The Ubiquitous Library:

University of Maryland Libraries in the Next Five Years
New Directions & Continuing Legacy

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A Note of Thanks

Like any planning endeavor in the University of Maryland Libraries, this report is a result of a team effort. The heavy lifting was done by the Library Executive Council, with considerable effort by the numerous staff. The data gathering and idea generation involved the broad spectrum of leadership including branch and team leaders. The result builds on and extends the strong consensus expressed by our Strategic Plan. It reflects a singleness of purpose about what we must do to fulfill the vital role of providing scholarly information to a tier one public research university. I am proud of the results of this team effort, particularly given the compressed time-frame within which we had to complete the work.

Charles B. Lowry, Dean

Introduction

The University of Maryland Libraries are grappling with a series of challenges that are integrally related to a deep transformation of scholarly communication faced by all academic libraries. How the staff and faculty of the Libraries meet these basic challenges is critically important to the future of the University. It is amply clear that the academic library as a place will be

sustained. At the same time, it will become ubiquitous because of the use of advanced networking and computing to support innovation in how the Libraries work with and for the students and faculty. This assessment of changes that will occur and how the Libraries will look by 2008 has offered an opportunity to take stock of the strategic plan and do some interim planning. The transformation defined herein tracks closely to what was described in the Libraries' strategic planning process two years ago (see, http://www.lib.umd.edu/PUB/STRATEGICPLAN.HTML). The Appendix maps the planning in this report to the Libraries Strategic Plan Revision of 2001.

Throughout this report, an assessment is made of the opportunities for internal reallocation occasioned by new initiatives as well as significant shifts in emphasis with established programs. In some instances the report attaches explicit dollar values to these changes. However, the reallocation of human resources—the single largest item in the Libraries' budget—will take significant workforce planning over the next five years (see section below) to establish the final measures for these changes. In any case, minimum and maximum ranges are provided for reallocations in the conclusions.

This concurrence gives us confidence in how well the strategic plan relates to the environmental scan that accompanied it. The use of the term "ubiquitous" is meant to convey that the Libraries will be available to the campus community in a pervasive fashion, basically at their fingertips. Of course, this does not mean that every print volume will be online—a dream of "Memex" that may never happen. The "ubiquitous library" will have a number of characteristics that relate to the way we will deliver information and the way library faculty and staff will be engaged in the teaching and research mission. Some of the characteristics are:

- An increasing preponderance of scholarly information will be accessible online in full text. Although the shift to networked electronic access is accelerating for journals, books will persist in print for a substantial time until peripherals can mimic their high usability.
- Library IT applications like the new 'Research Port' will present diverse resources which we license and those available for free on the Internet, so that the user will experience them as highly integrated, creating order out of the chaotic nature of the Internet. Users will be able to control the presentation of these resources through the 'my library' capability of MetaLib/SFX. TM
- Subject expert librarians will be reachable through networked reference service—and increasingly on a 24X7 basis.
- The role of librarians will continue to change dramatically as they become more directly engaged in classroom teaching and research in collaboration with faculty, particularly with respect to information literacy.
- The notion of 'libraries as place' has demonstrated a resilience characterized by continued high demand as reflected in foot traffic—1.5 million last year. Better access provided by the "ubiquitous library" creates a strong demand on facilities for use of libraries in person. This will mean too that remote access to print materials housed elsewhere must be expedited by speedy delivery and digital access. Older facilities will need significant attention to keep them up-to-date with new demands. Some facilities may need to be replaced.
- Large retrospective print collections will still be required by research universities, but libraries will enter into shared-use facilities and will create consortia which eliminate

duplication of some low use materials while maintaining 'last copy' access through regional and national print repository agreements.

- The digital library program, currently in its infancy, will become a vital offering that makes unique special collections available to a wide audience on campus and will have the added benefit of high impact on the broader K-12 educational community that will serve to strengthen the service role of the Libraries and the University.
- The Libraries have carved out a strong role nationally in organizational development and will become and exemplar of a 'learning organization', which will enable them to respond quickly and effectively to the changing landscape of scholarly information.
- The Libraries will investigate both cost recovery and entrepreneurial programs that generate income, in particular some digital library programs will offer opportunities to do so. On the other hand, some efforts at digitization will be aimed at protecting content currently in the public domain from being exploited for commercial profit.
- The Libraries will take up institutional leadership in advancing access to the scholarly output of UM faculty through projects like Digital Repository at the University of Maryland. .
- The Libraries will play a leadership role through the Association of Research Libraries and AAU in the long-term struggle to preserve the fair use principle for education and research purposes.

The reallocation of resources and effort described in this report is aimed at assuring that all of this happens. Thus, successes in employing advances in technology, additions to our rich special collections, growth in the print and electronic general collections, diversified services that meet new needs—all these are indicative of a nimble response that this University deserves of its Libraries and which is already evident in what we do. To achieve these goals, the University of Maryland Libraries must become a 'learning organization' that provides staff with resources for training and a focus on organization that emphasizes the full engagement of staff in continuous change. This is the heart of what the UM Libraries are becoming.

