TECHPLAN 2001

HUMBOLDT STATE UNIVERSITY
INFORMATION TECHNOLOGY PLAN ANNUAL UPDATE

The Humboldt State University Information Technology Plan, ***TechPlan 2000***, was approved by the University Executive Committee on March 16, 2000. Part of ***TechPlan 2000*** stated that

> *The Standing Committee on Information Technology will review this plan annually and issue an update which shall consist of*
>
> - *The previous year's accomplishments;*
> - *Updates to the Themes/Goals/Objectives grids; and*
> - *Priorities and schedules for the following twelve months.*

TechPlan 2001 is that update. It was approved by the University Executive Committee on April 6, 2001.

OVERVIEW

This document consists of five parts:

☞ ***Planning and Consultative Structure***

This section provides an organization chart of Information Technology Services (ITS – formally Computing & Telecommunications Services) and describes Humboldt's consultative structure for information technology.

☞ ***TechPlan 2001 Update on Accomplishing Humboldt's Vision/Goals***

Humboldt State University remains committed to using information technology effectively in four primary areas which represent the "Themes" of its Information Technology Plan:

- Provide for a comprehensive information competency program.
- Support the instructional program.
- Provide technology tools to faculty, staff, and students.
- Work within the California State University.

This section updates the Themes/Goals/Objectives grids from the original Information Technology Plan (***TechPlan 2000***). The grids have been expanded to show both last year's accomplishments from ***TechPlan 2000*** as well as the activities which still remain to be accomplished in order to meet the objectives in ***TechPlan 2000.***

☞ ***Implementation***

This section provides time lines for the highest priority activities to be accomplished under ***TechPlan 2001.***

☞ ***Budget Implications***

This section provides estimates of funding required during Academic Year 2001/02 over and above the continuation of base budgets for information technology.

☞ ***Assessment of the State of Information Technology at Humboldt State University***

Associated Students, and the Academic Senate. Periodically, the representatives facilitate meetings of their constituent groups to review and advise on campus information technology plans and priorities. *TechPlan 2001*, this update to the campus Information Technology Plan, was developed during Fall 2000 and early Spring 2001 via this process. SCIT provides an annual recommendation to URPBC of the next twelve months' priorities.

ITC is comprised of representatives of essentially the same set of offices as SCIT, but the representatives are the primary information technology support staff for those constituencies. ITC advises SCIT, as well as the Director of Information Technology Services and the Information Security Officer, on campus-wide information technology issues concerning standards, end-user support, and security.

In general, comments, concerns, complaints, or proposals should be directed to the representative for the constituency of which an individual is a member. Faculty can send their input either directly to their representative or through their college/library computing advisory committee. Also, in general, policy and planning input should be directed to the individual's SCIT representative and standards and technical support input directed to the ITC representative, but either path will work. Input, including agenda items, can be mailed directly to SCIT at scit@humboldt.edu and to ITC at itc@humboldt.edu.

Faculty Advisory Committee to the Center for the Support of Instructional Technology (FAC/CSIT) and the Instructional Technology Advisory Group (ITAG)

CSIT provides a forum for the discussion of faculty issues concerning the use of technology to enhance teaching and learning. FAC/CSIT addresses topics such as intellectual property, copyright, distance learning, faculty support needs, and priorities for projects and the use of resources.

ITAG is comprised of information technology support staff from each of the academic units. Its primary function is to advise FAC/CSIT on the use of the Academic Computing laboratories and Humboldt's smart classrooms.

Faculty can send their input either directly to their representative or through their college/library computing advisory committee. Also, in general, policy and planning input should directed to the FAC/CSIT representative and standards and technical support input directed to the ITAG representative, but either path will work. Input, including agenda items, can be mailed directly to FAC/CSIT at csit@humboldt.edu and to ITAG at itag@humboldt.edu.

Help Desk

ITS, through its Information Technology Resource Center, operates Student Help Desks in Gist Hall 218 and Library 121. In addition to communicating through their representative on SCIT, students can visit either Help Desk site to submit comments, concerns, complaints, or proposals; call them in to 826-HELP (4357); or e-mail them to help@humboldt.edu.

On-line Opportunities to Stay Informed

ITS uses a Continuous Process Improvement approach for developing and deploying new information technology products and services. Users can keep themselves informed on the progress of various pilot projects and respond to calls for participation by subscribing to the Information Technology Council's list server, itc@redwood.humboldt.edu. To subscribe, users should point their browser at http://redwood.humboldt.edu/cgi-bin/MailServ/mailserv.

Academic Computing also posts current information about the computing laboratories under its management at its Web site. Users should point their browser at http://www.humboldt.edu/~ac. In addition, users can subscribe to a list server for individual labs in order to receive postings about the lab from its system manager. Users should point their browser at http://www.humboldt.edu/~ac/flash/html/lists.html.

Further, there are Bulk E-mail notices sent to all students, faculty, and staff from time to time when appropriate.

TECHPLAN 2001 UPDATE ON ACCOMPLISHING HUMBOLDT'S VISION/GOALS

The statements of "Theme," "Needs Assessment," and "Vision/Goal" which appear in this section all are from Humboldt's Information Technology Plan adopted on March 16, 2000. The grids from that Plan are updated to identify the accomplishments over the past twelve months and those activities that still must be accomplished in order to meet the objectives from the original ***TechPlan 2000***. The update to these grids was developed through meetings with each constituent group on campus hosted by the group's representative(s) on the Standing Committee on Information Technology.

Theme:	**Provide for a comprehensive information competency program.**
Needs Assessment:	Humboldt State University takes pride in being a technology-intensive environment. In order to ensure that its investments in technology generate the benefits expected, the users of that technology must be knowledgeable. However, students, faculty, and staff arrive on campus with widely varying levels of computer, information, and networking knowledge and skills.
Vision/Goal:	*All students, faculty, and staff at Humboldt State University will possess an appropriate level of information competency.*

Objectives	Accomplishments during Calendar Year 2000	Remaining Activities from TechPlan 2000
(1) Implement an information competency program for students.	• Expanded new student orientations to ensure students can register for classes, activate their central computing accounts, and survive in the Academic Computing labs. • Using statistics gathered by the Student Help Desk as a guide, redesigned the Help Desk Web page to allow students to navigate it more easily. • Library implemented an "Instructional Services" page at its Web site which contains significant materials on information competency, including "functional" definitions for selected disciplines.	• Define "functional" information competency for each major and ensure students have achieved it before graduation.
(2) Provide development opportunities for faculty.	• Expanded one-on-one tutoring sessions through the Courseware Development Center. • Increased the number of technology showcases and HSU now participates in all area technology fairs. • Developed a three-track, 20 hours/track, Scholar's Workshop: technology in the classroom; multimedia development; and use of the Internet for research and course content.	• Develop an orientation program for new faculty. • Survey faculty as to development needs and design workshops to address requests (continuing activity).

