

Report to the 1997 Hawai'i State Legislature

RE: S.R. No. 132

Requesting the Coordination of Efforts to Make University of Hawai'i Library Collections Available on a Systemwide and Statewide Basis through Modern Distributed Digital Storage Systems and Telecommunications Technologies

February 1997

S.R. 132 asks the University of Hawai'i to do this report and this fulfills the obligation.

1. The Purpose of the University Library

The purpose of our libraries is to connect people with knowledge. Librarians forge links between vast stores of information and manage constantly evolving information systems and collections so that knowledge sources can be shared over time as well as distance. Libraries retain the collective record of our experience. Through them we transmit knowledge and information. Our service as library faculty and staff is to help people select, locate, and use what they need in a timely and effective manner and to make this process of discovery enjoyable as well as rewarding.

2. The Planning Context

The University of Hawai'i Strategic Plan

The Strategic Plan of the University of Hawai'i (November 1996) acknowledges that the role modern information technologies play in service to the mission of the University is more pervasive and profound than what was conceived of in the planning documents of the past decade. (p. 3) The University's new plan recognizes that "telecommunications, computing technology, and integrated library and information systems will continue to advance at a rapid pace, offering opportunities in how the University carries out its instructional and research missions ... and responds to distance education and informational needs." (p. 21)

The Plan states that the University must "insure that students can function in an information society in which telecommunications and information technology are increasingly a basis for access to knowledge, economic activity, and political/social interactions worldwide." (p. 5) The Plan calls for utilizing emerging information technologies to assist student learning and research (p. 6), to integrate the appropriate use of information technologies into the curricula, instructional process, and libraries and to make available the facilities and technical and human resources necessary to support this infusion. (p. 8)

To realize this vision of information technologies promoting access, student learning, and faculty effectiveness, the University's strategic plan calls for the University "to provide and support UH system-wide and campus-specific library and electronic information services to preserve and develop collections and enhance the academic programs of all UH students, regardless of their place of attendance. "The Plan gives "priority to the Hamilton Library addition, the restoration and maintenance of the Hamilton and Sinclair collections, and the provision of services and physical facilities

at a level appropriate to a major research university fully immersed in the information age." (p. 16)

The University's Strategic Plan provides the basis for advancing the use of information technologies and libraries to broaden access to educational opportunities and knowledge resources through local as well as worldwide networks. It articulates the development of the necessary support in a number of areas, including: technical infrastructure, equipment replacement, facilities, curriculum revision and services.

The proposed library plan outlined below is developed in relation to the University's plan and priorities. Over the long term, it assumes that households in Hawai'i will have access to telecommunications networks with the capacity and speed to distribute digital information in various formats, that funding will occur for digitization of the Hawai'i Interactive Television System (HITS), and that the University's Internet link to the mainland will be upgraded well beyond its present T2 level.

The University of Hawai'i at Manoa Library Strategic Plan (issued May 1996)

As technology revolutionizes scholarly communications, the UH Manoa Library is adapting its methods and services in order (1) to provide access to a wider array of knowledge resources, (2) to share and preserve collections, (3) to offer direct services to people through electronic networks, and (4) to operate more efficiently. Organizing and facilitating access to our intellectual and cultural resources lies at the heart of our library's contribution to the enterprise of education and research.

To perform this critical role, the Library depends on coordinated and phased investments in advanced, sustainable, computerized systems and on the coordination of electronic resource allocations. Access to electronic resources is, and will continue to be, designed to meet the needs of users and to enhance their productivity. Digital information will be presented through an interface that is flexible, powerful, and easy to use, and available from computer workstations in the libraries, in campus offices, classrooms, dormitories, and off-campus locations. Students and faculty will use computer workstations with network connections to locate and view the information they need.

Hamilton and Sinclair Libraries will be fully wired for connections to the campus and worldwide information networks. The Library will provide students with access to specialized information equipment that is beyond the ability of individuals to provide for themselves. To help prepare students for life and employment in the information age, the faculty of the library will continue to work with faculty members in the University's colleges and schools to develop innovative approaches for incorporating information skills into the general curriculum.

3. Initiatives to Meet the University's and the Library's Strategic Plans

The following initiatives will enable us to meet the goal of making the information resources accessed through the University of Hawai'i at Manoa Library and other appropriate collections more broadly available on a systemwide and statewide basis.