Expanding E-Resources and Redefining Collections

The universe of scholarly publishing is in great flux. We will be successful providing information to meet the needs of our students to learn and our faculty to teach and advance knowledge through research only if we accept the fact that the delivery of information is diversifying. Yes, we believe that books will be around for a long time to come (a "good machine"), but we also believe that the scholarly journal will soon be principally electronic and that we have a responsibility for grappling with new information forms from remote sensing and GIS data to U.S. Government information that is migrating with blinding speed from print to the Web.

While the demands for print resources, particularly research monographs, and other collections are likely to remain unchanged for the foreseeable future, the electronic journal is increasingly becoming more commonplace and is challenging traditional notions of print serial collections. The "added value" represented by the more dynamic electronic journal compared with its less robust print counterpart is uncontested.

The UM Libraries currently spend approximately **$4,000,000**, half of the total acquisitions budget, on 6,500 paid journal subscriptions. Of this number approximately 4,000 are also available to the campus community in electronic form. Many of these e-journals are still not available as a subscription separate from a "package" that also includes the print version. In 2004, the UM Libraries will for the first time begin subscribing to some of these titles in electronic form only. Journals of the American Institute of Physics and the American Physical Society are among the first examples of this transformation. While this represents a significant departure in the collecting of journal literature, it will still encompass less than 10% of our total serials. This switch will permit us to realize some immediate space and processing efficiencies, without jeopardizing the archival permanence of the content that is acquired in electronic format only. The latter issue is critical, since not all publishers have commitments to preserve their electronic publications in perpetuity.

Journals
Based on trends of the past few years, over the next five year period the UM Libraries may be able to convert between 10% and **50%** of its print journals to electronic format only. Depending on the particular mix of publishers involved, this may consequently represent a range of **$400,000** to **$2,000,000**. These figures do not represent a reduction in acquisitions expenditures, but rather a strategic redirection in how our acquisitions dollars are presently invested from print journals to electronic online access. How quickly this conversion develops will depend largely on the extent to which individual journal publishers permit electronic-only subscriptions and provide for effective archiving to ensure future access to current content. The effects of this move to electronic-only access will be diverse. Any positive budgetary impact from the reduction in the number of print subscriptions is likely to be minimal. At present, the most generous publishers typically offer a one-time reduction in subscription costs of 10%. Other publishers are using the opportunity to change their pricing models in ways that preclude the Libraries from realizing any cost reductions, merely an opportunity to limit the damage done by rapid inflation. Perhaps the most alarming trend in the past two years has been the adoption by some publishers of "tiered" pricing, where large institutions are assessed far higher charges than small institutions. Nonetheless, the University of Maryland Libraries have been a leader in the national trend of shifting acquisitions resources to online access of full text and this will continue particularly because it is highly desirable to the campus community and emerging pricing models will require the gradual abandonment of the print paradigm for a significant part of collection management budget.

Changes in the composition of journal collections and in the amount of material acquired in physical form will change the allocation of other resources. Conversion of half of our journal subscriptions to electronic-only form would reduce annual growth of journal collections by approximately 10,000 volumes. This is in comparison to the 50,000 monograph volumes that are typically acquired annually.

Conversion to increasing electronic access will have other resource implications. Annual binding expenditures would be reduced by as much as **$80,500** and periodical check-in by **$28,000**. Continued decline in the circulation and use of print collections, requiring shelving and stacks maintenance will present additional opportunities to reallocate nonexempt staff and student assistant funds. Reductions would be possible within the existing allotment for the shelving contract (**$50,000** in FY03, **$30,000** in FY04). These adjustments, while increasingly

real in the long term, could be more than offset in the next five years by increased demands created by transitional work.

 The processes for the selection and management of electronic collections have been characterized as "chaotic."[1] This is in sharp contrast with the established and orderly systems that libraries have had in place for decades to deal with materials in print and other more traditional formats such as microforms. Subject librarians are increasingly working in a complex environment, where the vagaries of electronic formats and the marketplace pose constant challenges. The digitization of information resources and scholarly content is also redefining in significant ways the landscape of collection building and related user services. In this broad context of collection activities, the following cogent observations are appropriate:

> The migration from print to electronic varies in speed and extent by discipline; electronic products are interdisciplinary and expensive, giving rise to selection by committee; projections for future funding are guesswork; and archiving and content control are problematic. Legal and negotiation skills are now mandatory. To complicate matters, decisions are often made through a consortium. The process for acquiring electronic resources turns the traditional acquisitions and user service model topsy-turvy.[2]

Non-Serial Publications
While the emphasis in the foregoing has been on the transition of the print journal to the electronic format, there are notable efforts underway that affect non-serial publications. UM graduate students will be submitting theses and dissertations in electronic form beginning in 2003-04. In cooperation with the Graduate School, the Libraries will facilitate access to these electronic resources. This will represent reductions in annual binding costs of approximately **$9,660**. The cataloging of these materials is being outsourced. There will be some processing required for the records. However, we can anticipate eliminating 2.5 months of work for one cataloger, or **$8,000**. This effort can be devoted to materials that would not have been cataloged, such as digital objects and backlogs of unique collections.