(3)	Formalize training programs for staff.	• Campus offered more off-campus training opportunities. • Campus offered a number of specialized trainings, such as in MeetingMaker and BRIO.	• Develop an orientation program for new staff. • Develop basic training programs for standard office software suites.
(4)	Develop a technology currency program for information technology staff.	• Staff increased its participation in the CSU's Conference for Academic Technology Staff (CATS) program. • ITS expanded its intern program. • ITS increased its staff training expenditures.	• Survey all information technology staff to determine each's skill set needs. • Implement a development program to bring each staff member to the appropriate level of skills and maintain them.

Theme:	**Support the instructional program.**	
Needs Assessment:	Humboldt State University must ensure that the necessary information technology infrastructure is in place to support instruction. It has exceeded its target of one computer available on campus for each ten students, but all of these computers are not at current technology levels, there are restrictions on who can use what equipment and when, and the support available for maintaining these resources is uneven across the campus	
Vision/Goal:	*Students and faculty will have access to both interdisciplinary and discipline-specific computing resources to support their instructional and research computing needs.*	
Objectives	**Accomplishments during Calendar Year 2000**	**Remaining Activities from TechPlan 2000**
(1) Leverage existing computing resources to expand access.	• Improved coordination to ensure there is a common set of software tools available on all campus microcomputers. • Implemented a program to provide printer paper and toner to the disciplinary-specific labs from ITS. • Began implementing Dynamic Host Configuration Protocol (DHCP) to improve tracking, security, and support and allow plug-in ports on the campus network.	• Develop resource-sharing agreements covering campus student computing laboratories to allow broader access to and campus-wide support of existing laboratories. • Regularly survey faculty on their experiences in the interdisciplinary computing laboratories. • Assess the mix of interdisciplinary and discipline-specific computing laboratories and determine if the mix is appropriate or if adjustments should be made. • Expand the available hours of operation for all computing laboratories. • Develop a method for directing students to laboratories with open seats. • Determine how many computing laboratories HSU needs and where they will be located.

(2) Improve courseware development capabilities and courseware support services.	• Formed the Instructional Technology Advisory Group (ITAG) to
	  ○ Act as a consultative structure for determining what hardware and software should be acquired, where it should be located, and how it should be supported in order to minimize unnecessary duplication.
	  ○ Enhance coordination between Instructional Media Services and Academic Computing to ensure campus laboratories contain all software needed to execute courseware.
	• Faculty Advisory Committee to the Center for the Support of Instructional Technology (FAC/CSIT) developed draft intellectual property paper.
		• Make faculty more aware of the services and support available to them, including services and support from CSU facilities such as the Center for Distributed Learning (CDL) on the Sonoma campus and its MERLOT project.
		• Develop resource-sharing agreements covering existing courseware development and multi-media laboratories to allow broader access to and campus-wide support of existing laboratories.
		• Address impediments that limit faculty use of technology mediated instruction, including workload issues, copyright, intellectual property, compensation, etc. (continuing activity).
		• Pilot Open University teacher credentialing programs for rural areas.
		• Perform market research to identify community distance learning needs and match to HSU strengths (continuing activity).
		• Provide technology leadership and enter into collaborative efforts with community colleges and K-12 school districts (continuing activity).
		• Develop support mechanisms for distance learning, both to serve the distance learner and to reduce seat-time for HSU's on-campus students, including ensuring software is available to students for their personal computers to run locally developed courseware.

(3) Ensure electronic access to library information resources..	• Library implemented the Endeavor Voyager library automation system accessible from all public campus computing resources. • Library implemented EasyProxy remote-user authorization/authentication.	• Expand the availability of electronic resources, including locally maintained electronic resources (continuing activity).

(4)	Design a "classroom of the future" and implement appropriate technology for use in the classrooms.	• Replaced video conferencing equipment. • Upgraded FH 118 with new projection equipment and computers. • HSU now has 16 "smart classrooms" (i.e., permanently equipped to accommodate computer-based, multimedia presentations) and 24 multimedia equipment carts (10 and 9 of these, respectively, are provided by ITS). • Upgrade GH 225 with new video conferencing equipment to replace the previous obsolete, unsupported system.	• Assess the effectiveness of technologies being used in classrooms today and maintain an assessment of new technologies as they develop (continuing activity). • Establish a mechanism for on-going refresh of existing facilities (existing facilities were built using one-time funds). • Expand the number of multi-media equipped lecture rooms and the availability of check-out equipment. • Evaluate cost/effectiveness and usability of portable, wireless computing labs for use in lecture rooms.
(5)	Enhance ability to support research computing.	• Expanded the availability of ITS professionals to support faculty research activities (e.g., providing database design expertise). • Established the principle of cost recovery for the support of grant-funded activities provided by ITS. • Doubled the speed of HSU's connection to 4CNet (CSU's intercampus backbone network).	• Ensure adequate capacity to meet most faculty mainframe computing needs on-campus, including pooling central server resources when necessary. • Assist faculty in obtaining agreements to use off-campus computing resources when necessary, especially through Internet II. • Assess HSU's subscriptions to Speciality Centers, both within the CSU and without, and adjust subscriptions as appropriate.

