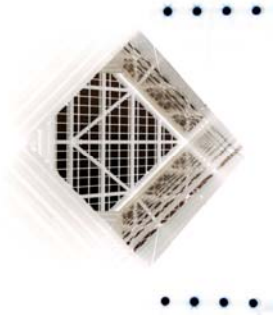


SCHOOL OF ARCHITECTURE

VISION PLAN AY 2004-05



BY: ERIC HEPBURN
DIRECTOR OF INFORMATION TECHNOLOGY
EHEPBURN@MAIL.UTEXAS.EDU
512.694.7067

Summary:

The School of Architecture is dedicated to providing secure, reliable, and relevant information technology to its students as an integral part of our education mission. The ever increasing usage of and reliance upon computing technology within the School and in the professions that we teach makes the seamlessness of this integration, and its success, all the more important.

Recurring Funding Requests:

Cyclical Replacement of Equipment **\$90,000**

The increasing utilization of both Computer Lab and Studio computing resources in combination with the growing computational power required by contemporary modeling, analysis, and visualization software necessitate the continued funding of student computing resources in the School.

Software Acquisition & Licensing **\$40,000**

Our commitment to providing students with access to the various design, analysis, and visualization software packages used in industry is a lynchpin to their successful professional education.

Network Infrastructure **\$15,000**

The expansion, maintenance, and cyclic upgrade of existing networks in the School is critical to fulfilling our mission.

New Recurring Funding Requests:

Operating Systems Specialist (FTE) **\$65,000**

This funding, annual salary plus fringe benefits, and the commitment to its associated recurring costs are vital to the ability of the School to meet its critical operational needs. This request is consistent with the Provost's commitment to provide additional support infrastructure for the School's new degree programs, our substantial increases in graduate student enrollment, and with the stated need for additional IT staffing in the School's previous vision plans.

Project Funding Requests:

Digital Fabrication **\$55,000**

The capacity to produce physical models in three dimensions directly from

computer-based designs is one of the most exciting areas of growth in the School. We currently have a computerized CNC router in our shop facilities; and \$42,000 of our 2003-04 project budget was invested in a 3D Digital printer, to be housed in our Computer Lab Printing Facility. The next phase in our implementation of digital fabrication facilities in the School is the acquisition and installation of a laser cutter in our shop facilities. We believe that these technologies are key to keeping current with state-of-the-art architectural practice and the growing emphasis on digital design within the field. This funding request is consistent with recent discussions between the Dean of the School of Architecture and the Vice President for Information Technology.

Computer Lab Printing Facility & Studio Printing **\$40,000**

The analysis of our pilot programs in distributed studio printing have resulted in a significant shift in our vision plan for student output. We are shifting our emphasis away from providing dedicated output devices in every studio to providing centralized high-speed, high-reliability, & high-availability printing and plotting through the Computer Lab Printing Facility. To meet this goal we will need to purchase additional large format plotters to provide print queues large enough to fulfill the School-wide demand. Our new plan for distributed printing is to provide tabloid color inkjet printing in select, required computer-intensive studios only.

Classroom & Review Presentation Systems **\$15,000**

We are in the process of completing the installation of 'basic' presentation systems in our primary teaching facilities. This funding will allow us to upgrade these basic facilities (a projector and a screen) to include newly available low-cost and high-reliability control systems by Crestron. These control systems will protect our initial investment in presentation technology by reducing operating and support costs. In addition, we plan to upgrade at least one review facility with projectors so that digital-intensive studios will have a review facility appropriate to their design and presentation methodology.

Sutton Hall Infrastructure Upgrade **\$100,000**

The partial network upgrade of Sutton Hall in AY 2003-04 has been a tremendous success. The computer lab and studios now have rudimentary fast Ethernet capabilities which have alleviated the avalanche of network failures that plagued the School in previous years. However, this partial solution has only emphasized the need for a complete SCS (Structure Cabling System) within Sutton Hall. Sutton Hall operates the only remaining Thick Ethernet Trunk on campus, this antiquated network is simply unsupported by either local personnel or ITS Telecommunications & Networking. Earlier plans to avoid the significant costs of this upgrade through reliance on wireless technologies have proven untenable. This funding request is consistent with conversations with William Green of ITS Telecommunications and Networking.

Total ITAC Funding Request: \$420,000

Appendix A – Review of Technology Infrastructure and Support Services:

Computer Lab

The School of Architecture Computer Lab, located in Sutton Hall 1.102, provides dedicated computational, input, and output resources to all students enrolled in classes within the School. There are forty-one standard PC workstations, sixteen standard Macintosh workstations, two slide scanning stations, four flatbed scanning stations, two Wacom tablet computers for digital hand-drawing, an EdgeCam workstation for the CNC router, and a 36" by 48" digitizer workstation. The computer lab is open 104 hours per week; 8:00 AM to Midnight Sunday through Thursday and 8:00 AM to 8:00 PM on Fridays and Saturdays. The lab is monitored by five half-time TAs and five paid student monitors during all hours of operation, the TAs and monitors are housed in the adjacent Printing Facility. The computer lab was completely reorganized over the 2003 semester break and lab usage for Spring 2004 has been very high and steadily growing. On peak days we have commonly seen average utilizations of 35 students per hour (for an 18-hour lab day) and peak utilization upwards of 60 students (which is greater than our number of standard workstations). These numbers highlight our critical need for additional computing resources in our lab environment.

