



A Bridge to the Future: The Rutgers Digital Library Initiative

Steering Committee for the
Libraries' Long Range Plan

March 25, 1999

Marianne Gaunt, Chair
and University Librarian

THE STATE UNIVERSITY OF NEW JERSEY
RUTGERS

A Bridge to the Future: The Rutgers Digital Library Initiative

TABLE OF CONTENTS

Executive Summary	i
Preamble	1
Introduction	1
Scenarios of the Future [sidebar]	2-3
What is the Digital Library Initiative?	4
Why is the Digital Library Initiative important?	4
How does the Digital Library Initiative relate to the library of the past and present?	5
How will the Digital Library Initiative support the university's strategic plan?	5
What are the building blocks for the Digital Library Initiative?	7
Rutgers' Partners in Resource Sharing in the Digital Age [sidebar]	8
What will we need to build the Digital Library Initiative?	8
Principles and Priorities for the Digital Library Initiative	9
A. Collection Development Principles	9
B. Service Priorities	10
C. Staffing Principles and Priorities	11
D. Facilities and Infrastructure Priorities	11
Goals and Activities for the Implementation of the Digital Library Initiative	12
A. Collection Development	13
B. Improving Access	13
C. Improving Service and Instruction	13
D. Staffing	13
E. Development/Funding	14
F. Facilities/Infrastructure	14
G. Planning	14
Appendices	
A. Charge to the Steering Committee	
B. Steering Committee Membership	
C. Location and Dispersion of Library Collections	
D. Budgetary Overview	

A Bridge to the Future: The Rutgers Digital Library Initiative

An Executive Summary

In the next five years, the period of the Libraries' long range plan, there will be nationally and internationally a continuing growth of the digital information environment. This environment will create new forms of communication and provide opportunities to enhance the use of the traditional staples of scholarly communication - the book and journal. To face the prospects and challenges that this new environment brings, the Steering Committee for the Libraries' Long Range Plan proposes the Digital Library Initiative (DLI) as a bridge between the old library and the new, a two-way bridge that will allow us to connect all that we value in traditional library services with the possibilities of new forms of knowledge acquisition and creation. This initiative will assure our access to digital information worldwide and will be based on those values we treasure most of the library's traditional strengths, scholarly resources and service.

The DLI is an elaboration on and companion to the *University Strategic Plan: A New Vision of Excellence* (1995) and RUNet 2000. The DLI takes direction from the university's strategic plan, which provides a framework in which Rutgers will grow as it aspires to be ranked among the top quartile of public AAU universities by 2010. RUNet 2000 will create an enabling technological infrastructure for the university, and the DLI will provide much of the intellectual content and an important organizational component for that infrastructure.

The DLI is a five-year plan to move aggressively, but intelligently, towards the creation of a new library system. That new library is characterized most specifically by its ability to use technology to enhance information services to students and faculty, to support new instructional methodologies, and to improve access to all forms of information. While the new library will have both print and digital materials, the DLI focuses on:

- developing a user-centered information technology infrastructure across all university libraries
- designing more effective services capitalizing on technology
- acquiring, organizing, and disseminating high quality digital content
- creating new multimedia content with other faculty colleagues
- experimenting with digital preservation
- continuously assessing and evaluating the impact of information technology and making appropriate changes in the provision of services and information resources

The DLI is critical to the future of the Rutgers University Libraries because comprehensive research libraries as we now know them are no longer possible to sustain. The current pricing schemes for both print and electronic information and the exponential growth of knowledge require new models for the development of academic libraries. These new models will increasingly incorporate a growing level of digital content and depend on services enhanced by information technology. They will rely on inter-institutional collaboration to develop a tiered approach to information provision: the local, state, regional, national, and international library. And they will influence the development of new pricing and distribution models for print and electronic resources through experimentation and collective action. The DLI is a prerequisite for the emerging academic

library model.

The challenge is to implement DLI and, at the same time, continue to develop and manage a growing collection of books, journals, and other materials, many of which will not be available in digital form. Indeed, within the scope of the Rutgers University Libraries, we see growth in the numbers of both new electronic publications and printed materials.

While there is potential for producing publications solely as online, digital works (because most originate in digital form prior to publication in print), the extent to which this is happening varies from discipline to discipline. The move to a completely digital environment will not occur in the five years of this plan, or perhaps not at all. The print publications and the vast majority of materials the Libraries have collected for years and will continue to collect can flourish through the Digital Library Initiative through online request and delivery, online links to contents and finding aids, and selective digitizing. Collections, in digital and other formats, supporting the “academic growth areas” identified in the university's strategic plan will be targeted for excellence.

The DLI addresses many challenges unique to the Rutgers environment. One of the most distinguishing characteristics of Rutgers is its complexity, with its three geographically separated campuses linked together as one university. Moreover, many faculty and students are commuters, academic programs are offered on multiple campuses, and the expanding role of distance and continuous education is a reality. This complexity has long presented challenges to the university. The DLI is the beginning of a comprehensive system to address these issues. It will provide more equitable access to information resources and greatly improved communications. It will also foster the creation of “one university/three campuses” outlined in the university's strategic plan.

The role of the librarian as a collaborator with the teaching faculty in the delivery of the curriculum and in research will grow in the digital environment. Students need to know how information is created, how it is accessed, and how it can be evaluated. Students will also need to know how to publish in print and on the web and how to create and use multimedia and reformatted information for their class presentations. Beyond the university, they must learn new information management skills to compete in the workplace. Rutgers librarians and staff will assist in the development of these skills.

The Libraries will also play a key role in organizing and providing access to digital research projects in the university. The Libraries will act as a clearinghouse and consulting service for digital resources created by the Rutgers community. An increasing number of departments, professional schools, institutes, and centers are generating scholarly resources in multimedia, including electronic journals. Through the DLI, these efforts will be organized with the creation of a central registry that integrates them into a general information access mechanism and, when appropriate, archives them for future use.

Since knowledge is power in society, it is essential that the Rutgers community have access to and be prepared to make the best use of all informational and scholarly resources. The Digital Library Initiative – a bridge between the old library and the new – will move us aggressively but intelligently into the digital age.

A Bridge to the Future: The Rutgers Digital Library Initiative

Preamble

The library occupies a central place in campus intellectual life, drawing faculty and students together in the common enterprise of creating knowledge and fostering discovery and understanding. The onset of the electronic age does not diminish these functions, but, in fact, enhances the Libraries' position as a central place in the university that is integral to the work of the international research community and of teaching and learning on campus. At a time of accelerating academic specialization and fragmentation of knowledge, the libraries stand as a symbol of our common pursuit of knowledge that is the embodiment of the university. The Rutgers University Libraries serve not only the common good of the Rutgers community but also the public good of the state of New Jersey. They must remain a source of public knowledge and a resource for all the citizens of the state.

Over the next few years the Libraries will become even more important due to the growth of digital resources. To face the prospects and challenges that this new environment brings, the Steering Committee for the Libraries' Long Range Plan proposes the Digital Library Initiative (DLI) as a bridge between the old library and the new, a two-way bridge that will allow us to connect all that we value in traditional library services with the possibilities of new forms of knowledge acquisition and creation. This initiative will assure our access to digital information worldwide and will be based on those values we treasure most of the library's traditional strengths, scholarly resources and service. The DLI will bring about a stronger, more effective Rutgers library system capable of meeting the responsibilities of a great public university.