Theme:	**Provide technology tools to faculty, staff, and students.**
Needs Assessment:	Technology is not just a fact-of-life, it is the "survival" tool of the current age. Unless effective technology services are available, Humboldt State University's students, faculty, and staff cannot be successful.
Vision/Goal:	*All students, faculty, and staff at Humboldt State University will have access to the information technology tools and services each needs to be successful in his or her academic and professional pursuits.*

Objectives	Accomplishments during Calendar Year 2000	Remaining Activities from TechPlan 2000
(1) Be an aggressive implementor of the *Assured Student Access to Computing and the Network* Initiative.	• Implemented a second Student Help Desk in the Library to provide assistance and access to multi-media development tools. • Provided Microsoft Office, Visual Suite, SAS, and other software products campus-wide. • Implemented new virus protection software across campus. • Implemented a program to provide printer paper and toner from ITS to discipline-specific computing labs. • Established work group under the Information Technology Council to improve the ergonomics of courseware to make it more accessible to disabled students. • Completed upgrades to interdisciplinary computing labs in FH 202, HGH 229, JH 212, and SH 119. • The College of Arts, Humanities, and Social Sciences implemented a foreign language lab in GH 227.	• Actively promote student ownership of personal computers. • Implement purchase and lease/purchase plans for students to obtain computing hardware and software, including a financial aid program for those in need. • Provide loaner microcomputers for Residence Hall students with financial need. • Make instructional software accessible to home computers via thin-client software servers. • Reopen UAX 123 as an open student access computing lab. • Continue the refresh cycle for Academic Computing laboratories.

(2) Provide a rich set of classroom management tools for faculty use.	• Expanded support of WebCT as the
	  • User-friendly development tool for faculty.
	  • Online testing tool.
	  • Survey tool.
	• Provided online option for collecting official teacher evaluations.
	• Provided online option for collecting class evaluations for Associated Students.
		• Enhance existing services such as electronic grade books (continuing activity).
		• Acquire and implement BlackBoard as an alternative to WebCT for those faculty who wish to use it.

(3)	Automate, or improve automation of, business processes where appropriate.	• Implemented online signatures. • Implemented online (paperless) purchase order process and performed partial campus roll-out. • Pilot-tested simplified, limited-feature student time reporting process.	• Establish an in-house consulting service for business process reengineering. • Develop online forms for the transmittal of information between offices (continuing activity). • Develop custom programming where appropriate (continuing activity).
(4)	Provide enhanced support for institutional research.	• Additional BRIO training was offered.	• Create data "views" as appropriate (continuing activity). • Redesign the processing of surveys, including providing an online option.
(5)	Improve general communications capabilities of the campus.	• Implemented WebMail, a "portable," Web-based e-mail agent. • Provided support for chat function in WebCT. • Implemented special list servers for redistribution of messages from the Chancellor. • Provided support for the creation of specialized list servers (e.g., by department, by college, by major/minor, etc.). • Established a consultative service for maximizing the utility of the telephone and voice mail systems, including call coverage, automatic call directory, voice forms, FAX redirect, etc. • Residence Halls completed "port per pillow" data networking project.	• Implement news readers and other group discussion technologies as appropriate. • Research implementing a student Web portal to all online services. • Develop a sustainable funding approach for network support.
(6)	Improve communications capabilities for "remote" sites.	• Designed and tested "800" call-in service to voice mail. • Improved monitoring capability on network, including ability to block hackers and external attacks (viruses). • Residence Halls completed planning for providing voice services.	• Provide improved remote access to voice mail. • Provide ISP and wireless services for on-campus locations not connected to the backbone. • Provide off-campus ISP services. • Improve communications services to off-campus locations (e.g., Marine Laboratory, First Street Gallery, etc.). • Implement improved network security for both voice and data (continuing activity).

(7)	Improve technology support services across the campus.	• Experienced no reportable Y2K problems.
		• Completed ITS disaster recovery plan.
		• Established the Information Technology Council (ITC) under the Standing Committee for Information Technology (SCIT) to address common technology issues on campus.
			• Develop a sustainable funding approach for desktop/laptop computer refresh.
			• Provide a consultive service for units developing disaster recovery plans.
			• Expand the availability of Information Technology Resource Center consultants.
			• Develop an assessment proposal for funding the acquisition of common software across campus (e.g., MeetingMaker, virus protection, etc.).
			• Use the ITC to
			  ○ Develop a coordinative structure for providing end-user technical support, including cross-unit backup of personnel.
			  ○ Implement remote desktop support tools.

Theme:	**Work within the California State University.**
Needs Assessment:	Humboldt State University is part of The California State University. It needs to be an active participant in CSU initiatives in order to take advantage of this relationship while ensuring local needs are met.
Vision/Goal:	*Humboldt State University will be an active participant in implementing The California State University's Integrated Technology Strategy.*

Objectives	Accomplishments during Calendar Year 2000	Remaining Activities from TechPlan 2000
(1) Participate in the Technology Infrastructure Initiative.	• Completed preliminary plans. • Actively participated in CSU planning for Help Desk services. • Created a security Web page to assist HSU faculty, students, and staff protect their computing assets in an ever more increasingly connected environment.	• Hire a project coordinator/network technician. • Complete working drawings during 2001/02. • Begin construction of the *Baseline Telecommunications Infrastructure* during 2001/02, complete during 2002/03. • Extend backbone services, most likely via wireless technologies, to temporary buildings. • Implement wireless, "roaming" capabilities on campus, particularly within the Library. • Integrate campus Dynamic Host Configuration Protocol (DHCP), Domain Name Service (DNS), and Simple Message Transfer Protocol (SMTP) with CSU-standard authorization/authentication services. • Update campus Appropriate Use Policy to conform to CSU guidelines.
(2) Participate in the Common Management System Project (formally Collaborative Management Systems).	• Began process mapping for Human Resources and those parts of Financials, such as Payroll, that are tightly integrated with Human Resources in the PeopleSoft suite.	• Update the readiness assessment on an on-going basis. • Hire a project manager. • Implement PeopleSoft applications as a "Wave Two" campus. • Interface HSU local systems to PeopleSoft.
(3) Pursue grants from within the California State University.	• Established as the host site for the CSU's Service Learning Internet Community (SLIC). • Staff took leadership role in the CSU's Conference for Academic Technology Staff (CATS) annual conference. • HSU provided leadership personnel for the Information Technology Advisory Committee, Academic Technology Advisory Committee, Academic Technology (Media) Directors, Telecommunications Directors, and Academic Information Resource Council organizations.	• Establish a response structure to allow HSU to compete more effectively for grants made available as part of the implementation effort for the CSU/ITS (continuing activity). • Participate more actively in systemwide bodies in order to improve HSU's competitive position for CSU grants and increase HSU's influence over CSU planning (continuing activity).