A. Technical Infrastructure

1) Computer Hardware

- **Upgrade the Tandem mainframe computer with increased processing performance (K2000 CPU) and disk storage capacity.**

Required to accommodate more users systemwide, to store additional databases and records, and to increase throughput of data. Supports increasing demand for services by all ten UH System libraries, other UHCARL sites and future sites statewide, including University Centers. K2000 is the platform for which new applications are being developed by CARL Corporation, the UHCARL software vendor. Time frame: 1997/98.

- **Upgrade CARL gateway server.**

Required to support World Wide Web versions of the UH library catalog databases and a common user interface which will simplify student, faculty and public access to networked electronic information resources statewide. Upgrades server capacity from 50 to 250 users. Time frame: 1997/98.

- **Install a materials booking system in the Wong Audiovisual Center.**

Required to allow UH Manoa faculty to reserve audiovisual materials from their offices through the University network. Automates a manual record keeping operation. Supports UH Manoa faculty distance education classes. Time frame: 1997.

- **Purchase and install equipment needed to provide networked access to information resources in CD-ROM compact disc format.**

Required to broaden access to bibliographic indexes, full text and images of journal articles, and other electronic information resources distributed in CD-ROM compact disc format to be used by students, faculty and the public systemwide. Time frame: 1997/98.

- **Purchase and install equipment needed to provide access to photographs and images.**

Required to support networked electronic access to photographs and images selected from the libraries' rare, archival and other research collections, for example, Pacific Islands photographs, Hawai'i War Records Archive and Charlot Collection. Time frame: 1998/99.

- **Acquire an electronic reserve system to provide broad access to faculty required course readings in electronic form.**

Required to enhance a function which is only partially supported by UHCARL software. Allows UH Manoa students, faculty and Manoa distance education students to access course reserve materials through the Internet regardless of location. Manages copyright royalty payments automatically and insures compliance with federal law. Time frame: 1998/99.

2) Telecommunications Infrastructure

- **Upgrade connectivity between the UH Manoa Library network and the University network.**

Required to increase the capacity of the Library network to support high speed transfer of data such as video, sound and images between the Library and the University network. Time frame: 1997.

- **Purchase and install a high speed fiber optic network in the UH Manoa Library.**

Required to satisfy, within acceptable response times, systemwide end user requests for video, sound and image data stored on devices connected to the Library network. Time frame: 1997.

- **Install network connections to support access to information resources located on the UH Manoa Library network.**

Required to support workstations used by students, faculty, staff and the public in the UH Manoa Library. Supports initiatives described in B. Equipment Replacement. Time frame: 1997/98.

- **Test an experimental wireless networking infrastructure within the UH Manoa Library.**

Required for preplanning of Hamilton Library Phase III addition to determine the feasibility of wireless networking where access to fixed network connections will be limited. Time frame: 1997/98.

3) Software

- **Upgrade World Wide Web version of the UH Manoa Library Catalog.**

Required because the CARL Corporation will no longer support or enhance the public access catalog text-based environment after December, 1998. Upgrade increases access license from 10 to 250 simultaneous users. Time frame: 1997/98.

- **Install a common user interface to electronic information resources that is flexible, powerful and easy to use.**

Required to simplify student and faculty access to a multitude of electronic information resources, such as library catalogs, CD-ROM databases, images and World Wide Web resources. Time frame: 1997/98.

B. Equipment Replacement

- **Replace 200 dumb (text-based) terminals and related peripheral equipment used by students in the UH libraries systemwide with multimedia computer workstations capable of displaying color, video, sound and images.**

Required because the CARL Corporation will no longer support or develop applications for the text-based environment after December, 1998. Allows student access to World Wide Web-based library catalogs, interactive multimedia instructional materials created by faculty, digitized images of rare and archival materials, course reserve readings, course-related electronic mail, and millions of resources available on the World Wide Web. Replaces 85 public access terminals in UH Manoa Library and 125 public access terminals in other UH System libraries. Time frame: 1997/99.