Introduction

The development of the Libraries' long range plan comes at a time of confluence in planning activities at the university. In September 1995 the *University Strategic Plan: A New Vision for Excellence* was completed. This plan is a blueprint that has already focused faculty energies on specific areas targeted for excellence. It is intended to thrust the university into the top quartile of public AAU institutions by the year 2010. The plan acknowledges that a robust academic support infrastructure, including the acquisition and production of library databases, are key to the achievement of university goals. By identifying cognitive science and information science as two of the strategic areas targeted for excellence, the university recognizes the critical role that human-computer interaction will have on all aspects of everyday life in the new electronic information environment. Indeed, the results of research being done in this area under the sponsorship of Strategic Resource Opportunity Analysis will undoubtedly have an impact on how the Libraries present multimedia content and design information services both now and in years to come. In this environment, it is crucial that librarians and other faculty researchers work together so that research and practice are more effectively allied.

The recently completed Middle States Accreditation ten-year review followed a self-study that included a special topics report on information systems and information technology. That report acknowledged significant achievements by the Libraries over the last ten years guided by their planning document, *An Information Strategy for the Rutgers Libraries*. That plan, however, concluded in 1997. The self-study also acknowledged that patterns of publication and scholarly

SCENARIOS OF THE FUTURE

The following are some scenarios reflecting how the Rutgers University Libraries might look when the DLI becomes a reality.

Undergraduate teaching and learning:

- A cinema studies professor preparing a lecture on the uses of propaganda in the film industry during WWII uses excerpts from Leni Riefenstahl's "Triumph of the Will" digitized for her lecture in a smart classroom. As she discusses Riefenstahl's filmic techniques and aesthetics, she projects these digital Quick time movies, shuttling through some excerpts frame by frame. She has previously assigned her students to view PBS documentary on Riefenstahl available on Rutgers Libraries Online Reserve System. To show Allied media production from the same period, the professor connects via the Libraries' gateway (IRIS) to the Library of Congress digitized Newsreels and Photo Archive. A student suggests the class think about U.S. propaganda and recommends the web site for the E.H. Tepper Collection of World War II Posters, which has a finding aid with selected scanned images of the posters. As the class ends, students are buzzing with new ideas with new connections and contexts, the sources of which have all intersected and originated from the DLI.
- Following his teacher's last lecture via teleconferencing, an undergraduate from Monmouth County begins to think about his paper on daily life during the Civil War, a paper that must include some original documentation. Sitting at his workstation, he panics as he is unfamiliar with the screen that he faces. He has been told there is a information navigator that will help him through this information jungle. He finds the navigator icon and clicks it with relief. The navigator guides him through explanations of various types of literature available from different broad disciplinary categories, and he finds books, journal articles, and government publications that have relevance to his topic. Some are full-texts online; others he must order from a document delivery company. He has not, however, found original documents that interest him for his paper. He activates the video camera in the workstation and contacts a librarian in the Dana Library. The librarian suggests he look at the Internet site, "Electronic New Jersey." He finds it and locates several digitized diaries, one by a soldier from Newark and another by a Metuchen woman whose husband has gone to war, leaving her with three children to care for on her own. The student is fascinated with them. He contacts his fellow students about this material and an idea he has from his paper. The electronic messaging archive stores and retrieves his own, his teacher's, and other students' remarks via an interactive threaded discussion. With confidence and new insights, he pulls a couple of "all-nighters" and finishes his paper.

Advanced Research

- A graduate student in political science is working on a dissertation comparing congressional elections in Los Angeles and Dade County, Florida, assessing the impact of growing Hispanic populations on the outcome of these elections

communication are changing. Not only has the cost of information risen well beyond normal inflation, but the amount of information is growing exponentially. And many scholars, especially in the sciences, are communicating daily on the Internet and sharing preprints of articles maintained on academic web sites. These factors will have a tremendous impact on how resources are spent and how information is produced and delivered by the Libraries.

RUNet 2000 is a recently completed comprehensive plan for a university-wide, high-speed network to support advanced data, voice, and video communications. RUNet 2000 is critical to university research and instruction as the enabling infrastructure for the new applications and digital content that will ride on the network.

Last but not least is the university plan for escalating development activities through a capital campaign. With the university's strategic plan as the blueprint, and the hiring of a new foundation director, the university is poised to achieve its target of excellence by raising the resources necessary to complement state allocations. The Libraries have recruited a new library development officer who will focus on the cultivation of major gifts full-time. This position is funded jointly by the Rutgers University Foundation and the Libraries in recognition of the importance of external support for the Libraries and their established record of success in fund raising.

All of these factors make strategic planning for the Libraries crucial at this time.

An overall goal of the university as outlined in the university's strategic plan is to be within the top quartile of public AAU institutions by the year 2010. The Long Range Planning Steering Committee strongly endorses this goal and recommends that the Libraries' achievements be measured by the standards of those top institutions' libraries, shaped by the specifics of the university's strategic plan and Rutgers' academic mission. To attain this goal requires educated and skilled library personnel to make the critical decisions, along with the university community, to create a library system that facilitates world-class research and an excellent instructional program.

In the next five years, the period of the Libraries' long range plan, we will see a continuing growth of the digital information environment. This period will remain volatile, as the paradigms for pricing, producing, preserving and distributing both print and digital media are very unsettled.

over the last twenty years. After searching IRIS, he locates fifteen relevant books on recent Hispanic immigration to the U.S., election trends in Florida and California, and the recent history of Miami and Los Angeles. He searches indexes to periodical articles and finds fifty relevant hits, many of which are available within the Rutgers University Libraries, mostly on the shelves, others available electronically in JSTOR, and some of which he can acquire by ordering directly from the publisher's server. On another day, he seeks out Internet resources and finds a discussion group devoted to Latinos in politics in Florida. He has access via the DLI to census and polling data. He identifies the specific data sets he needs for congressional districts in Dade County and Los Angeles and applies GIS (Geographic Information System) mapping software to this data. In a short time he has graphs of Hispanic population density-growth in relevant congressional districts from the 1980, 1990, and 2000 census and of polling data from the congressional elections for the same time frame.

- A researcher at Oxford University is doing research on origins of the consumer protection movement in the United States. He has heard that Rutgers Special Collections has the papers of Consumers Research, Inc., the first known consumers' organization. He locates the AMC (Archival and Manuscript Catalog) Record in IRIS, which "hot links" to the complete finding aid, marked up in EAD (Encoded Archival Description), finds selected digital images online, and discovers several folders of relevant materials from the finding aid. He sends an e-mail message to Special Collections identifying the remaining documents of interest. He hops on a plane two weeks later, and when he arrives at Special Collections, two boxes of materials he identified are waiting for him in the Reading Room.
- A researcher connected with the Cranberry Research Center in Chatsworth is looking for recent articles on pesticides and organic alternatives for pest control. He searches the database Agricola available on the Libraries home page, discovers fifteen articles published since 1996 in ten journals, and learns that the Libraries holds eight of those journals. He orders fax copies of seven articles from the Chang Library, has access online to full-text articles for several others, and the rest can be acquired through Uncover, a document delivery agency. Within twenty-four hours, all the articles he needs are in his hands.

This remains a period of experimentation, one in which investments must be made to gain experience with the impact of technology, to assess and evaluate, for example, the "right" design for new learning environments, the balance between information access and ownership, document delivery on demand or continuing subscriptions. This environment will create new forms of communication and, at the same time, provide an opportunity to enhance the use of the traditional staples of scholarly communication, the printed book and journal.