(4)	Continue to support local applications systems until replaced by CSU systems.	• Modified existing systems to support Year Round Operations. • Implemented student fee billing via e-mail. • Provided faculty and staff expanded access to Banner via applications forms.	• Implement a student recruitment/enrollment management module(s) for undergraduate and graduate programs. • Implement a degree audit/student advising module (DARS). • Implement Banner Web for Faculty and Advisors. • Expand the availability of student services via the Web. • Review requirements for providing student services via interactive voice response. • Ensure adequate resources to support current processes.

IMPLEMENTATION

The highest priority activities from the grids' ***Remaining Activities from TechPlan 2000*** in the previous section are listed in the tables below with a target completion term ("By Fall" means "By the beginning of Fall semester;" "During Fall" means "Before the end of Fall semester"). It is expected that staff will work on all of these projects simultaneously, so their order within the tables does not imply any relative priority.

- *General Projects*. The Information Technology Council has formed four working groups to assist in the implementation of these projects. Some example working groups are: Network Issues; Desktop Support Issues; Assistive Technology (for meeting ADA requirements); and Software Copyright Policy. Additional working groups are be formed as necessary. Calls for participation in pilot projects are issued to the general University community.

Completion	Project
During Spring 2001	**Voice Mail**. Implement "800" access to voice mail to support travelers.
During Spring 2001	**Classrooms**. Survey the condition of pull-down screens in classrooms and develop a maintenance plan.
During Spring 2001	**Conservation**. Complete a test of using 100% post-consumer recycled paper in the Academic Computing labs.
During Spring 2001	**Additional list server functionality**. This project will allow organizations to develop list services where only organization members can post messages but non-members can read them.
During Spring 2001	**Distance Learning**. Initiate a pilot project to establish video conferencing capability, possibly via satellite, with the Hoopa school district.
By Summer 2001	**Wireless**. Develop a plan for providing wireless services on campus, with particular emphasis on providing roaming services in the Library.
By Summer 2001	**ISP**. Develop a plan for providing ISP services to the campus community.
By Summer 2001	**Residence Halls**. Simplify to the extent possible the registration process for residents to connect their microcomputers to the network.
By Summer 2001	**Faculty Information Competency**. Improve faculty support by • Surveying faculty on their workshop needs; • Expanding the number of Technology Fairs; • Offering the Scholar's Workshop program at additional times; and • Leveraging HSU's annual participation in the CSU's Conference for Academic Technology Staff (CATS) to disseminate information about CSU's Center for Distance Learning.
By Summer 2001	**Technology Currency Program**. Survey IT support staff skill sets and develop a professional development program.
By Summer 2001	**Desktop Support**. Develop a plan for better coordinating end-user support on the campus, including implementing service level agreements (SLAs) to ensure performance.
By Summer 2001	**Assistive Technology**. Develop a plan for expanding the availability of assistive technology on campus to improve disabled access to technology.

By Summer 2001	**Staff Information Competency**. Working through Human Resources, make available additional training opportunities for staff.
By Fall 2001	**Student Information Competency**. Starting from previous UCC work on defining information competency expectations for students and working through the faculty, Library, HOP, and others, develop orientation and training programs for students.
By Fall 2001	**Student Computer Ownership**. Make the section below, ***Assessment of the State of Information Technology at Humboldt State University***, available to prospective students. Update the student-ownership promotional materials.
By Fall 2001	**Telecommunications and Network Charges.** Complete a study and prepare a proposal to bring equity to the charging for and controllability to the costs for • Data network connect charges that account for the loading placed on the network and the amount of effort required to administer the connection; • Long distance calling; • Credit card usage; and • Operator-assisted dialing.
By Fall 2001	**Residence Halls**. Implement new, improved voice services in the Residence Halls.
By Fall 2001	**Smart Classrooms**. Improve the availability of technology in the classroom by • Refreshing 10 smart classrooms; • Implementing 5 to 10 additional smart classrooms; and • Refreshing loaner equipment for use in the classrooms.
By Fall 2001	**Assured Student Access**. • Implement a microcomputer loaner program for Residence Hall students with financial need; • Review the mix of labs (Mac, PC, dual platform); • Refresh Academic Computing laboratories to the extent feasible, including replacing all remaining 3-gun projectors. Next scheduled labs for full refresh are GH 215, GH 218, SA 364, and SH 118 – for which funding exists to do one; • Address the need for a student open access lab that allows visitors to be in the lab with a student; and • Begin regular surveys of faculty experiences teaching in the labs.
By Fall 2001	**Faculty Information Competency**. Develop an orientation program for new faculty. This will include a CD (which will be available to all faculty) which demonstrates available products and services.
By Fall 2001	**Grant Processing**. Provide electronic support for the submission and tracking of grant applications.
During Fall 2001	**Graduate Student Support**. Develop an automated template for enforcement of thesis guidelines. Establish a process for plagiarism review.
During Fall 2001	**Distributed Learning**. Pilot a program of delivering continuing education to local K12 teachers in their classrooms.

- *Local Administrative Projects*. Administrative projects generally require the allocation of some new funding. All license fees already have been paid for the following projects. End user committees are formed for each project from staff in the affected offices.

Completion	Project
During Spring 2001	**Registration**. Improve the response time of the registration system by acquiring a new database server and redistributing parts of the processing load onto some of the existing central computer systems.
During Spring 2001	**Recruitment**. Pilot remote student recruiting using video conferencing to a high school.
By Summer 2001	**Web for Faculty and Advisors**. Experience gained from implementing Web for Students should make this implementation straight-forward.
By Summer 2001	**On-line credit-card fee payments**. Provide students an option during Web registration to pay fees immediately via credit card or receive an e-mail billing.
By Summer 2001	**Financial Aid**. Computerize the processing of financial aid award and tracking for Summer Semester.
By Fall 2001	**Graduate applications processing**. Develop a plan consistent with plans being developed for CMS interfaces.
By Fall 2001	**Business Process Improvements**. Identify appropriate units and assist them to implement improved business processes, including • On-line purchase orders; and • Limited automation of student time/pay reporting.
By Fall 2002	**DARS**. Humboldt will be able to benefit from work already done, particularly in the area of lower division general education requirements, at other CSU campuses.
On-going	**Electronic Forms**. Roll out, to the extent reasonable, paperless (online) processes such as the purchase order process. Determine what other forms should be considered for conversion to online processing.