Above all, the internal shift of the work of Technical Service Library Faculty to cataloging foreign languages and special formats and metadata development means that we will diminish their time commitment to basic cataloging and rely on retrained staff, technological improvements in library systems and outsourcing to help maintain our level of effort in processing print materials. This is essential because we do not foresee a diminution in the addition to the collections of monographs over the next five years significant enough to diminish the need to process for use large numbers of print volumes. For example, in 2003 the Libraries added 20,000 journal/serial volumes and 50,000 monograph volumes. Even if we moved shifted half of our journals to e-only (our highest estimate), the Technical Services staff will still process 60,000 print volumes per year.

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[1] "Collections & Access for the 21st-Century Scholar: Changing Roles of Research Libraries," ARL: A Bimonthly Report on Research Library Issues and Actions from ARL, CNI, and SPARC no. 225 (December 2002): 10.
[2] Ibid.

Federal Documents
Discussion is also underway among institutions, including the University of Maryland, that serve
as one of the nations' 51 regional depositories for U.S. government publications. The migration
of these materials from print to electronic form stands to redefine in substantive ways the
traditional roles that depository libraries have served. This may have profound implications for
government document collections and associated services.

The Federal Depository Library Program (FDLP) has announced that 95% of all U.S.
government documents will be in electronic form in five years. FY02 FDLP statistics show that
68% of the government documents are distributed in electronic form already. The University of
Arizona has reported to the Government Printing Office on a pilot project that retains electronic
versions of government documents and eliminates print from the collection. UA is a selective
59% depository while UM is a regional 100% depository. In one year UA recouped 190 linear
feet of shelving, one microform cabinet, one map cabinet, and freed up 1.0 FTE staff. UM
Libraries could realize such savings to be reallocated if we began to weed paper and microform
versions of documents. With fewer "tangible" documents to process, shelve, and re-shelve,
staffing may be devoted to new projects. For example, in the Technical Services Division, one
staff person, or **$30,000**, may be devoted to new tasks.

The FDLP has also announced a joint digitization project with the Association of Research
Libraries and federal government agencies. UM Libraries could participate by taking on specific
projects or by partnering with the Chesapeake Information and Research Library Alliance
(CIRLA) libraries to digitize sets of government documents. For example, the National
Agricultural Library could work on agricultural documents, the Smithsonian could digitize its
own documents, and the same is true for the Library of Congress. The University of Maryland,
Johns Hopkins University, George Washington University, and the University of Delaware could
be assigned other subsets of these collections or assist the National Agriculture Library, the
Smithsonian and the Library of Congress with their work. Records created for these collections
could be requested from the Government Printing Office (GPO) and distributed electronically. A
project such as this would compel the library to rethink a proposed project to catalog and
inventory the existing print collection.

Expanding E-Services and Tools to Enhance User Access

The Libraries recognize the growing expectations of our users to provide services that allow
access to services and resources not just in our library facilities but at home, in the office, or in
the classroom. While the campus will continue to have a strong residential component,
commuter students and distance education students (who may never even set foot on the College
Park campus) expect services and resources equal to those available to users on site. Digital
reference services, desktop article delivery, user empowerment capabilities, and digital library
initiatives are means by which the Libraries will reach out electronically to all of those user
groups, and the continued development and expansion of these services will require a
reallocation of staff resources. Such efforts will also improve service within the College Park
campus. All of these will require a reallocation of faculty and staff effort that we can only
estimate, but which will require significant workforce planning.

Digital Reference Service
Technology has also been a driver of change in public services. E-based help services have been adapted for use by libraries to provide reference services via e-mail and chat. Simultaneous with the expanded use of technology in libraries, site-based (face-to-face) reference declined nationally in academic libraries for several years and is now leveling off. It seems clear that this decline was a direct result of the introduction of large scale online reference and full text resources through the Libraries "gateway" Website and the intensive information literacy training that accompanied it. The Libraries have provided email reference service since 1998 and began a chat service in 2001. In 2003, the UM Libraries joined a pilot cooperative statewide chat service, Maryland AskUsNow!, giving us the capability of expanding to a 24/7 chat service for our users. Currently the chat service is staffed by 17 subject librarians who each contribute 1-2 hours/week, with assistance from staff in other areas of the libraries. As the Libraries mainstream and expand digital reference service, an increasing amount of human resources will need to be reallocated to it. For the subject librarian, this reallocation will have a direct impact on his/her other responsibilities: user education and collection management. Also, support staff resources will be affected as work formerly done by librarians may shift to them. For example, the expectation to maintain a service desk will continue for the five-year timeframe of this document, but the staffing might be provided to a large degree by non-librarian staff with adequate training to meet most user needs. Or, as chat and email questions are collected and analyzed over time, the Libraries may find that the other staff can respond to these queries and that a subject librarian's expertise may not always be required. In summary, as library faculty in public services effort is shifted to the expanding instructional role and specialized e-services, staff must be retrained and their time reallocated to fill some of the traditional roles of such as reference and introductory level instruction such as "Library Safaris" (instructional tours).