Only by observing the use of these new media in research, in instruction, and in service, can we influence new models for their pricing and accessibility, determine the appropriate balance between print and digital media, and design new services that will support what faculty and students need for their work.

As the Internet and the World Wide Web have developed, it is clear that the traditional roles of libraries – selecting, organizing, and archiving information and knowledge, and assisting people in making the best use of information – are vital functions in the new digital environment.

The DLI provides a unique solution to the problem of the physical dispersion of the Rutgers campuses as well as a new service strategy for citizens throughout the state. It turns geographical complexity into opportunity by acting as a force pulling together the regional campuses, connecting individual scholars, departments, and other units, and focusing intellectual energies. It attends to the needs of commuting faculty and students and promotes exchange not before possible. It will counter the tendency toward fragmentation by equalizing and expanding access to library and other information resources, and it will position the Libraries as a center of intellectual life for the university and the state of New Jersey.

The road to the fully functioning library envisioned here will be complex and costly, but it will be one of the most valuable enterprises within the university. Careful planning for services and collections, in conjunction with appropriate financing and staffing, and the commitment of the

university and the state are required. The following outlines our concept of the DLI and what we must do to put it in place over the next five years.

What is the Digital Library Initiative?

The DLI is a five-year plan to move aggressively, but intelligently, towards the creation of a new library system. That new library is characterized most specifically by its ability to use technology to enhance information services for students and faculty, to support new instructional methodologies, and to improve access to all forms of information. While the new library will have both print and digital materials, the DLI focuses on:

- developing a user-centered information technology infrastructure across all university libraries
- designing more effective services capitalizing on technology
- acquiring, organizing, and disseminating high quality digital content
- creating new multimedia content with other faculty colleagues
- experimenting with digital preservation
- continuously assessing and evaluating the impact of information technology and making appropriate changes in the provision of services and information resources

At the center of the DLI will be IRIS, the new Integrated Rutgers Information System. IRIS will manage access to all materials owned by the Libraries, and it will serve as a gateway to materials in other libraries' collections or at remote sites on the Internet. IRIS will be the entry point for new and enhanced services, such as electronic materials requesting, electronic reserves and reference services, self-check out, and the like.

The DLI will also complement RUNet 2000, university participation in Internet II, and Rutgers' expanding distance education programs by providing the quality scholarly and information resources that are used, enriched, and manipulated by students and faculty on campus and at remote sites served by the university.

The DLI will facilitate change. The Libraries will use digital technology to provide improved and expanded access to their various other collections: government publications, manuscript collections, video and film resources, microforms, printed monographs and journals, and their contents. At the same time strategic investments will be made in the acquisition of quality digital information and in the creation of new multimedia content from locally held print materials.

Why is the Digital Library Initiative important?

Comprehensive research libraries as we now know them are no longer possible to sustain. The current pricing schemes for both print and electronic information and the exponential growth of knowledge require new models for the development of academic libraries. These new models will increasingly incorporate a growing level of digital content and depend on services enhanced by information technology. They will rely on interinstitutional collaboration to develop a tiered approach to information provision: the local, state, regional, national, and international library. And they will influence the development of new pricing and distribution models for print and electronic resources through experimentation and collective action.

The DLI is a prerequisite for the emerging academic library model. It is the critical infrastructure that will:

- build a local gateway and archive for scholarly collections and other information resources that will connect Rutgers to every tier in the new academic library model
- create a teaching library that uses web-based and other multimedia modules to help students and others apply critical thinking skills to the identification, filtering, and evaluation of information
- offer new kinds of distance and multimedia learning initiatives consistent with university academic standards

- foster interinstitutional collaboration on joint purchasing of and access to digital information resources
- enhance service to the citizens of New Jersey by providing access to databases and other multimedia resources created at Rutgers

The challenge is to implement DLI and, at the same time, continue to develop and manage a growing collection of books, journals, and other materials, many of which will not be available in digital form. Indeed, within the scope of the Rutgers University Libraries, we see growth in the numbers of both new electronic publications and printed materials. As a result, the availability of electronic information and electronic delivery systems will not diminish the overall cost of providing information resources to the university. Over time, as the digital environment grows, costs, however, will increasingly shift away from print collections and buildings to digital media and the technology infrastructure.

How does the Digital Library Initiative relate to library of the past and present?

The potential for producing publications solely as online, digital works is vast, as most originate in digital form prior to publication in print. The extent to which electronic publications are developing varies from discipline to discipline. For example, there is a growing body of electronic scientific journal literature and social sciences data, but humanities scholarship will remain print-based for some time to come. Books will remain the most convenient and least expensive way to provide more lengthy, in-depth coverage of a topic. How will these and other non-electronic formats that libraries have collected for centuries relate to the DLI? Will these all be digitized, or, if not, will they be forgotten? (“If it’s not in the computer, it doesn’t exist.”)

The economics of retrospective digitization will limit massive projects. Initial studies on digitizing printed and manuscript material suggest that the costs are extremely high, and copyright restrictions in the digital world complicate such activities. The vast majority of what we currently hold in libraries will not be digitally reformatted. These materials will still remain valuable to instruction and research and can flourish through the DLI. How will that happen?

First and foremost, the records for all print materials owned by the Libraries (and in some cases their tables of contents and indices) must be included in IRIS, the new information system. Only seventy to seventy-five percent of these materials are now represented there. Once in IRIS, these materials can be requested online for local delivery. Finding aids that list the contents of special collections can also be made available through IRIS. Users will be able to point and click on entries in IRIS for materials that are digitized and view, print, and download the source materials. Selected materials – valuable and unique primary resources (the New Jerseyana collection, for example) that can be accessed remotely to reduce physical handling, as well as material for online reserve and new curricular programs – will be digitized.

How will the Digital Library Initiative support the university’s strategic plan?

One of the most distinguishing characteristics of Rutgers is its geographic complexity, with its three separate campuses linked together as one university. Even the New Brunswick/Piscataway campus has had an unusual evolution and bears its own inherent complications. Moreover, many faculty and students are commuters, academic programs are offered on multiple campuses, and distance and continuous education is expanding. These complexities have long presented challenges to the university. The university's strategic plan emphasizes interdepartmental and intercampus initiatives, and the DLI is the beginning of a comprehensive system to address, in a commanding fashion, these issues. It will make access to information resources equitable among the campuses and greatly improve communication. It will foster the

concept of one university, as embodied in the plan. The prospect of making available full-text electronic journals and documents, bibliographic and numeric databases and files, and applications software and multimedia throughout the university is one that can only strengthen research and instruction, especially in the areas targeted for excellence, and enhance learning in new ways.

The role of the librarian as a collaborator with the teaching faculty in the delivery of the curriculum will grow with the DLI. Librarians are natural partners of the teaching faculty in supporting university-wide learning goals for undergraduates, a key element of the university's strategic plan. Students need to know how information is created, how it is accessed, and how it can be evaluated. In the print environment, librarians select quality materials and acquire them for libraries. In the digital environment that selection role is even more critical, because much of the material on the web is of dubious quality. As a result, critical judgment is required when selecting resources for research and instruction. Students will also need to know how to publish in print and on the web and how to create and use multimedia and reformatted information for their class presentations. They will work with information collaboratively with other students and others throughout the global networks. Students must learn new information management skills to compete in the workplace. Rutgers librarians and staff will assist in the development of these skills.