- *CSU Integrated Technology Strategy Projects*. These projects will require the allocation of significant funding for implementation as originally identified in ***TechPlan 2000*** and refined in ***Budget Implications*** below. Implementation teams are being organized.

Completion	Project
During Summer 2001	**Year-round Operations (YRO)**. Operate a summer semester for 750 FTES.
By Spring 2001	**Common Management System (CMS)**. Have a project director on-board.
By Summer 2001	**CMS**. Develop a project budget for 2001/02.
During Fall 2001	**CMS**. Perform campus readiness assessment.
During Fall 2001	**CMS**. Begin training staff and developing detailed implementation plans.

By Spring 2002	**CMS**. Begin implementation of the Human Resources and Financials modules.
During Spring 2001	**Telecommunications Infrastructure Initiative (TII)**. Hire an architect to complete the Working Drawings.
During Spring 2001	**TII**. Update the Appropriate Use Policy (AUP) to bring it into conformance with the CSU's 4CNet AUP and Guidelines for Campus AUPs.
By Summer 2001	**TII**. Develop a project budget for 2001/02.
During Fall 2001	**TII**. Complete Working Drawings, put out for bid, select contractor.
During Fall 2001	**TII**. Determine additional campus funding required beyond that provided by the Chancellor's Office, including costs for implementing wireless services as a solution for serving temporary buildings and providing campus roaming services, particularly for within the Library.
During Fall 2001	**TII**. Hire a project coordinator/network technician to be the telecommunications "clerk of the works."
During Fall 2001	**TII**. Begin integrating campus DHCP, DNS, and SMTP services with CSU-standard authorization/authentication services.
During Fall 2001	**Help Desk**. Begin integrating campus end-user support services with 4CNet and CMS operations and support services infrastructure.

Humboldt State University is moving forward on all the objectives identified under its four major themes, but the pace of new product development under its Continuous Process Improvement Program as described in ***TechPlan 2000*** can be expected to diminish over the next several years as an increasing proportion of staff time is assigned to the Common Management System Project and the Technology Infrastructure Initiative.

BUDGET IMPLICATIONS

As described in ***TechPlan 2000***, expenses for projects which are within the scope of the regular Information Technology Services' allocations, such as those projects which fall under Humboldt's Continuous Process Improvement Program, will be paid from existing funding. Requests are made to the appropriate review group, such as the Academic Affairs Budget Committee or the University Resource Planning and Budget Committee, for extraordinary, special project funding.

Extraordinary, Special Project Funding During 2000/2001

Two projects required special funding during Spring 2001: improvements to Humboldt's smart classrooms; and replacement of the central database server.

- *Improvements to Humboldt's Smart Classrooms*. Both the Faculty Advisory Committee to the Center for the Support of Instructional Computing and the Schedule 25 Committee (an *ad hoc* appointed by the Vice President for Academic Affairs to make recommendations on policies/procedures for scheduling lecture rooms) recommended that all lecture rooms at Humboldt State University be equipped as Smart Classrooms. The current standard configuration for a Smart Classroom is a slide projector; ceiling-mounted video projector; cart-enclosed computer and CD, DVD, and VHS players; and Ethernet connection. The campus has ten lecture rooms so equipped that are open for scheduling and maintained by Information Technology Services. During Spring 2001, the Academic Affairs Budget Committee awarded $124,900 in one-time excess

Lottery Funds ear-marked for Instructional Technology to ITS to improve technology support in the lecture rooms. The funds are being spent as follows:

○ Replace broken and obsolete equipment in ten existing lecture rooms	$ 35,300
○ Equip six additional lecture rooms chosen by the three college Deans	68,400
○ Acquire three lap-tops and portable projectors for circulation	21,200
	$ 124,900

Two additional lecture rooms will be selected by Instructional Media Services and equipped using $20,000 provided by the Vice President for Academic Affairs from the Classroom Improvement General Fund Account. If additional funds are available at the end of the year, the priorities are

- License BlackBoard course management software for $11,000.
- Equip additional lecture rooms at a cost of $11,400 each.
- Purchase additional equipment for circulation.

Note that the ten existing equipped classrooms were equipped using one-time funds, and no funds for on-going support have been allocated – repairs and refresh are accomplished with one-time funds when they become available. The Schedule 25 Committee recommended that on-going funds be allocated to refresh these facilities because of the significant dependency of so much of Humboldt's course offerings on their availability.

- *New Central Database Server*. Humboldt has placed an ever increasing load on its central database server that hosts the Banner Student Information System and Banner Financial Aid System. Major contributors to the loading increase are the Web interface for students, Web interface for faculty and advisors, and online fee assessment with credit card payment coming. Response times had degenerated to the point that students were having difficulty registering for class. Accordingly, during Spring 2001 the University Resource Planning and Budget Committee recommended to the Executive Committee, and the Executive Committee approved, the expenditure of up to $110,000 from University unallocated funds to acquire a new central database server. Purchasing the new systems eliminates the need to spend approximately $20,000/year in each of 2000/01 and 2001/02 for upgrades to existing systems, for a net cost of $70,000. The new system will be in place in time to support the continuing student registration cycle in May 2001. The new computer should meet the University's needs for central databases services until Humboldt fully converts to the PeopleSoft software as part of the Common Management System Project.

Extraordinary, Special Project Funding During 2001/2002

The two major projects which will require special allocations during 2001/2002 are the Common Management System (CMS) Project and the Technology Infrastructure Initiative (TII). These projects are described in some detail in ***TechPlan 2000***.