User Empowerment
Another area of technological impact is user-initiated services. Online gateways, a promising area of technology application, empower users to develop personalized access to library resources. The "my library" concept grants more control to users over their interactions with the library. In addition to being able to view their library accounts (for borrowed items, fines, due dates), users will be able to save searches and results, select key resources they consult regularly, arrange for update notifications of new resources, and personalize the interface to provide more direct access to relevant resources. As a result, front line staff may potentially have time freed up to devote to other endeavors. A shift in responsibilities will need to occur to support a focus on interface design, user testing, and system development. The planned installation of self-check units that allow users to circulate library materials without staff intervention may also lessen the demand for staffing the circulation service points while improving user 'wait-time' for this basic service.

Desktop Article Delivery
A pilot program, Electronic Article Document Delivery, has been in place for over a year, testing faculty interest and resources required to deliver articles, owned and not owned by the UM Libraries, to faculty desktops. Expanding this program campus-wide will require additional resources through cost-recovery; a survey to participating faculty is being conducted this fall semester to test various pricing models. Human resources within Access Services that are currently assigned to stacks maintenance provide a potential pool of staff to be reallocated to this

work and which may be partially funded by fees charged to users, pending an acceptable pricing model.

Digital Library Initiatives
The Libraries have been building the infrastructure in staff and tools to support digital library initiatives. Increasingly the Libraries are finding the need for additional specialized staff to maintain the program. Once in place, the digital library will provide online access to a number of local special collections, thereby permitting more researchers to interact with unique source materials, as well as offering access to licensed materials in a variety of media formats (e.g., audio and video). The Libraries are already shifting staff from operations positions that were necessary in the past mainframe-computing model to tasks such as scanning materials for the digital library. This transition represents approximately **$20,000** *per annum* in staff salaries and could reach as high as **$80,000** *per annum* over this five-year period. In addition, the Libraries anticipate shifting resources in order to support metadata creation (i.e., description of digital objects for online retrieval) and management in a digital environment as noted above. The Technical Services Division will continue to seek sources of cataloging for materials acquired. Any resulting staff efficiencies would be devoted to cataloging materials in new formats. Currently there are three vacant faculty positions in Original Cataloging. One or more of these positions could be filled with a person having expertise in digital objects and alternative metadata description and encoding standards. These adjustments in responsibilities will require an investment in retraining. The goal of the digital library is to integrate what have been separate silos of information into a total Web experience.

Another area of significant digital library development is the creation of the Digital Repository at the University of Maryland (DRUM). In part this project begins to address the issue of universities producing knowledge and buying it back from publishers. It also provides an opportunity to address the preservation of intellectual content for continuous access into the future. The system will provide a central repository for institutional and discipline specific information in the form of traditional scholarly communication, namely articles and research notes, as well as newer forms of knowledge represented in visualizations, data sets, and software, to name but a few. Projects such as this shift the nature of scholarly and creative publication and dissemination. They position libraries as the hub for recorded knowledge whatever the medium. This will require a more active role in marketing and supporting the service for collection development/management and public services staff. As noted above, the Libraries anticipate that a lessening emphasis on traditional print publishing over time will permit this shift in focus. For the time period discussed in this document, the repository project is likely to be the recipient of additional resources with nominal gain in efficiency or cost reduction. In the long term, however, this project and others like it hold the potential for significant transformative change in what libraries do, how they do it, and the overall cost of acquiring, maintaining, and providing access to knowledge. This change cannot occur without direct work with teaching faculty who produce new disciplinary knowledge.

The implementation of context sensitive linking technology in the libraries supports some freeing up of staff resources currently committed to maintaining online links to licensed resources in the catalog. Further development of Research Port, the UM Libraries new gateway to e-resources, as the primary means of access to e-resources will reduce the duplication of effort that occurs in

developing and maintaining a separate web site interface for e-resources potentially yielding **$3,000** in staff time that can be devoted to other aspects of digital library initiatives.

Last but not least, electronic reserves has functioned in a pilot mode for several years awaiting the implementation of the new integrated library system. Concerted efforts to migrate more fully to an electronic resources environment over the next few years will require a shift in human resources from staffing a physical reserves desk to developing a virtual reserves service.

Reconfiguring Library Space to Support Learning and Research

The phenomenon of the increasing importance of "library as place," in an era when it matters less and less where information resides, is widely noted and commented on in the library community. The Association of Research Libraries (ARL) recently reported that much space in research libraries is busier than ever before. About 1.5 million people walk through the UM Libraries' doors annually. This is an average of over 45 trips a year to the Libraries by every student and faculty member on campus. ARL also reported that library space is now viewed as learning space on equal footing with classrooms and laboratories. Thus, the library as a place, a community for collaborative learning and research, is still vital to maintain and improve.