Members of the teaching faculty are already making use of digital resources in their teaching and research and participate in virtual communities of scholars and scientists. At the same time, some need assistance in how to make the most effective use of the digital resources in their work. The Libraries' effective collaboration in these ventures will require appropriate facilities in each of the major library buildings, such as video conferencing, in support of new learning methodologies.

The Libraries can also play a key role in organizing and providing access to digital research projects in the university which support the service mission of the university to the state, as articulated in the university's strategic plan. With the DLI, the Libraries can act as a clearinghouse and consulting service for digital resources created at the university. An increasing number of departments, professional schools, institutes and centers, are generating scholarly resources in multimedia, including electronic journals. Through the DLI, these efforts can be organized by the creation of a central catalog that will bring them to the attention of other scholars, integrate them into a general information access mechanism, and, when appropriate, archive them for future use.

Decisions about what resources to acquire and retain for scholarly use will be facilitated by the DLI. Collection assessment has been a part of the bibliographer's responsibility, but collection of user data has been problematic. IRIS has the capacity to collect use and financial data automatically, while preserving the anonymity of users. Once the records for all materials owned by the Libraries are represented in IRIS, more and better information on which to make collection development and management decisions can be collected. Circulation statistics can validate past choices of particular titles as well as indicate trends in usage within subject areas. For example, which collections are most heavily requested for delivery among the campuses? Which materials are frequently recalled and require multiple copies? User data will also come from the Libraries' web pages and other databases. With online information that is leased, access decisions can be reversed or maintained based on the changing need for these products as reflected in use statistics. Digital libraries promise to improve the fit between the collection and

the user, help form comparative benchmarks with other institutions, and address quality improvement, all of which are highlighted in the university's strategic plan.

What are the building blocks for the Digital Library Initiative?

There is a strong foundation on which to build and extend the DLI. The Middle States Self-Study on Information Systems and Information Technology highlights how well the Libraries have positioned themselves over the last ten years, guided by their planning document, *An Information Strategy for the Rutgers Libraries*. Since the fiscal year 1993/94, the university has invested more than \$8 million in supplemental library funding, of which nearly \$7 million has targeted the information technology infrastructure of the Libraries. Fundraising by the Libraries has leveraged these funds. As a result of these investments we now have a new, highly electronic science library on the Cook campus, the Chang Science Library, and the Scholarly Communication Center in the Alexander Library equipped with two 25-workstation information handling labs, a 100-seat teleconference lecture hall, and a humanities and social science data center. The Library of Science and Medicine's first floor has been remodeled and expanded to provide an enriched information technology environment. More than 300 new computers for public access to databases have been added to the libraries on the Camden, Newark, and New Brunswick/Piscataway campuses. All libraries now have a hands-on computer lab for instruction in using databases; and the Libraries' top priority, a new integrated information system, IRIS, was purchased in 1997. The Libraries reallocated funds from print to electronic information, and with supplemental Instructional Computing Initiative and multicultural funding, now provide access to more than fifty-five networked databases, some of which include the full-text and full-image of journal articles. A large portion are maintained locally on newly purchased servers running Ovid or SiteSearch software. The Libraries leveraged their funds with other units of the university to purchase a university-wide site license to the ARCview geographical information system (GIS) software.

IRIS will be the center of the DLI. In IRIS the Libraries have one primary tool for identifying information resources, including comprehensive cataloging of the materials the Libraries hold locally or have acquired access to remotely. Electronic journals and databases can now be hot-linked from the catalog record, and catalog records for manuscript collections can be linked to comprehensive finding aids. Supplementing IRIS access are web-based, specialized subject pages that provide guides not only to materials purchased by the Libraries as well as carefully selected, relevant information that is available free on the Internet.

RUNet 2000, the university's bold plan to provide high speed connectivity to all users in all Rutgers' buildings, will construct a key component in the infrastructure to make the DLI a reality, as will the university's participation in Internet II. A robust network environment will be critical for the new applications, requiring large amounts of data provided by the Libraries and transported daily by the network to the university community.

Rutgers can not build the DLI on its own. There are many technical and policy issues that must be solved on a local, national, or international scale. Authentication/authorization of remote users (especially if they are accessing the Libraries through a commercial internet service provider), authentication and preservation of electronic media, copyright and intellectual property, present challenges awaiting national, collective solutions. In order for seamless networks, interconnectivity, and an underlying commonality of search engines to be realized, we must be aware of and influence the development of technical standards appropriate to the academic community. Until such standards are developed and implemented, it should be

**RUTGERS' PARTNERS IN RESOURCE
SHARING IN THE DIGITAL AGE**

- PALINET, a Pennsylvania/New Jersey/Maryland area region for OCLC libraries providing interlibrary loan, reciprocal borrowing cards for participating libraries, as well as a consortium for its members to enter into cooperative purchase of electronic databases. Currently RUL has acquired Ideal (170 electronic journals from Academic Press) and Project Muse (more than 30 electronic journals from Johns Hopkins University Press) through PALINET.
- The Research Libraries Group provides RLIN, a major database of catalog records of large and specialized research libraries around the world, and expedited interlibrary loan for its members. It also develops specialized electronic databases and is in the forefront of encouraging new digitization projects of unique resources.
- The Center for Research Libraries is an international, not-for-profit consortium of colleges, universities, and libraries that make available to users everywhere scholarly research resources not widely held. The Center is currently placing special emphasis on archiving and delivering electronic and printed resources. It is a key player in the ARL/AAU Global Resources Program and has begun to provide digital versions of its expensive microform collections.
- The NERL (Northeast Research Libraries) Consortium, a newly formed group consisting of the Ivy League and other research libraries in the northeast, was formed specifically to forge cooperative purchases of electronic resources and to develop cooperatively library-friendly licensing agreements.
- VALE (Virtual Academic Library Environment), a newly forming consortium of academic libraries in New Jersey intends to acquire electronic resources cooperatively and facilitate the development of the necessary infrastructure to enable all New Jersey academic libraries to have seamless access to jointly held information. Three databases were acquired through VALE in FY 1999.

understood, the Internet remains a dynamic yet rather chaotic collection of quirky subnetworks. The Libraries' membership in organizations that are addressing these issues, including the Coalition for Networked Information, the Association of Research Libraries (and its SPARC Working Group), and the Commission on Library and Information Resources, will be important for participation on a national scale. University-wide committees, such as the Copyright Policy Committee, will also be important to resolve these issues at the local level.

Interinstitutional collaboration will be the hallmark of the DLI and the emerging academic library model for the digital age. Rutgers' current resource sharing/cooperative collection agreements with other library organizations, such as PALINET, the Research Libraries Group, Center for Research Libraries, and the Virtual Academic Library Environment (VALE), are important building blocks for this model to be successful.

What will we need to develop the Digital Library Initiative?