- *Common Management System (CMS) Project*. At the time of preparation of ***TechPlan 2001***, estimating the budgetary requirements for CMS for fiscal year 2001/02 remains problematical. The Project Director is on-board and has developed a preliminary estimate for total project costs through fiscal year 2005/06. The preliminary estimate is basically the *pro forma* numbers prepared several years ago by the Chancellor Office and reported in ***TechPlan 2000*** but adjusted for the passage of time since that original estimate was prepared. A number of factors have changed since then, including an increase in prototyping and implementation experience across the CSU, the adoption of "fast implementation" approaches to getting the software up and running, and the evolution of the PeopleSoft product to a Web environment with which Humboldt's technical staff is well acquainted. The CMS Project Director, the CMS Steering Committee, and the appropriate technical personnel will develop a budget proposal by the end of Spring 2001 for consideration by the Executive Committee during Summer 2001.

- *Technology Infrastructure Initiative (TII)*. As described in ***TechPlan 2000***, the TII is a two-stage project: 1) construct telecommunications spaces in Humboldt's permanent buildings and install intra-building media

(cabling) with the funding coming from the proceeds of a bond sale; and 2) install inter-building media and electronics with the funding to come from then unidentified sources. The Chancellor's Office now has identified funds within the Governor's Compact to pay for Stage Two. These funds will be on-going, which will meet most costs for refresh of the electronics for a number of years to come but will become diluted over time because buildings that come on-line during the interim also will need to be refreshed from the same fixed amount of on-going funds. The outcome is that Humboldt will not need to allocate funds during 2001/02 to purchase media or electronics for its permanent buildings. However, there are new costs during 2001/02 that Humboldt will need to cover. The Working Drawings will be completed in October 2001 and bid documents released about a month later. Humboldt will need to provide a clerk-of-the-works with telecommunications (cabling) expertise by July 2001 to support the construction phase. Communications and Network Services (CNS) currently is attempting to fill an open network analyst position with someone who has these skills. If CNS is successful, this individual will act as clerk-of-the-works for the project, but Humboldt will need to back-fill the position. If CNS is not successful, it will need to hire a temporary employee for the life of the project to perform these functions. Further, Humboldt also will need representation on a number of systemwide committees dealing with architecture, authentication, and authorization, resulting in significant travel, and all CNS staff will need training in the new cable and electronics technologies. The requested 2001/02 budget augmentation is

Plant Inspector (back-fill or temporary hire)	$ 61,000
Supplies and Services	10,000
Training	18,000
Travel	12,000
	$ 101,000

Note that no funding is provided through the project to connect Humboldt's temporary buildings. Communications & Network Services (CNS) has put aside some funds to cover initial costs and will develop a new charge-back system for all network users in order to generate the funding to connect the temporary buildings, most likely via wireless technologies. Communications and Network Services will establish a new account in which to deposit the currently accrued funds and any additional operational savings, such as those from the existing unfilled network analyst position, to be used for defraying the costs of connecting the temporary buildings.

Budget implications for the third major CSU-related initiative identified in ***TechPlan 2000***, *Implementing Year-round Operations* (YRO), are not addressed in this document. They are being addressed through the Summer Semester 2001 Management Team's planning and budgeting effort.

On-going Funding Problems

Information technology typically is treated at Humboldt as if it is a capital investment – pay once and forget while it accrues in value. Information technology actually behaves more like disposable supplies – hardware needs to be refreshed (replaced with current technology) about every three years and most software must be relicensed annually. Because of the way the California State University provides funding, most information technology at Humboldt has been purchased with one-time funds, on-going support funds typically are not available to keep the technology current. While this is a problem for the entire campus, and for instructional equipment in general, four areas are at particular risk and could result in significant loss of services if funding cannot be identified.

- *Workstations*. It is up to individual units on the Humboldt campus to provide microcomputers for their faculty and staff. The only exception was when the campus implemented the graphical user interface for the Banner suite of software several years ago, and the campus used one-time funds to purchase a number of workstations for staff. While it is safe to say that all staff who need one and all faculty who want one have a workstation, many of these stations are old. It is possible to find entire academic departments with faculty using P166 processors, 16 MB of memory, 4X CD drive, and Win95 software. Besides being five years old, these machines do not have the horse power to run current instructional software. The CSU calculates that a faculty workstation program costs $1,000/year/faculty member and a staff program costs $800/year/staff

member (these numbers currently are mitigated by the fact that the most popular Microsoft products are on CSU site-license for another year).

- *Smart Classrooms*. Humboldt started the year with ten smart classrooms under central management and will end the year with an expected eighteen. All of these rooms have been equipped with one-time funds, and Instructional Media Services (IMS) has never received a budget augmentation for their support. Just one replacement bulb for a video projector costs $300. One third of the instructional equipment funding the campus received this year is having to be spent to repair equipment in the existing ten classrooms. IMS needs an augmentation of about $3,500/year/room to keep the facilities operating and at current technology levels.

- *Computer Laboratories*. During the period from 1995 through 1998 when Humboldt was a pilot campus for the *Assured Student Access to Computing and the Network Initiative*, the Academic Computing laboratory support program was funded at approximately $500,000/year in general fund for Academic Computing, $500,000/year in funds provided by the Chancellor's Office in lieu of Humboldt collecting the Student Technology Fee its students approved in Spring 1995, and $500,000/year in additional funds from one-time sources available to the campus. Since 1998, only the first two of these sources have been available to Academic Computing to run the entire program, and the total amount of annual funding available for refresh of the labs is about $165,000. It is time to start a new refresh cycle, and the labs that should be refreshed during 2001/02 are as follows:

Upgrade GH212	(1995 CPUs)	$ 184,371	
Upgrade GH218	(1995 CPUs)	277,676	
Upgrade SciA364	(1995 CPUs)	189,677	
Upgrade SH118	(1994 CPUs)	155,755	$ 807,479

- *Shared Software*. For Humboldt to take advantage of the technology, its users must have software tools. However, there is no funding mechanism in place to acquire software that provides general benefits to the campus. The two most recent examples are:

    - Meeting Maker. Information Technology Services (ITS) acquired a site license for Meeting Maker two years ago and it has become the standard appointments software on the campus. Last year, the license was about $5,300, which ITS paid because it had an open staff position. The staff position is no longer open and ITS will not be able to pay the bill due at the beginning of 2001/02.

    - Virus Software. ITS licensed Dr. Solomon virus software four years ago on a three-year site license for $20,000. Last year, that software was no longer available, and ITS licensed Norton virus software for the campus for two years for $25,000. ITS paid those two licenses because it had open staff positions. ITS does not expect to have an open staff position and will not be able to pay the bill due at the end of 2001/02.