Unfortunately, College Park's seven libraries are at capacity and, like other campus facilities, suffer from the effects of inadequate resources and attention to repair, long-term maintenance and renovation. Furthermore, even with internal relocation, the Libraries cannot generate enough resources to fully fund the work that is needed**. The Libraries, at present budget levels, could reallocate no more than $50,000 - $75,000 a year, toward projects needing millions total.**

Even so, in five years the UM Libraries, with the University, should have accomplished the following remedial and developmental steps:

- ❑ Long-term solutions to serious infrastructure, temperature and humidity control and maintenance problems in all libraries, but especially in the Engineering and Physical Sciences Library and McKeldin Library, should have been identified, prioritized, and plans made and sources of funding identified to correct the problems.

- ❑ Renovation of the Hornbake Library to house Nonprint Media Services and special collections (including movement of the Gordon W. Prange Collection from McKeldin to Hornbake and including a proper conservation environment) will be complete.

- ❑ Areas within McKeldin Library should have been reallocated to increase space for public workstations, group study and research, WAM lab, community spaces (such as the café), partnerships like the undergrad research center and 24/5 study.

- ❑ A new off-site shelving facility will be operational, to satisfy UM's and Johns Hopkins' needs for space for less frequently used materials accompanied by rapid retrieval of books and digital transmission of journal articles and chapters.

❑ Plans for a new, combined Art and Architecture Library in the Visual Arts and Cultures Center should be on the state's ten-year list of Capital Improvement Projects.

❑ All libraries should be better outfitted for e-access, wireless data networks, etc. to provide the an optimal experience by users of access to electronic and print resources.

Information Literacy & Instructional Technology

The Middle States Commission on Higher Education, in its revised accreditation document, *Characteristics of Excellence in Higher Education*, defines information literacy and sets the expectation for the development of information literacy programs in colleges and universities. In a companion document, *Developing Research and Communication Skills: Guidelines for Information Literacy in the Curriculum,* the Commission notes:

> The principles underlying information literacy are as old as higher education itself. Faculty and administrators have expectations for how students will acquire, analyze, and use information related to courses that the institution offers. However, the usage of the term in contemporary educational practice has brought these various elements together into a single concept that has increasing value as a way to cope with the challenges of the "Information Age."[3]

Both the University in its Strategic Plan and the Libraries in its own have adopted "information literacy" as an key institutional goal. UM Libraries have a long history of instructional outreach to students and faculty through User Education Services and, more recently, the Information Literacy Team. Statistics demonstrate steady growth in the numbers of students reached through our information literacy program, a jump from 18,836 to 21,075 students reached between FY01 and FY02 alone. This increase represents a reaction to an increasingly complex information environment as well as concerted efforts by librarians to reach out to faculty for instructional partnerships.

Two examples serve to illustrate different means of responding to this demand, one addressing the needs of a large-enrollment undergraduate class and the other focused on majors. EPSL Expedition is a two-hour workshop designed and delivered by science and technology librarians. It is offered to freshmen enrolled in ENES 100-Introduction to Engineering Design, the core introductory course for all engineering majors, and introduces the students to the resources of the Engineering and Physical Sciences Library. Twenty-four sessions reaching 864 students were taught in FY02. The second example, LASC 403: Research Sources and Methods in Latin America is a one-credit course developed by library faculty to prepare Latin American Studies certificate students for the senior capstone paper. These initiatives are indicative of a significant trend that will accelerate over the next five years and will cause a redirection of a significant portion of the effort of library faculty.

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[3] Middle States Commission on Higher Education, *Developing research & Communication Skills, Guidelines for Information Literacy in the Curriculum* (Philadelphia, 2003), p.1.

In addition to face-to-face instruction, technology provides opportunities to reach students in different ways through stand-alone and course-related online tutorials and the integration of information literacy skills and resources into courses using WebCT and other course management software that is used on campus as well as for distance learning courses. An online tutorial--TILT (Terrapin Information Literacy Tutorial)--developed by the Libraries User Education Services and the Information Technology Division and designed for English 101 classes is used heavily A partnership with the Office of Information Technology has been launched to establish better linkages between library resources and course management software. The use of IT in support of information literacy will allow us to expand our instructional reach in spite of fiscal restraints on the expansion of positions in the library faculty.

The Libraries also participate in SAILS (Standardized Assessment of Information Literacy Skills), a project developed at Kent State University for the Association of Research Libraries to create a tool for measuring information literacy and assessing its impact on student learning. The results of this assessment will inform us about the effectiveness of library instruction activities and provide hard data for ongoing program development.