Developing the DLI will require that the Libraries maintain several infrastructures simultaneously. The fully functioning research library requires, first and foremost, access to strong scholarly resources regardless of format. The Libraries will contribute towards Rutgers' goals for excellence, as outlined in the university's strategic plan, by developing the strongest collections in focused areas identified in the plan, enhanced by digital access to information about them. It also follows that these collections must accommodate all formats, including

books, journals, manuscripts, memorabilia, maps, sound recordings, visual material, video, film, microforms, electronic databases, texts, and multimedia, distributed and delivered to the desktop workstation. Such infrastructures require stacks for books, journals, and archival materials, photocopying machines, VCRs, record players, preservation laboratories, disc players, microform reader-printers, hardware and software for workstations, and digital production (scanners and PCS) that must be replaced on a three to five year cycle, a sufficient collections and access budget, and, of course, appropriate faculty, staff, and space related to each of these activities, including instruction for information literacy. The Libraries must also selectively preserve for future generations materials in their original formats. Digitizing works now in paper is primarily done for access and not preservation. Original digital works must regularly be "refreshed and migrated," or they will quickly become obsolete or unusable. The new library is, indeed, one of the most complex, costly, and valuable enterprises within the university.

Obviously, not everything of potential relevancy to the academic enterprise can be acquired or accommodated by the new library. Smart choices must be made. There are, however, no easy tradeoffs, such as electronic and not print, support for the sciences and not the humanities, textual

materials and not media, technical skills being valued over subject expertise, funding for access to materials (via commercial document delivery or a remote “information provider”) but not for acquisition of materials owned physically. We need to find a balance between all of these competing demands. There will be continuous shifts among these and other options. Already in FY1999, over \$700,000, or approximately 10%, of the collections budget will be spent on electronic resources. As more publications become exclusively available in electronic form, the need for shelving will decline. Large research libraries are typically adding 100,000 to 150,000 volumes each year, requiring thousands of linear feet of shelf space. The demand for shelving and shelf maintenance remains significant, but it will be monitored closely based on changing use patterns and the availability of electronic resources.

For the DLI, the provision of different kinds of spaces and appropriate equipment is needed. Currently the Libraries have more than 700 workstations for staff and the public, with demands for access to them increasing. It will be important for the Libraries to provide a sufficient number of workstations configured with specialized software to handle the variety of applications appropriate for full-text searching, digital mapping, data and media manipulation, and other information-intensive applications. In the future, students may bring their own laptops to the library for general purpose computing, and the Libraries may not need to provide numerous workstations for such activities. Nonetheless, the ongoing maintenance of equipment and the need to upgrade on a three to five year schedule will require significant ongoing funding.

Principles and Priorities for the Digital Library Initiative

Because the development of the new library is a complex undertaking and choices need to be made, the Libraries’ Long Range Plan Steering Committee offers the following principles and priorities that it considers essential to the realization of the DLI. The Libraries’ progress will be shaped by these principles and priorities along with a systemwide library advisory committee to provide ongoing guidance to the university librarian for library planning.

A. Collection Development Principles:

A fundamental measure of the quality of an academic library is the richness of the scholarly resources that it makes available to its students and faculty. One of the overarching goals of the university’s strategic plan is to rank among the top quartile of public AAU institutions by 2010. Developing collection resources to the level of those institutions will be a major challenge. The Steering Committee endorses the following principles for developing collections toward that end while also reflecting Rutgers unique characteristics:

- Develop collections based on university program priorities (as described in the university's strategic plan and other relevant documents), and build on current strengths, while maintaining appropriate information resources in other areas and relying on consortial partners for additional support.
- Strengthen liaison relationships between the Libraries and academic departments to ensure that collection and service decisions are based on the programmatic priorities of users.
- Analyze regularly collection use data available through IRIS and other sources so that collection development will better match user needs and budgets are allocated appropriately.
- Strive to develop collections comparable to the top quartile of public AAU libraries.

- Acquire library resources in support of Rutgers faculty and students on *all* campuses.
- Make available all electronic resources, including electronic journals, for access and use on each of the three regional campuses if there is a programmatic or research need. Although there may be certain exceptions for some CD-ROMs and similar resources that do not network easily, the operative principle is that all members of the community will have equal access to the resources that the Libraries provide.
- Negotiate with vendors of electronic materials on a university-wide basis, and not on a campus by campus basis. The university-wide context of negotiations with vendors of electronic materials is at the very core of the creation of the DLI.
- When resources are needed on two or more campuses, provide those resources electronically to meet those needs.
- Consider quality, cost, accessibility, preservation/archival factors, and space as selection principles for library materials where there is a choice in format (print, electronic, microform, etc.)
- As undergraduate and graduate programs emerge that require information resources already owned on another campus, materials delivery and networked electronic subscriptions must be considered before duplication of print resources; however, duplication is required for heavily used materials.
- Disperse physical collections based on the intellectual coherence of the collections. [see appendix Location and Dispersion of Collections]
- Minimize duplication of monograph and journal print collections to increase the depth of coverage in disciplinary areas collected by the Libraries.
- In order to make cooperative collection development among the three campuses a reality, the goal of no more than forty-eight hours for document delivery must be met.
- Develop collections in relationship to resource sharing agreements and cooperative collection development strategies with other institutions, pursuing consortial purchasing agreements where possible.

B. Service Priorities

The Libraries must implement a suite of services appropriate for the Rutgers community that capitalizes on emerging technologies. In order to develop new services and revamp traditional services by incorporating digital technology, librarians must observe how faculty and students are using digital resources. To ensure that the DLI will be successful, the following priorities have been established for the five year plan:

- Provide timely, accurate, and convenient delivery of information resources to the desktop.
- Create instructional programs that provide students and faculty with skills to exploit the new information environment.
- Provide enhanced information services, such as the online “Ask a Librarian,” so that users can satisfy information needs in a timely manner.
- Ensure that all Rutgers’ resources are represented in IRIS and that bibliographic links in IRIS are made to the full-text content of materials where available.
- Support faculty in the creation of digital resources for their research and instruction.
- Acquire external funding to digitize selective unique library resources that contribute to the creation of the global digital environment.

C. Staffing Principles and Priorities:

The organization of the Libraries for the DLI will demand flexibility as they assess and observe the impact of information technology on their users and redesign organizational structures and services to accommodate the changing environment. While the Libraries endeavor to recruit personnel with the special subject and/or technical expertise necessary for the position at hand, a new requirement will be the ability to manage change. As the Libraries rely more heavily on digital technology, organizational structures based on physical location will become less relevant. In an institution as large as Rutgers with a geographically dispersed campus environment, the digital environment presents an opportunity for creative structures impossible before now.

The recent reorganization of the New Brunswick Libraries has fostered new collaborations across the campuses to better serve the community. It also provided an opportunity to redefine positions and maximize resources to address new needs. As a result, several administrative positions were reallocated to frontline activities, redundancies were examined and, where possible, were eliminated. The Libraries must continuously examine organizational structures, so that expertise can be shared systemwide. Indeed, the Libraries may implement the concept of one university, as embodied in the university's strategic plan, more effectively than any other organization within the university.

The requirements for an effective library workforce are and will continue to be demanding. Librarians have always had an important teaching role in the university. In the digital environment, they are aggressively expanding this role as they teach students information literacy skills, and educate and collaborate with the teaching faculty and the Teaching Excellence Centers in the creation of multimedia curricula. Their role as organizers of information resources and designers of new services and systems will grow as the information technology environment grows in sophistication. As the technology infrastructure of the Libraries grows, there will also be a concomitant need for technology support staff. As a result, the Libraries will balance priorities among all levels of personnel.