- **Replace 250 dumb (text-based) terminals and related peripheral equipment used by staff in the UH libraries systemwide.**

Required to migrate to the new CARL Corporation microcomputer-based environment for library processing, cataloging, circulation and public access catalog applications. Also required because OCLC, the major bibliographic utility used by

UH System libraries, will no longer support the text-based cataloging environment after December, 1997, and will, instead, require Windows-compatible workstations for cataloging operations. Also facilitates work of library faculty to create new and unique electronic information resources in support of the University's strategic teaching and research priorities. Replaces 150 staff terminals in UH Manoa Library and 100 staff terminals in other UH System libraries. Time frame: 1997/98.

C. Facilities

- **Design the telecommunications infrastructure for the Hamilton Library Phase III addition to be compatible with the Phase I/II building, incorporating current technologies.**

Required to provide a level of service consistent with the functions to be performed in the Phase III building. Time frame: 1997.

- **Assess electrical power and telecommunications infrastructure in Hamilton Library Phase I/II and Sinclair Library.**

Required to meet the increasing demand for additional computer equipment and high speed access to networked electronic information resources. Time frame: 1997/99.

- **Upgrade electrical power and telecommunications infrastructure in Hamilton Library Phase I/II and Sinclair Library.**

Required to meet the increasing demand for additional computer equipment and high speed access to networked electronic information resources. Time frame: 1999/2000.

D. Education and Outreach Services

- **Purchase systemwide licensing agreements for electronic information resources.**

Required to broaden access to electronic scholarly and scientific bibliographic indexes and journals needed for teaching and research systemwide. Time frame: 1997/99.

- **Establish systemwide standards for library information literacy competencies.**

Required to meet the University's systemwide goal to establish general education standards for information skills and to integrate these standards into the curriculum by the year 2000. Time frame: 1997.

- **Create library information literacy instruction based on Systemwide standards.**

To provide online instruction to the distance education student and remote dial-in user statewide. The instruction will expand the scope of traditional instructional methods, such as classroom instruction and workbooks and will be available from the World Wide Web page of each UH System library. Time frame: 1997/98.

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SENATE RESOLUTION

REQUESTING THE COORDINATION OF EFFORTS TO MAKE UNIVERSITY OF HAWAII LIBRARY COLLECTIONS AVAILABLE ON A SYSTEMWIDE AND STATEWIDE BASIS THROUGH MODERN DISTRIBUTED DIGITAL STORAGE SYSTEMS AND TELECOMMUNICATIONS TECHNOLOGIES.

1 WHEREAS, the library is the intellectual heart of any
2 university and its academic programs; and
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4 WHEREAS, Hamilton Library serves as an unparalleled
5 information resource for the entire State of Hawaii; and
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7 WHEREAS, the University of Hawaii has demonstrated a deep
8 and continuing commitment to the delivery of instructional
9 programs throughout the State via telecommunications
10 technologies; and
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12 WHEREAS, this commitment has resulted in a highly
13 successful distance education program serving people throughout
14 the State of Hawaii; and
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16 WHEREAS, the University of Hawaii libraries have been a
17 significant factor in the success of the University of Hawaii
18 distance education programs through their role in the exchange
19 and delivery of materials and cooperation in support of
20 students' instructional and research activities; and
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22 WHEREAS, much research on the emerging application of new
23 information technologies addresses the concepts of digital and
24 virtual libraries; and
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26 WHEREAS, the Governor has stated his commitment to fund
27 the digitization of the Hawaii Interactive Television System
28 (HITS), which will permit HITS to provide for the interisland
29 distribution of digital information and communication in
30 various formats (text, image, audio, video) as well as
31 increasing the State's capacity for interisland interactive
32 television services; now, therefore,
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34 BE IT RESOLVED by the Senate of the Eighteenth Legislature
35 of the State of Hawaii, Regular Session of 1996, that the

1 University of Hawaii at Manoa libraries, in partnership with
2 the libraries throughout the University of Hawaii system and
3 the University's Information Technology Services Division,
4 develop a plan and a proposal for making the resources of
5 Hamilton Library and other appropriate collections available
6 more broadly on a systemwide and statewide basis through modern
7 distributed digital storage systems and telecommunications
8 technologies; and
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10 BE IT FURTHER RESOLVED that the University of Hawaii Board
11 of Regents is requested to report its plan to the Legislature
12 no later than twenty days before the convening of the Regular
13 Session of 1997; and
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15 BE IT FURTHER RESOLVED that a certified copy of this
16 Resolution be transmitted to the University of Hawaii Board of
17 Regents.
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OFFERED BY:


