124 online databases and 40,000 electronic journal subscriptions. We subscribe to these resources remotely and our students access them over the Web through our proxy servers. While we do not host these journals, we do host software that enables inter-linking across these resources through special software that runs on our servers.

Desktop Computer Hardware/Software

The Library provides over 500 devices in support of student research and instruction through its fourteen branches including Electronic Information Centers in the Perry-Castañeda Library, the Undergraduate Library, and the Science Libraries. Through these computers the Library provides access to the thousands of licensed electronic resources as well as to the open web so students can check email, the news, or just surf.

Laptop Checkout

With a valid UT ID students may check out laptops from Perry-Castañeda Library and the Undergraduate Library.

Ethernet Connections

Ethernet laptop connections are available in the Perry-Castañeda Library, the Undergraduate Library, and the Engineering Library. An EID is required.

Wireless Access

UTNet Wireless Access is available to students, faculty, and staff throughout the Engineering Library and the Undergraduate Library and in selected areas of the Architecture and Planning Library, the Fine Arts Library, the Perry-Castañeda Library and the Tarlton Law Library.

Ask a Librarian

This services is provided through the Library website and provides a virtual help desk for students doing research. This service not only provides ways for students to connect with librarians through email, chat, or telephone, but it offers an FAQ and a way to contact a subject specialist by appointment. Online tutorials are available here as well.

Electronic Reserves

This service is available to faculty members and provides a way to make course packets available online over the web.

Training and Instruction

The Library provides sixty-six computers in four training rooms. These rooms support hands-on instruction in the use of online resources and are offered often in conjunction with assignments as part of classroom activities.

Infrastructure

The human and technology resources required to support the digital library have grown with the rise in the use of web-based resources and services by our students and faculty. We have found that while there is still demand for our printed materials there is an ever-increasing demand for information that can be delivered to the student or faculty member anytime, anywhere.

The technology platform outlined below is redundant and failsafe and can recover from hardware failure without downtime or reduced availability of systems. Following is an outline of the resources required to deliver digital library services:

Production Web Servers

- 16 Sun Microsystems CPUs running the Solaris Operating System and 64 GB of memory
- Apache web server
- EZ Proxy server (for remote access to licensed resources; EID required)
- Helix streaming media server (for audio and video delivered over the web)
- Sun One application server

Production Database Servers

- 4 Sun Microsystems CPUs running the Solaris Operating System, 8GB memory
- MySQL DB server
- Z39.50 DB server
- LDAP Directory Server

Production Search Servers

- 2 Sun Microsystems CPUs running the Solaris Operating System
- Verity K2 Enterprise Server search engine

Network Attached Storage

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

Tape Backup Library

-Backup system located in main campus data center

Archiving Station

-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

Development Servers

These servers are the staging area for work that is copied into production

-6 Sun Microsystems CPUs running the Solaris Operating System, 3 GB memory

-Apache web server

-Helix streaming media server

-Sun One application server

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 bound-book scanner

-Epson 1640XL large format flatbed scanner

-Xerox Digipath duplexing document scanner

-Contex Chroma TX wide format scanner

-Nikon coolscan 4/5000 slide scanner

-Kodak DCS Pro 14N digital camera

Current and Proposed Funding Sources for IT Programs and Infrastructure

Primary sources of funding for library information technology initiatives are the UT Libraries regular budget, UT System Library, Equipment, Repair and Renovation (LERR) Program, UT System Digital Library program, and external grants and contracts. The UT Libraries regular budget, the student library fee, 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. To date, no sustainable funding mechanism to provide consistent life cycle funding for information technology infrastructure has been identified. Following is a summary of local expenditures in support of Library IT infrastructure:

Funding Source	Salaries	Fringe	Software	MO&E	TOTAL
Budget	1,202,416		87,320	181,558	1,471,660
St. Library Fee	1,127,335	338,200		7,226	1,572,761
UT System- LERR	122,416	36,726	189,305	246,610	595,057
Digital Library	239,745	60,307	2,125	7,035	309,212
Contracts/Grants					
UTOPIA	174,083	42,997	1,008	11,692	229,780
Tx St. Hist. Assn.	96,200	21,339	1,351	36,400	155,290
TOTAL	2,962,561	499,569	281,109	490,521	4,233,760

Use of 2004/2005 Academic Year Allocations

Web Development Program: \$105,000

We requested continuation funding for staff who were paid with 2003/2004 ITAC funds in order to continue their work in development and implementation of Web-based digital library services and content.

The focus of the work of the team up to last year had been on developing support materials for services and resources that are already heavily used by students and faculty. Staff developed two types of products: 1) web-based tutorials involving the capture, production and editing of digital video and audio, as well as text and still images and, 2) software to assist in providing basic services.

We did not receive ITAC funding until very late in the academic year last year, and staff members who were funded with these funds to provide electronic information services to students left to pursue employment elsewhere.

When funding arrived, we directed it mostly toward the library's workstation support unit and toward our digital library production program to assist in providing basic services. We have also decided to direct approximately \$53,000 toward the maintenance and upgrade of our web server and storage platform. All of the ITAC funds were spent to support information services for students.

Needs and Proposed Use of Funds

Our current needs are directly related to our ability to maintain our infrastructure. There are two primary needs in this area. The first is a staffing need. As the Library becomes increasingly involved in the delivery of digital information and web-based services, there is increasing pressure on our budgets to grow the base of human resources that are necessary to keep pace. Our website (<http://www.lib.utexas.edu/>) will receive over 1 billion "hits" this year and the use of equipment in our facilities is steady. Below is a description of two positions that are currently adding critical support to our unit and value to our students. These are the positions we need to continue with ITAC funding and are listed in the budget at the top of this request:

1. Systems Analyst. Due to the growing number of hardware and networking devices that we are deploying and the need for continued and increased security for these publicly available systems, there is a growing need for staff to ensure that these systems are secure. It is vital that we maintain a secure computing platform so that we can maximize system availability and minimize downtime. The way we accomplish this is through a combination of computer programming, system configuration and physical security. We are requesting continued funding that will be used to support a full-time systems analyst who will work in our public desktop support unit. The position will write scripts that aid in the conversion of desktop machines to Active Directory; provide enhancements to our systems management software such as a waitlist application; and assist in troubleshooting various problems related to routine use of this equipment. We must have this person to be able to provide safe, continuous access to information for the entire campus community.

2. Information Analyst. Due to the growing complexity of our website as we continue to add content and host websites for other libraries and departments, there is a growing need for an information architect who can work with our design team and systems staff to produce underlying structures that will facilitate navigation through our web by our students, faculty, and other end-users. We must continue this person, who has already become part of the planning and design processes for several new pieces of content and will play an important role in the deployment of new projects as they are scheduled.