The following principles and priorities for staffing will guide the development of the DLI:

- Recruit and develop library faculty with information technology skills, knowledge of academic subject areas, and the ability to manage change.
- Recruit and develop personnel with technical skills, including high level staff such as systems managers and webmasters.
- Increase emphasis on human resources development, including continuous upgrading of skills and knowledge of all personnel in the library.
- Recruit and maintain a diverse workforce reflecting the composition of the student body and society at large.
- Develop staffing levels in line with the top quartile of public AAU libraries, especially in light of geography.
- Work closely with university administration to develop creative staffing models that maximize and leverage personnel resources.

D. Facilities and Infrastructure Priorities

The DLI builds on the university commitment to the upgrading and expansion of its communications and information technologies infrastructure - the RUNet 2000 project that is being designed to meet university needs for advanced voice, data, and video systems. In many ways, with its focus on the content, access, organization, creation, archiving, and use of electronic and multimedia information resources, the DLI may be viewed as a companion to the

RUNet 2000 conduit systems, the two interlocking systems of content and conduit that will be necessary for the enabling and enhancement of instruction, research, and service in the emerging digital era.

The DLI will require: 1) new facilities with technology-enriched spaces and environments in support of an active electronic and multimedia-based learning and selected digital library development and research projects; 2) selected facility renovations in support of technological, storage, and user and staff needs; and 3) the expansion and cyclical upgrading and replacement of equipment for digital, multimedia, and conferencing activities.

The following list of priorities represent two types of facilities/infrastructure priorities. The first represent ongoing infrastructure needs that must be budgeted regularly and with creative leveraging. The second represent strategic capital investments that will not be part of regular budget requests. They will, however, form the basis for opportunity funding, such as HEFT, ELF, and SROA, and for case statements for library fund-raising priorities. Indeed, the Libraries have many building and room naming opportunities for the capital campaign. The priorities are:

- Cyclically upgrade and replace equipment on all campuses.
- Construct videoconferencing facilities and smart electronic classrooms in the major libraries on the Camden, Newark, and New Brunswick/Piscataway campuses.
- Redesign, expand, and renovate media facilities at the Douglass Library to create a multimedia resource center for the arts to link to the Arts Distribution Network, a *University Strategic Plan* initiative.
- Complete the shell floor at the Dana Library for the Center for Instructional Information Technologies (CIIT), initially funded by a current Strategic Resource Opportunity Analysis grant in support of the university's strategic plan.
- Create the Rutgers Digital Archive to assure the long-term availability of electronic information owned by Libraries, and the expansion of the preservation laboratory in Special Collections.
- Expand networking in conjunction with RUNet2000 preparations.
- Complete infrastructure preparation for mobile computing in Camden, Newark, and New Brunswick/Piscataway.
- Complete the installation of shelving in the Annex (with associated HVAC improvements) to provide necessary storage space for science collections and Special Collections and University Archives.
- Conduct a feasibility study for space and service needs of the science libraries in New Brunswick/Piscataway.

Goals and Activities for the Implementation of the Digital Library Initiative

The specific activities for the five years of the long range plan focus on putting an infrastructure in place that empowers the user to discover, locate, retrieve, and use effectively information resources in any format, located anywhere in support of the university's strategic plan and academic mission. In the DLI this will be achieved through the use of technologies that create seamless access to information and the delivery of resources (or information) over the network to users' desktops. In order to make the DLI a success, the Libraries will implement the following activities over the course of the next five years. They will form the basis for annual goals setting, complementary budget requests, and library accountability reports to the university:

A. Collection Development

- Expand collection resources to an appropriate level for current programs in order for

Rutgers to gain a competitive edge for faculty and students.

- Acquire networked electronic resources for general and specialized materials.
- Focus collection support in areas of emphasis as outlined in the university's strategic plan, with particular attention to the areas in which Rutgers collections are currently weak, such as global and international studies.
- Collaborate with other libraries and consortia for purchase of electronic resources at reduced prices with favorable licensing terms and for cooperative collection development programs.
- Select and prioritize collections to be digitized.
- Revise and complete the Rutgers University Libraries Collection Development Policy Statements in view of the New Brunswick Libraries' reorganization and the DLI.
- Design and implement collection assessment and availability measures to provide input for collection development.
- Create and implement a preservation plan for materials in all formats.

B. Improving Access

- Create electronic records for all items existing in Rutgers collections.
- Improve existing records to assist in more complete and effective retrieval.
- Create finding aids for specialized materials.
- Create mechanisms to link catalog records to the digital full-text and to link electronic databases to library holdings.
- Begin digitization projects.
- Inventory digital projects within the university and create a clearinghouse list so that the Rutgers community is made aware of such resources.
- Collaborate on archiving of digital projects.

C. Improving Service and Instruction

- Implement user-initiated services, such as self-checkout of library materials, and journal article and interlibrary loan requests.
- Conduct user-initiated commercial document delivery service projects and assess their financial, service, and collection impact in relation to traditional interlibrary loan.
- Purchase and mount in all Rutgers University Libraries software and hardware for scanning and document delivery to users' workstations.
- Provide information services electronically to remote users.
- Design and implement electronic navigators and interactive instructional programs.
- Design and implement assessment measures for services using technology.
- Work with Rutgers faculty, design instructional programs for students that incorporate information literacy to advance undergraduate learning goals.
- Develop programs in collaboration with TEC, RUCS, OTR, and other relevant groups for faculty use of instructional technology and multimedia services.

D. Staffing

- Continually assess impact of library technology and realign and expand staffing as needed.
- Secure staffing for demands related to the DLI.
- Expand and refine the human resources development program.
- Recruit and hire a full time development officer in conjunction with the Rutgers University Foundation.

- Implement a minority internship/residency program.

E. Development/Funding

- Complete and implement a development plan for external funding.
- Create case statements for the capital campaign.
- Escalate the development of grant proposals.
- Establish a regular mechanism to convey Libraries' funding needs and help establish university budget priorities.

F. Facilities/Infrastructure

- Secure external funding for capital facilities priorities.
- Create a plan for ongoing infrastructure maintenance.

G. Planning

- Establish an external systemwide Libraries' Advisory Committee to provide ongoing advice to the university librarian for library planning.

Appendix A

CHARGE TO THE STEERING COMMITTEE

October 1, 1997

To: Steering Committee for the Libraries' Long Range Plan

From: Marianne Gaunt, Chair

Thank you for agreeing to participate on the Steering Committee for the update of the Libraries' Long Range Plan. As you may be aware, the impetus for this effort has come from a variety of sources. Last year, a Summit Conference on the Libraries identified a number of issues that needed to be addressed for the future development of the university library system. The Middle States Self-Study process recommended that the Libraries update their Long Range Plan to take into account the changing information environment and the *University's Strategic Plan*. And the Libraries and the University Vice President for Academic Affairs have desired broad university input into the many choices available for academic information provision into the future.

University aspirations, as described in *A New Vision for Excellence, the University Strategic Plan*, require a library system that takes advantage of new information formats, retains a commitment to print materials, and provides enhanced library services. The library will continue to develop as the locus of academic information acquisition, management and distribution, and will play a key role in the provision of information throughout the University. In doing so, the Library will strengthen its role as the crossroads for the creation and preservation of knowledge.

The Rutgers University Libraries strive for excellence in both collection resources and services to the university community. What will the Rutgers University Libraries look like five years from now? What kind of collections, facilities and services will support University goals at a time when the price of information is rising faster than the consumer price index, when state funding to the university remains stable at best, and when information technology is creating numerous choices for information delivery?