ASSESSMENT OF THE STATE OF INFORMATION TECHNOLOGY AT HUMBOLDT STATE UNIVERSITY

It can be difficult for an organization to perform a self-assessment unless there is some outside agency that can provide guidance on the factors that should be considered. This section provides the answers to 35 questions students should ask about technology at any school they are considering attending. The questions were developed by EDUCAUSE with the cooperation of the National Association for College Admission Counseling (NACAC) and the American Association of Collegiate Registrars and Admissions Officers (AACRAO). EDUCAUSE is "an international, nonprofit association whose mission is to help shape and enable transformational change in higher education through the introduction, use, and management of information resources and technologies in teaching, learning, scholarship, research, and institutional management." See

http://www.educause.edu/consumerguide/index.html

Academic Experience

- **What percentage of campus courses use electronic information to enhance the course (for example, syllabi, reading lists, discussion groups, demonstrations)?**

  Humboldt State University prides itself on its use of information technology to enhance classroom learning. Almost all classrooms are connected to the campus backbone network and a number of classrooms have been equipped as "smart rooms" with a microcomputer, CD and DVD players, video player, television, and projector. Faculty can check out portable microcomputers and projectors for use in classrooms not permanently equipped with this equipment. In order to ensure there is valuable content to present in these classes, Humboldt's Instructional Media Services helps faculty place course materials on the Web, CDs, and video tape. Hundreds of courses have a significant portion of their content converted to electronic form, and students can access this material from any of the campus microcomputer laboratories or by using their own microcomputers in the Residence Halls and from off campus.

  A faculty member's Web site for a class might consist of a text-based presentation of the syllabus, reading lists, and class notes, or it might include an online movie or 3D animation, all locally produced here at Humboldt. Some faculty include their tests on the Web sites with instantaneous grading and feedback.

  Humboldt has made it easy for faculty and students to use technology in their coursework. For example, there is a program that creates an e-mail list server for the class that automatically subscribes the faculty member and all students registered for the class. That makes it simple to set up discussion groups.

  Almost all faculty have attended some seminars on using technology in the classroom, so many of them are able to put syllabi, reading lists, class notes, and even advanced courseware onto their Web sites. For this reason, it is impossible to estimate what percentage of campus courses use electronic information to enhance the course.

- **Are technology resources available, used effectively to enhance the learning experience, and designed to prepare graduates in their major for successful technology use in their careers?**

  Humboldt State University's technology resources consist of central computing facilities that support electronic mail, Web services, and major applications packages for use by all students; microcomputer laboratories open to all students that support all the major Microsoft and Macintosh applications; and departmental microcomputer laboratories that host specialized software for students taking courses from that department. Examples of some of these specialized laboratories are the Geographic Information Systems Laboratory, the Spatial Analysis Laboratory, the Writing Center, and the Language Laboratory. As a member of the California State University system, Humboldt also has access to a number of "specialty

centers" which provide specialized software, access to databases, and expert assistance in areas such as business, social sciences, and geography.

- **What library resources are available online (catalog, databases, special collections)?**

  The Library has implemented the Endeavor Voyager library automation system which provides an online catalog. Access to the online catalogs of other California State University campuses, the University of California campuses, and other universities also is provided. More than 100 databases are available, including Encyclopedia Britannica, Chemical Abstracts, Medline, and Lexis/Nexis. The complete list can be viewed at

  http://library.humboldt.edu/infoservices/indexes/alphafast.html

  The Library also has a large number of special collections, many of them available online. Links to these collections can be found at

  http://library.humboldt.edu/infoservices/humco/links.htm

- **What electronic reference materials are licensed and how accessible are they from outside the library (for example, in the residence halls or off-campus)?**

  In addition to databases and special collections, the Library provides electronic access to journals, magazines, newspapers, and other materials with full-text retrieval. Because the online interface to all Library systems is a Web page, all materials are accessible by students with microcomputers in the Residence Halls and from off-campus via Internet Service Providers. A good place to start a tour of the Library online is

  http://library.humboldt.edu

- **How does the campus help students develop computer skills?**

  All new students attend an orientation session where they are given an overview of the resources available, activate their e-mail and Web accounts, learn how to register for classes online, and are given a "survival course" in using the campus microcomputer laboratories. There are a number of for-credit courses for developing computer skills as well as non-credit courses on topics such as finding reference materials on the Internet. Further, there are 650 computer-based training courses available online, ranging from introduction to word processing to programs leading to certification in network management and systems development. These online courses are available at no charge to the student.

- **Does the campus allow students to receive credit for courses taken electronically from other sources?**

  Yes – but, like any other transfer credit, the credit must be awarded by a community college, college, or another university that has been accredited by one of the accrediting agencies, such as the Western Association of State Colleges, and the course must correspond with a Humboldt State University course.

- **Does the campus have a specific computer/IT competency requirement for all undergraduates?**

  No, the campus does not have a "requirement" in the sense that there is some test that all students must pass in order to show competency – however, the campus has identified a core information competency level expected of students, defined as the ability to find, evaluate, use, communicate and appreciate information in all its various formats. Additionally, it has identified five basic competencies: microcomputer operating systems, library resources, word processing, telecommunications, and spreadsheets. Students can gain these competencies through course work, attending some of the free training sessions, or taking some of the free online computer-based training modules. The Information Competency Laboratory has been established in the Library specifically to assist students in gaining the necessary skills.

- **Are course reserves and other materials available online/via the Web site?**

  A number of faculty make use of the Library's electronic reserve system. Materials are input as either Adobe or html files and put behind a passworded file so as to observe copyright restrictions. The Courseware Development Center also scans documents and makes them available on the faculty member's class Web site. Many faculty also do their own scanning, so a great deal of course material is available online and accessible by students in the Residence Halls and from off campus.

- **What percentage of faculty has a networked computer available to them?**

  Essentially all faculty have a microcomputer with network access.

- **What percentage of faculty use e-mail regularly?**

  All faculty are given an e-mail account on the University's e-mail server. Over 90% have activated their campus e-mail accounts and about 80% are active, regular users. A number of faculty do not use their on-campus account but use accounts through Internet Service Providers. The University does not track this usage, so it has no way of estimating what the total usage is but expects total usage to be close to 100%.