More than any time in the past, librarians are playing a direct and critical role in the development and delivery of the curriculum and it is anticipated that this role will continue and expand in the future. Over the next five years, the Libraries will need to monitor and adjust the allocation of human and technical resources to information literacy efforts. For example, subject librarians will likely devote a larger percentage of time to teaching and to working with faculty to integrate information literacy into the curriculum as well as to developing online tutorials, guides, and other "self-service" instructional resources that support the goal of user empowerment, which is a key objective of the Libraries instructional and IT programs and one that supports the University's strategic plan.

Organizational Changes within the Libraries to Innovate and Improve Services

Since the late 1990s the UM Libraries have been resolutely on the path to a team-based, learning organization. This new direction became evident with the 1998 consolidation of the undergraduate and graduate general library collections and services and also with the formation of subject teams with librarians having integrated duties (individually and within the teams) for collection development, instruction in use of the Libraries' resources, and provision of reference/information services. The benefits of the changed structure are flexibility and responsiveness to user needs, to changing patterns of scholarly communication and to opportunities provided by new technology. For several years now the Libraries have consistently measured user needs and satisfaction through the Libraries MIS office and participation in Association of Research Libraries new measures programs like LibQual^{TM} the national assessment of library service quality. These assessment efforts are ongoing. Together, organizational development and assessment are key elements in the Libraries ability to move to model of constant change to adapt services to new user needs and a changing information landscape.

The new direction was further reinforced and expanded with the development of program teams, the creation of an educational program for library staff and divisional plans for changed structures and functions. These efforts have led to the development of best practices for how work and collaboration are accomplished across the divisions among library staff. Workshops and other learning activities led by experts, plus the creation of the positions of Assistant Dean for Organizational Development, Manager for Staff Learning and Development, and Coordinator for Personnel Programs supported and continue to support library staff in learning to work and provide service differently.

Divisions providing the Libraries' infrastructure have engaged the team philosophy as appropriate to the services they provide internally. For example, Technical Services undertook a comprehensive program review in FYs 2001 and 2002 and emerged with a new framework that addressed eight organizing principles, including these:

- ❑ The structure will support a streamlined workflow.
- ❑ The structure will rely on a staff that has a broad knowledge base and is cross-trained in multiple activities.
- ❑ The structure will be supported by teams, which serve to provide leadership and coordination between physically separate production groups and divisions.

In the last two years fiscal and staffing challenges have tested the strength and depth of the Libraries' developmental, planning and operational focus. That testing is expected to continue in the next five years. However, in five years, the UM Libraries should have achieved more fully the following objectives pertaining to organizational development:

- ❑ Momentum and innovation have continued, regardless of periods with declining or static fiscal and staffing resources;
- ❑ Fundraising, including grantsmanship, are consistently productive operations;
- ❑ Decision-making realms, for improved communication and results, are clear and understood by most library employees;
- ❑ Shared governance with the Library Faculty Assembly is effectively practiced.
- ❑ Teams are actively engaged in shared, collaborative work.
- ❑ Continued development of and learning by staff have progressed and have been demonstrated to improve the organization's performance;
- ❑ Performance review and development (PRD) for exempt and non-exempt staff and work planning and performance review for library faculty are core processes and are used primarily as developmental tools;
- ❑ The Libraries have a culture of assessment;
- ❑ There is a strong and growing cadre of leaders in the team-based environment;
- ❑ There is staff-wide consensus on expectations and accountability for organizational citizenship;
- ❑ The Libraries are a mature multicultural organization;
- ❑ The Libraries have successfully developed and carried out recruitment and retention efforts for a diverse and changing workforce.

Workforce Planning
To achieve the final objective, the Libraries must begin careful workforce planning to deal with anticipated large numbers of retirements. Of course, retirement is a highly individual decision and is not mandated by age or years of service. On the other hand, demographics are such that

the UM Libraries must begin planning for what will likely happen in a workforce where over half of the present staff of 219 permanent employees is fifty years or older. The breakdown, along with average years of service, is shown in Table I. Based on traditional age at retirement, as many as 10% of the staff might choose to retire in the next five years.

Table I

Years of Age	Number	% of Total Workforce	Average Years of Service at UM
50-54	50	23%	14.59
55-59	41	19%	17.49
60-64	16	7%	17.02
65 and above	7	3%	19.65
Totals	119	52%	17.18

The breakdown of years of service at UM, regardless of age, is shown in Table II.

Table II

Years of Service	Number of Employees	% of Total Workforce
Less than a year – 9.99	107	49%
10 – 14.99	40	18%
15 – 19.99	24	11%
20 – 24.99	21	9%
25 – 29.99	11	5%
30 and above	16	7%

The Public Services Division is a good case in point of the age plus years-of-service conundrum. Eleven of its 94 employees are over 60 years old. Four are in managerial positions and three of those are branch managers.