The Steering Committee is charged to oversee a process whereby the Libraries' Long-Range Plan is made current to the year 2003. Because technology is changing so rapidly, planning is now being done on a shorter cycle and reviewed and updated more frequently. Therefore, the long range plan should outline broad areas and priorities and identify goals for the next five years. The process should engage a broad spectrum of the university community, including forums, focus groups or public meetings. Where appropriate, experts from elsewhere should inform discussions and supplement local expertise. The following questions, among others that the committee identifies, should be addressed and included in the plan:

- what principles should guide how collections are developed and distributed throughout the system, including, for example, duplication of resources, dispersion of collections, new program development, and location of departments/programs?
- what factors should influence the balance between print and electronic resources that the Libraries provide?

- to what extent should the Libraries satisfy the University's information needs through collaborative resource sharing arrangements or document delivery, as well as the traditional ownership of information resources?
- what are the characteristics of service excellence to the university community?
- what quality, scope and types of library space will be required to provide service excellence into the future?
- in what ways can the university community act to affect the current scholarly communication models to increase information availability and reduce costs?

The Plan should be developed over the Fall semester, 1997 for review by appropriate bodies during the Spring semester, 1998. The first meeting of the committee is scheduled for October 10, 1:30 p.m. in the Alexander Library, College Avenue, Nicholas Rutgers Conference Room, 3rd floor, administrative offices. Background reading materials are enclosed. If you haven't already done so, please contact Doris Hawkins, Library Administration, 2-7505 (dhawkins@rci) to indicate your attendance. I look forward to seeing you then.

cc: J.J.Seneca

October 1, 1997

Appendix B

STEERING COMMITTEE MEMBERSHIP

Long Range Planning Committee Membership

Susan Beck
Librarian
Administration, Paul Robeson Library
Paul Robeson Library, Camden
Phone: (609) 225-6034
Fax: (609) 225-6428
susanb@crab.rutgers.edu

Joanna Burger
Professor, Room B218
Nelson Biology Laboratories, Busch
Phone: (732) 445-4318
Fax: (732) 445-5870
burger@biology.rutgers.edu

Michael Copeland
Ph.D Program, Student
School of Criminal Justice
15 Washington St.
Newark
Phone: (973) 353-1300
Fax: (973) 353-5896
mcpelan@pegasus.rutgers.edu

Fariborz Damanpour
Graduate School-Management, Professor
Management Education Center 0316, Newark
Phone: (973) 353-5050
Fax: (973) 353-1592
fdamanpo@gsmack.rutgers.edu

Harriet Davidson
Associate Professor
Room 8, Voorhees Chapel,
CAC
Phone: (732) 932-9331
Fax: (732) 932-1335
hardav@rci.rutgers.edu

Michael Eisenmenger
Assistant Professor, Art, MSGA
Civic Square 232, Douglass
Phone: (732) 932-2222 X804
Fax: (732) 932-2217
eisenmen@rci.rutgers.edu

Nuri William Emanetoglu
Secretary of the Graduate Student Association
Dept. of Electrical and Computer Engineering
0342 Buell Apts., Busch
Phone: (732) 445-0676
Fax: (732) 445-2820
anwe@ece.rutgers.edu

Ira Gang
Associate Professor, Economics
Faculty-Arts & Science, Rm. 419
CAC
Phone: (732) 932-7405
Fax: (732) 932-7416
gang@rci.rutgers.edu

Marianne Gaunt
University Librarian
University Libraries Administration
Alexander Library, CAC
Phone: (732) 932-7505
Fax: (732) 932-7637
gaunt@rci.rutgers.edu

John Gillis
History, Professor
Van Dyck Hall, Rm: 005
CAC
Phone: (732) 932-1870
Fax: (732) 932-6763
75463.217@compuserve.com

Gary Golden
Director, Paul Robeson Library
Paul Robeson Library, Camden
Phone: (609) 225-6036
Fax: (609) 225-6428
ggolden@crab.rutgers.edu

W. Phillip Huskey
Chemistry
FAS-N, Rm: 220, Newark
Phone: (973) 353-5741/5007
Fax: (973) 353-1442
huskey@andromeda

George Laskaris
Executive Director, RUCS
Hill Center, Rm: 240
Busch Campus
Phone: (732) 445-2741/2742
Fax: (732) 445-5539
Email: LASKARIS@rci

Jan Lewis
Professor, History
FAS-N, Conklin Hall
175 University Avenue, Rm: 313
Newark Campus
Phone: (973) 353-1279/5410/5411
Fax: (973) 353-1193
Email: janlewis@andromeda

Amy Liebmann
Student
0415 Brett Hall
CAC
Phone: (201) 361-3788
amyclieb@eden.rutgers.edu

Lynn Mullins
Director, John Cotton Dana Library
Dana Library, Newark
Phone: (973) 353-5222
Fax: (973) 353-5257
lmullins@andromeda.rutgers.edu

Jacqueline O'Donoghue
Graduate Student
66 Main St.
Nyack, NY 10960
Phone: (914) 353-2827
jod@rci.rutgers.edu

Brent Ruben
QCI, Executive Director
Professor SCILS, CAC
SCILS Rm:222
Phone: (732) 932-1420
Fax: (732) 932-6916
ruben@qci

Marla Segol
Student
Comparative Literature
123 St. Market Place #1
Brooklyn, NY 11217
Phone: (718) 789-9861
segol@aol.com

Robert Sewell
Associate University Librarian for
Collection Development & Management
University Libraries Administration
Alexander Library, CAC
Phone: (732) 932-7505
Fax: (732) 932-7637
rgsewell@rci.rutgers.edu

Ryoko Toyama
New Brunswick Library Director
Alexander Library Administration
Alexander Library, CAC
Phone: (732) 932-7129
Fax: (732) 932-1101
toyama@rci.rutgers.edu

Adeline Tallau
Librarian
Administration, LSM
LSM, Busch
Phone: (732) 445-2896
Fax: (732) 445-3208
tallau@rci.rutgers.edu

Thomas Tsakalakos
Professor, Mech. And Materials Science
College of Engineering, A100, Busch
Phone: (732) 445-2888
Fax: (732) 445-3229
tsakalak@rci.rutgers.edu

Dr. Gerald P. Verbrugghe
Associate Professor, History
Armitage Hall
311 N. Fifth Street 342, Camden
Phone: (609) 225-6071
Fax: (609) 225-6603
verbrugg@crab.rutgers.edu

Total: 24

12/19/97

Appendix C

LOCATION AND DISPERSION OF LIBRARY COLLECTIONS

LOCATION AND DISPERSION OF COLLECTIONS

(12/3/97)

The Libraries' Long Range Planning Steering Committee recommends that the physical dispersion of collections should be based on intellectual coherence of the collections. The current location of collections are workable and generally coherent. The committee further recommends that major collections moves should not be take place as departments relocate from place to place.

As stated in the Collection Development Plan (1990), library collection profiles were established to address the informational resource needs and related services at various library locations and also to address the cost of unnecessary duplication. The following is statement on the current location and dispersion of collections.

NEW BRUNSWICK:

In general, the primary collections (the most advanced in the system) are developed in libraries on this campus, with the exceptions of Management, Business, Jazz Studies, Nursing, and Criminal Justice in Newark.