Computer Lab Printing Facility

The Computer Lab Printing Facility, commonly referred to as the computer lab TA Office, contains the centralized printing and plotting equipment for the School and provides a central location for students needing IT assistance. The facility adjoins the Computer Lab and has the same hours of operation. It houses a central print server with queues for the various printers and plotters: one HP DesignJet 5500 plotter, five HP Designjet 800 plotters, two Lexmark C912 color laser printers, one HP Color LaserJet 8550 Duplex printer, and two Lexmark W812 laser printers. The facility also contains an HP DesignJet 815mfp 42" large format scanner, which in only five months of operation has scanned over 10,000 large format drawings, saving our students thousands of dollars. The School's new 3D printer will also be installed in this facility.

AV Resources

The AV Resources office provides students with the capability to checkout a variety of AV and IT equipment, including: PC Laptops, Macintosh Laptops, Digital Cameras, Video Cameras, and LCD Projectors.

Technology Classrooms

Following the completion of our current installations the School will have one auditorium, seven classrooms/seminar rooms, and two studios with installed projection systems.

Network Infrastructure

Of the School's four primary buildings, only Goldsmith Hall has up-to-date networking infrastructure. Sutton Hall has had a partial network upgrade but still requires a SCS and network equipment to bring it up to campus standards. West Mall Building and Battle Hall are also not up to campus standards, with legacy CAT3 cabling and Ethernet repeaters still providing core networking services.

IT Staff

Director of Information Technology (Senior Systems Analyst)

Responsible for IT vision, management of IT staff, administration of ITAC and Special equipment budgets, Network Administration, Server Administration, Software licensing and distribution, Computer Lab and studio workstation administration, computer support as described below.

Assistant Director of IT (Network Analyst)

Daily TA and Monitor supervision, Computer Lab supply management, Security implementation, Inventory, BevoBucks and print charging administration, Faculty and staff computer administration, and computer support as described below.

Webmaster / AV Specialist (Computer Programmer/Services Asst.)

Administers School's primary web site, assists users with web publishing issues, programs School's digital slide archival database, assists with all projection equipment/room problems, and operates high-profile AV events.

Table of Computer Support Escalation			
Tier \ Area	Computer Lab	Studios	Faculty/Staff
1	TA / Monitor	Asst. Dir.	Asst. Dir.
2	Asst. Dir.	Director	Director
3	Director	n/a	n/a

Proposed – Operating Systems Specialist

This position would take over Computer Lab and Studio computer administration, lower level server administration, practical software distribution, second tier computer lab, and first tier studio computer support.

Appendix B – Funding:

Information Technology Fee (ITAC)

The School of Architecture is extremely grateful for the generous funding that ITAC has provided over the past several years. However, the consistent administrative refusals over the past three years to create new fees or to substantially increase our existing fees has served to severely increase our reliance upon ITAC as our primary source of funding. It is hoped that the ITAC funding of the proposed Operating Systems Specialist position will allow our new IT Director more time to explore nontraditional funding options, produce

compelling documentation for the generation and expansion of the School's fee-based revenue, and to increase the efficiency of the allocation of ITAC funds; for example: through the renegotiation of software licensing contracts and the initiation of additional inter-college programs.

SOA Instructional Technology Fee

The School of Architecture implemented an Instructional Technology Fee for students in the AY 1995-96. This fee is completely allocated to salaries and is no longer considered in budgeting for other purposes. Our inability to substantially increase this fee has led to our request for ITAC funding of the Operating Systems Specialist position.

SOA Special Equipment Fund

A portion of the School of Architecture's annual operating budget is the Special Equipment Account. The annual Special Equipment budget is approximately \$100,000. This account is the primary source of money for faculty and staff computers, it is also used to support our AV and shop facilities and to subsidize essential technology programs not funded or partially funded by ITAC. The discontinuation of the CLC program this year has had a decidedly negative impact on our ability to stretch this budget to meet our overall computing needs.

SOA Revolving Fund

All Computer Lab Printing and Scanning Facility services are charged to students through the BevoBucks system. In addition, faculty and staff may use the input and output devices in this facility if they provide a UT account number. These funds go into the SOA Revolving account and are used to pay for toner, ink cartridges, paper, and printer/plotter maintenance as possible. Since our academic programs are very output intensive, the priority for these services is that they remain inexpensive and available to the students. Therefore the inflow of money is set at a level adequate for the re-supply of toner, ink, paper and other essentials; however printer and plotter maintenance and replacement is subsidized through the use of ITAC and/or special equipment maintenance money as necessary.

Please feel free to contact me if you require any additional information or clarifications. Thank you for your attention to these matters and for your devotion to improving the state of Information Technology at The University of Texas at Austin.

Sincerely,



Eric Hepburn
Director of Information Technology
School of Architecture
The University of Texas at Austin

ehepburn@mail.utexas.edu
phone: 512.471.0729
mobile: 512.694.7067
fax: 512.471.0716