The number of potential retirements, plus regular turnover (approximately 6% per annum), will mean that the 2009 workforce will be very different. Managing that rate of change will be key to the Libraries' continued success. Workforce planning, including succession planning, will help avoid loss of institutional memory and knowledge and will provide opportunities to hire individuals with needed, new skills. The Learning Curriculum, the Libraries' educational program for its staff, will also be key in enabling the present workforce to meet the service and operational challenges ahead for the Libraries. The workforce planning effort will respond to the numerous needs for initiatives described in this report. At a minimum the normal turnover rate will provide the opportunity to reassign 6% of Libraries workforce per annum to the needs described herein. In addition, it is also clear that a significant part of the needed change will be the result of current faculty and staff taking on new roles and shedding old ones. A rough estimate is that we will easily reallocate 2% of our staff or individual effort each year, but the actual rate will probably be much higher in the range of 5%.

Operational Efficiencies

Since FY02 the UM Libraries have major operating budget losses totaling about **$1,500,000**. The Libraries have about forty fewer positions filled than in FY02, by loss of state lines, contract-to-permanent conversions, or vacant lines held because of insufficient funds to fill.

FY03

Released two leased vans (kept two owned vans).*
Reduced June summer library hours.*

FY03 and ongoing

Reduced positions.
Tightened procurement guidelines.
Reduced administrative travel.
Approved minimal work by consultants.

FY04

Reduced contract for temporary workers to reshelve books in McKeldin at ends of semesters.*
Reduced July-August 2003 library hours.*
Switch from paper, mailed notices to e-mail for Circulation.
OCLC Telecommunications reductions and reallocations.*

*These changes netted the Libraries cost reductions of over **$75,000**. The switch to e-mail notices from Circulation, plus the efforts outlined below, haven't been undertaken yet or are still so new it is difficult to project the reallocations that may be achieved by cost reductions. Roughly, it is expected all operational efficiencies will yield a minimum of **$100,000** yearly that may be reallocated to the Libraries strategic initiatives.*

FY04 and beyond

Increase scrutiny to verify that charges posted to Libraries' operating budget are for costs incurred by the Libraries and that expenditures are posted to the appropriate accounts. Implement mechanisms to verify that the Libraries receive revenue as intended (e.g., summer school, DRIF).

This initiative will include the following in FY04:
- Verify that all Facilities Management and Public Safety charges against the Libraries' budget resulted from library work orders.
- Examine telecommunications charges for reductions and reallocations – instruments, long-distance, cell phones, data lines.
- Establish separate account for interlibrary loan (ILL) receipts and expenditures to determine actual cost to UM Libraries of ILL operation and to discern USPS, UPS and FedEx charges for all other library operations.
- Remove all unneeded or invalid open encumbrances from the budget.
- Standardize methods of dealing with deposits to Libraries' accounts and with earned income.

Fill vacant or new positions only under the following conditions and assurances:
- that the costs can be covered

- that the position is ranked (evaluated and prioritized) along with all other vacant or proposed positions in the Libraries;
- that the proposed position is a top priority because of its immediate effects on external or internal customers and/or on co-workers;
- that the work cannot be accomplished by reassignment to current staff.

Implement recommendations from a library task force on gifts in kind to
- increase percentage of donated material that is added to the Libraries' general collections;
- reduce costs and resources for cataloging and preserving items selected for the collections;
- assure that values of gifts are properly reported to University Relations;
- alter book sales as needed to maximize their utility.

Increase and standardize oversight of foundation and other gift accounts to assure accounts are properly managed and expended, for maximum impact of funds. This shift will relieve development staff to focus on fund-raising externally.

Summary and Conclusions

The report provides descriptive detail and some data, but what follows is a concluding summary of how large this reallocation will be and where it will occur. In simplest terms, the Libraries current State/Tuition supported budget has gone down slightly between FY'03 and FY'04. However, it is notable that **$500,000** of the acquisitions is soft funding that may not occur again in FY'05. Thus the budget picture as shown in Table III is actually a bit worse than the projected budget indicates.

Table III

	FY'03 Actual	FY'04 Projected
Acquisitions	$7,418,380	$8,422,906
Operating	3,805,891	2,845,312
Salary & Wages		
Faculty	4,665,709	4,750,834
Exempt	1,247,119	1,382,842
Nonexempt	2,844,968	2,725,985
Graduate Assistants	367,084	361,227
Contractual*	465,361	325,379
Hourly*	306,311	236,135
Student Assistants	770,413	742,958
	10,666,964	10,525,361
Total	$21,891,236	$21,793,578

Note: * Includes a mix of Faculty, Exempt and Nonexempt appointments

The preparation of this report has obligated the Libraries to revisit the 2001 Strategic Plan and undertake serious, if hurried, supplementary planning efforts. This has proved a salutary opportunity to take stock and to conclude that that plan is tracking well. At the same time, current fiscal constraints have forced the conclusion that 'business as usual' is just not possible if we are to achieve the goals of the plan and contribute to the achievement of excellence that is the prime objective of the University of Maryland. Because it is clear that significant growth in resources is not likely at least for the next few years, to be successful will require serious attention to reallocation within our present budget framework. If nothing else, this report has forced us to face these facts and begin a rigorous process to examine how to continue the advances of recent years even as we face budget constraints. The planning described herein can be illustrated on the basis of this budget in Table IV. In every instance, the estimates of reallocations are conservative. For instance, the maximum reallocation of staff is projected to total no more than 2% over the next five years although our initial workforce planning analysis indicates that we will have as much as 5% of the staff positions available each of those five years. Moreover, this does not even take into account the fact that individual faculty and staff will redirect their efforts to new work. It seems clear that the total internal reallocation attendant to our planning will be well in excess of 10% called for by University administration and probably in excess of 15%.