The Library of Science and Medicine and the Alexander Library hold most of the primary collections. The collections located in Kilmer and Douglass contain older, general materials from when they were seen as Astand-alone@ libraries for Livingston and Douglass colleges as well current and retrospective materials in their areas of specialization, and general and specialized reference material. Branch libraries such as Chemistry and Music have primary/specialized research collections.

The Alexander Library has primary collections in all of the social sciences and humanities with the following EXCEPTIONS:

- art history (Art Library)
- music (Music Library)
- labor studies serials collection and selective manuscript collections (SMLR Library)
- feminist history and theory (Douglass Library) (See policy: URL <http://www.libraries.rutgers.edu/rulib/artshum/womstd/wspolicy.htm> or libraries= women studies web page)
- sociology of women (Douglass Library)
- visual arts (Douglass Library)
- theatre arts (Douglass Library)
- human ecology or social aspects of environmental studies (Douglass Library)
- agricultural economics (Douglass Library)
- business (not the primary collection for the system) (Kilmer Area Library)
- media (film and video) (Kilmer Area Library)

The Library of Science and Medicine has primary collections in the sciences, engineering and medicine with the following EXCEPTIONS:

- mathematics and computer Science (Mathematics Library)
- astronomy and physics (Physics Library)
- chemistry (Chemistry Library)
- agriculture, aquaculture and fisheries, bioresource engineering, entomology, food science, physical oceanography, plant and animal sciences (Chang Science Library)
- alcohol studies (Alcohol Studies Library)
- landscape architecture (Douglass Library)

NEWARK:

Broad based liberal arts and sciences collections for undergraduate studies with special emphasis in areas of graduate studies including history, English, global and international studies (MA degrees), and at the Ph.D. level, management and business, public administration, criminal justice (primary collections), chemistry, psychology (emphasis on human/computer cognition), biological sciences, behavior and neuroscience, nursing, physics, and mathematics (the latter two in conjunction with NJIT). Newark also houses the special collection for jazz studies (a primary collection).

CAMDEN:

Broad based liberal arts and sciences collections for undergraduate and with special emphasis on the masters degrees in mathematics, history, business, biology, English, public policy and administration, and satellite MA programs in nursing and social work administered from Newark the Newark and New Brunswick campuses respectively.

What brings these disperse collections together is the libraries= materials delivery or intra-library loan service (Rutgers Request Service on IRIS). But the logic and practicality of the current collection profiles need to be revisited. The most complicated issues related to the location and dispersion of collections are within New Brunswick.

Related to the location and dispersion of collections in New Brunswick, the basic issues are:

- does the current distribution of collections represent an intellectually cohesive and convenient model for disciplinary and interdisciplinary research and study?
- what criteria should govern the possible redistribution as the university changes?
- should collections be dispersed as they are now to make effective use of current library facilities and provide a significant library presence on each of the New Brunswick campuses that complement some of the academic programs on a specific campus?

Across the three campuses the issues are:

- adequate onsite collections for local undergraduate and research needs
- circumstances under which resource sharing (intra-library loan) is sufficient
- reliance of electronic technology to overcome geography

Appendix D

BUDGETARY OVERVIEW

BUDGETARY OVERVIEW

The Libraries base their budgeting, services, and collections on the following principles:

- they must operate as a unified system across the three major campuses
- budget requests must reflect the university's priorities
- ongoing planning with the university community will ensure that services and collections are developed with institutional support
- budget request will be informed by management, statistical, and user data collected and analyzed regularly by the libraries
- external funding through development, grants, and other opportunities will augment state appropriations

The implementation of the Digital Library Initiative will require the appropriate financial support to be successful. Within the description of the following budget outline, the Rutgers University Libraries will use as their goal the achievement of parity with the top quartile of public AAU institutions by the year 2010, which is in concert with the university's goals as outlined in the *Strategic Plan*.

The goal of parity with the top quartile of public AAU institutions will be reflected by input and output measures; the input being the amount of resources Rutgers will need to bring to bear on the informational and scholarly resources and service programs of the libraries and on the output side - user satisfaction surveys, collection use data, service impact measure and the like.

The libraries' policy for budgeting collections, staffing, services, and facilities is based on the principle that the libraries must operate as a unified system to as great an extent as possible. Their organization is perhaps closest to the ideal of Aone university/three campuses@ to which Rutgers aspires. Technology has facilitated the libraries to move significantly in this direction. There are libraries serve nearly 50,000 students, including 13,000 graduate students, and 2,500 faculty on three regional campuses in 23 libraries and reading rooms. There are approximately 200 undergraduate, 100 masters, and 70 Ph.D. programs, again, all spread over these campuses. These factors must be taken into consideration when budgeting for collections, staffing, and facilities.

In setting goals and establishing budgets, the libraries take the lead of the university in its determination to be within the top quartile (quarter) of the public AAU universities by 2010. The top quartile of public AAU institutions are the seven ranked the highest among twenty-nine. In terms of AScholarly Quality of Program Faculty@ as reflected in the National Research Council's ranking, these are in rank order: University of California - Berkeley, University of California - San Diego, University of California - Los Angeles, University of Michigan - Ann Arbor, University of Wisconsin - Madison, and University of Texas -Austin, and University of Washington - Seattle. However, among these UC - San Diego has less than 60 Ph.D. programs and is not considered comparable to Rutgers. Therefore, University of Illinois - Urbana is substituted for San Diego. These institutions certainly set high standards for Rutgers to achieve.

In setting bench marks, we seek to be at least half way to the average of these institutions in various categories by 2003.

The figures from these topped-ranked public AAU universities for collections, staffing, and related budgets in all cases represent single-campus operations. Because of the complexity, size, and dispersion of the Libraries and the university, such figures are not comparable. It simply requires more resources to operate a closely coordinated system on three campuses spread over 90 miles than it does a single-campus operation.

Annual budget requests in the areas of collections, staffing, and facilities will be based on priorities set for each year that will lead to the implementation of the goals and activities to be accomplished by the end of the five year plan.

Financial support for the DLI can be enhanced through creative partnerships between the state, university, faculty, libraries, and external funding agencies, and by leveraging funds from each of these groups. The Steering Committee acknowledges the many competing needs of the university and offers the following funding strategies for university budget planning to support the DLI:

- Library information resources and technology must be a priority in the capital campaign
- A fixed fraction of funds from indirect costs from external grants allocated to collections would lessen, in part, the impact of extraordinary inflation rates for science materials
- A fixed portion of the Instructional Computing Initiative funds would help support the growing need for materials in electronic format in support of undergraduate and graduate instruction and research
- Formal budget requests, with priorities, that examines the implications for collection allocations and service program initiatives will be made on an annual basis whereby the fiscal implications will be widely understood o In the formal approval process for new programs, a statement from the libraries on both the impact of additional or no new allocations will document needs
- The Libraries must escalate the development of grants and external fund raising to supplement direct budget allocations. Fund raising should target collection endowments, physical facilities, and equipment that enhances access to the digital library, and supports selective positions.
- The university should support and participate in initiatives leading to cost containment measures for information resources, such as examining the impact of retaining all or partial copyright to faculty publications, participating in publishing consortia as alternate outlets for scholarly information, discussing alternate publishing venues with faculty editors, and encouraging professional associations to explore outlets for their members publications that introduce competition into the commercial publishing environment.
- Expand collaboration with libraries and consortia, such as VALE, NERL, and PALINET, for the purchase of electronic resources at reduced prices and favorable licensing terms.