Administrative Experience

- **What information about admission and financial aid is available online, and can necessary forms be submitted electronically?**

  Extensive admission and financial aid information is available online. The necessary forms can be submitted electronically or students can request online that paper copies of the forms to be mailed to them. The portal for getting started at Humboldt State University can be found at

  http://www.humboldt.edu/~records/index.shtml

  The status of a student's financial aid request and disbursements also is available via touch-tone telephone.

- **Is the college catalogue, including important campus policies, available on the Web?**

  The catalogue, schedule of classes, academic policies applying to students, and much more information is available on the Web. The best starting location for exploring this information is at

  http://www.humboldt.edu/~records/index.shtml

- **Can a student access his or her personal student information/data online?**

  Students can access their student records online, including viewing and printing their class schedules and unofficial transcripts (official transcripts can be requested online), grades, and fee account balances/statements. Students can even update some of this information, such as their address information and what e-mail account they would like to use, online.

- **Can a student find out his or her grades online or by phone at the end of a semester?**

  Grades are posted immediately at the end of each semester and are available both on the Web and via touch-tone telephone.

- **Is registration, including dropping and adding courses, processed electronically (either online or via phone)?**

the Residence Halls will assist student residents in connecting their personal machines to the network. Student clubs and other student and staff volunteers sponsor "bring in" days when students can bring their machines to a campus location for hands-on assistance – for example, "Linux days" when student can bring in their machines and have the linux operating system and StarOffice software loaded for free. More information on the Microsoft License Agreement can be found at

http://www.humboldt.org/bookstore/cmptrs/CSU_MICROSOFT_home.html

- **What hardware and software standards, if any, does the campus require, recommend, and/or support?**

  The campus does not establish campus-wide standards for hardware and software. However, because Microsoft's desktop software already is licensed for use by all students, Microsoft is the recommended software for both Macintosh and Windows platforms. Note that StarOffice, which runs under the linux operating system, is compatible with Microsoft Office.

- **What kinds of services (help desk, training, troubleshooting) are provided by the campus, and during what hours of operation?**

  All new students receive an orientation on using Humboldt's technology resources when they first arrive. Additionally, there are training sessions and online training available to them. The campus operates two Student Help Desks that provide e-mail (help@humboldt.edu), telephone (707.826.HELP), and walk-in consultation services. Their hours of operation are

8:00 a.m. - 8:00 p.m.	*Monday - Thursday*
8:00 a.m. - 4:00 p.m.	*Friday*
Noon - 4:00 p.m.	*Saturday, Sunday*

  The Student Help Desk in the Library includes multi-media workstations, digital scanners, and a digital camera for student use. Staff at the Help Desk provides expert assistance to students who wish to use this equipment to produce professional-looking homework and project reports.

The complete list of technology services can be found at

http://www.humboldt.edu/~its/services/services.html

- **Does the campus have a plan for keeping the hardware current, and if so, what is the replacement cycle?**

  The campus information technology plan can be found at

  http://www.humboldt.edu/~its/planning/techplan/techplan.html

  It calls for a three- to four-year replacement cycle for microcomputers in the open student access and interdisciplinary computing laboratories. This is a little misleading in that the microcomputers in a laboratory often are upgraded one or two times (processor, memory, disk, monitor) between the time they are purchased and when they are completely replaced three or four years later.

- **How does the campus support printing for students, and is there a charge for this?**

  All open access and interdisciplinary computing laboratories and many departmental computing laboratories have black and white laser printers for which all paper is provided. All students pay a $5/semester printing fee to help defray the costs of providing this service.

Glossary

Not all of the abbreviations and acronyms listed below will appear in each year's update of the Information Technology Plan. In the interest of completeness, entries are not removed once they have appeared in at least one year's document.

AC	Academic Computing
BATS	Basic Access to Hardware/Software, Training, and Support
BFA	Banner Financial Aid (system)
BRIO	a relational database query tool
BTI	Baseline Telecommunications Infrastructure (plan)
CAHSS	College of Arts, Humanities, and Social Sciences
CBT	a company providing computer based training on CSU contract
CDL	Center for Distributed Learning, a CSU service center located on the Sonoma campus
CMS	Common Management System (formally Collaborative Management Systems)
CNRS	College of Natural Resources and Sciences
CNS	Communications & Network Services
CPI	Continuous Process Improvement

CPS	College of Professional Studies
CSU	California State University
CSIT	Center for the Support of Instructional Technology
DARS	Degree Audit Records System
DHCP	Dynamic Host Configuration Protocol
DNS	Domain Name Service
FAC/CSIT	Faculty Advisory Committee for CSIT
FCDC	Faculty Courseware Development Center
FTES	Full Time Equivalent Students
GRE	Graduate Records Examination
HOP	Humboldt Orientation Program
HSU	Humboldt State University
HVAC	Heating, Ventilation, Air Conditioning
IMS	Instructional Media Services
ISC	Information Security Coordinator
ISP	Internet Service Provider
ITAG	Instructional Technology Advisory Group
ITC	Information Technology Consultant
ITRC	Information Technology Resource Center
ITS	Information Technology Services (formally Computing & Telecommunications Services)
ITS	Integrated Technology Strategy (CSU)
IVR	Interactive Voice Response (system)
LAN	Local Area Network
MERLOT	Multimedia Educational Resources for Learning and Online Teaching, a repository maintained by the CDL
OSA	Office of Student Affairs
SCIT	Standing Committee on Information Technology
SIS	Student Information System

SLIC	Service Learning Internet Community
SMTP	Simple Message Transfer Protocol
TII	Technology Infrastructure Initiative
TIMP	Telecommunications Infrastructure Master Plan
TIP	Telecommunications Infrastructure Planning (guidelines)
UCC	University Curriculum Committee
UCS	University Computing Services
UIAS	Unified Information Access System
UMS	Universal Messaging System
URL	Universal Record Locator
URPBC	University Resource Planning and Budget Committee
VMS	Voice Mail System
WAN	Wide Area Network
YRO	Year Round Operations
4CNet	CSU intercampus backbone data communications network