Table IV

| | Budget Totals $ | 5 Year Reallocation $ | | % of Total Budget | |
Budget Category		Minimum	Maximum	Minimum	Maximum
Collections/E-Reserves	8,422,906				
- Print to E-journals		400,000	2,000,000	1.84%	9.18%
- Bindery/Serials check-in		12,600	126,160	0.06%	0.58%
- Shelving contract labor		0	30,000	0.00%	0.14%
Workforce Planning					
- Library Faculty	4,750,834	237,542	475,083	1.09%	2.18%
- Library Staff*	4,108,827	205,441	410,883	0.94%	1.89%
- Student Asst & GA's	1,104,185	55,209	110,419	0.25%	0.51%
- Contractual & Hourly**	561,514	28,076	56,151	0.13%	0.26%
Operating	2,845,312	50,000	100,000	0.23%	0.46%
TOTAL BUDGET	21,793,578	988,868	3,308,696	4.54%	15.18%

*Includes Exempt & Nonexempt staff
**Includes Faculty, Exempt and Nonexempt appointments

The challenge for the Libraries, like other academic units, is to effectively manage the change process, gather the information needed to substantiate what is being accomplished and, at the same time, continue to focus on mission. The University of Maryland Libraries have the staff and the organizational strength to accomplish these tasks simultaneously.

Appendix

TRACKING the 2003 "The Ubiquitous Library – UMCP Libraries in the Next Five Years: New Directions and Continuing Legacy" to the Libraries' 2001 Strategic Plan

2003 Report	2001 Strategic Plan
Expanding E-Resources and Redefining Collections	4. Research, develop, evaluate and implement best practices for acquiring, organizing, delivering and preserving information resources in all forms. 4A. Implement allocation mechanisms, collecting strategies and staffing plans for effective use of funds and for maximum impact on university programs. 4B. Continue to invest in increased access to online journals and commercial scholarly databases for use by faculty, students and staff. 4C. Determine and carry out strategies for a transition from print to electronic holdings when and where appropriate.
Expanding E-Services and Tools to Enhance User Access	1B. Deliver effective and responsive core public services in person and electronically. 1D. Enhance delivery of reference and information services and inform the user population as new technologies are adopted. 2E. Expand and promote the digital library activity within UM Libraries designed for digitizing collections, cooperative ventures, etc. to improve electronic access to materials. 2F. Proceed with the MdUSA gateway for the UM Libraries, in partnership with USMAI and the Maryland Digital Library. 4D. Build better and timely access to information resources (including electronic resources) by streamlining workflow through Technical Services. 13. Explore mechanisms to support faculty and graduate students in the distribution of new knowledge and learning by collaboration with enterprises that are innovating in electronic scholarly communication. 21. Create and maintain an electronic networking infrastructure providing the levels of connectivity and data throughput required for library users and staff.
Reconfiguring Library Space to Support Learning and Research	6. Improve the Libraries' physical facilities to address the needs of onsite customers for better access to print and electronic resources, reference and instructional services, and study space.
Emphasizing Instructional	1A. Address specific needs of faculty and students through cooperative programs with each college.

Technology Services and Information Literacy	1E. Take a leading partner role with the Dean of Undergraduate Studies to establish and achieve information technology fluency and information literacy requirements for all undergraduates. 1F. Engage customers in evaluating the Libraries' user education program and act on the results.

2003 Report	2001 Strategic Plan
Making Organizational Changes within the Library to Innovate and Improve Services	3A. Expand self-managed teams for adaptable and responsive library operations and services. 3B. Begin an ongoing training and educational curriculum (i.e., the Libraries' Learning Curriculum) for staff at all levels so they can better serve users' needs. 7. Actively participate in the programs and events of the University Diversity Initiative. 8. Improve work climate by addressing the findings and recommendations of recent library surveys and studies. 9. Diversify workforce, by meeting targeted objectives in an updated library-wide diversity plan. 20. Build the Libraries' human resources infrastructure to enable recruiting, retention and first-class support of the University's academic mission. 20G. Develop and implement governance and other policies and procedures for librarians to function fully as non-tenured faculty. 21. Establish a top-performing library development operation for public communications, prospect management, partnership development, fundraising and grantsmanship.
Operational Efficiencies	5. Develop and implement a library-wide assessment and measurement program. 20E. Carry out cycles of working planning and performance review that embody best practices and most productive outcomes for staff. 23. Continue re-design of individual jobs and organizational processes throughout the Libraries for increased flexibility, accountability and performance.