The State of Preservation Programs in American College and Research Libraries: Building a Common Understanding and Action Agenda

A Joint Study by Council on Library and Information Resources Association of Research Libraries University Libraries Group Regional Alliance for Preservation

by Anne R. Kenney and Deirdre C. Stam December 2002

Council on Library and Information Resources Washington, D.C.

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ISBN 1-887334-96-3

Published by:

Council on Library and Information Resources 1755 Massachusetts Avenue, NW, Suite 500 Washington, DC 20036 Web site at http://www.clir.org

Additional copies are available for \$20 per copy. Orders must be placed through CLIR's Web site.

The paper in this publication meets the minimum requirements of the American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials ANSI Z39.48-1984.

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Acknowledgments

With funding from the Institute for Museum and Library Services, the Council on Library and Information Resources (CLIR), the Association of Research Libraries (ARL), the University Libraries Group, and the Regional Alliance for Preservation conducted a joint study to assess the state of preservation programs in American academic libraries. They were assisted by representatives from leading liberal arts colleges, land grant institutions, preservation educators, and the Preservation and Reformatting Section of the Association for Library Collections and Technical Services of the American Library Association.

Institutions targeted in this study were members of ARL (122 institutions) and the University Libraries Group (22 midsize universities), as well as 74 leading liberal arts colleges (all members of the Oberlin Group) and 20 major non-ARL land grant institutions. Anne R. Kenney, then director of programs at CLIR, served as project director. Deirdre C. Stam served as project consultant. ARL staff members Martha Kyrillidou, senior program officer for statistics and measurement, and Mary Case, director of the Office of Scholarly Communication, provided support and guidance for the survey portion of this project. Mark Young, statistics program research assistant at ARL, provided additional statistical data. An advisory committee, consisting of leaders from the partner organizations and others representing important preservation constituencies, guided this effort.

The study included both a survey of the targeted institutions and 20 follow-up site visits. Will Bridegam, Connie McCarthy, and Catherine Murray-Rust pretested the survey instrument at their institutions, and members of the Advisory Committee with ties to the targeted audience took responsibility for promoting and monitoring the survey. Appendix C lists the institutions responding to the survey. Members of the Advisory Committee who conducted the site visits were Willis Bridegam, Ellen Cunningham-Kruppa, Nancy Gwinn, Andrew S. Hart, Anne R. Kenney, Connie Kearns McCarthy, and Catherine Murray-Rust. Special thanks go to Catherine Murray-Rust, who conducted 5 of the 20 site visits. The 111 institutional participants in the site visits were very generous with their time and assistance. The institutions that hosted the site visits are listed on page 13.

> Anne R. Kenney Deirdre C. Stam

Preface

Rethinking Preservation in the Twenty-first Century

Awareness of the preservation problem has grown in American academic libraries in the past 20 years. In the 1980s, attention was drawn to the problem of brittle books and the effects of the environment and use on entire collections. In response, many libraries established preservation departments and began to plan strategies for ensuring the well-being of their holdings. Yet, as the scope of work grew, preservation activity became more specialized and isolated from the key activities of the library. Today, it seems, little has changed. Preservation treatments are increasingly sophisticated and effective, yet preservation as a core activity of libraries remains less visible than others such as cataloging and user surveys.

The information landscape has changed, thanks to the digital revolution. Libraries are working to integrate access to print materials with access to digital materials. There is likewise a challenge to integrate the preservation of analog and digital materials. Preservation specialists have been trained to work with print-based materials, and they are justifiably concerned about the increased complexity of the new preservation agenda. They cannot meet the challenges ahead without assistance from all parts of the library organization.

Libraries are society's stewards of cultural and intellectual resources. For libraries to continue fulfilling their stewardship role, they will have to approach preservation in a new way. It must be integrated into every aspect of the library's work. Preservation must be considered at the highest levels of the institution and reconceived in the digital environment.

> *Deanna B. Marcum* President, CLIR

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Acronyms and Abbreviations Used in Report

ACRLAssociation of College and Research LibrariesADAAmericans with Disability ActAICAmerican Institute for the Conservation of Historic and Artistic WorksAMIGOSAmigos Library ServicesARLAssociation of Research LibrariesAVaudiovisualCDcompact diskCIC(Big Ten) [universities] Combined CatalogCIPCataloging in Publication program; extended to digital objectsCLIRCouncil on Library and Information ResourcesCRLCenter for Research LibrariesCNICoalition for Networked InformationDLFDigital Library FederationEADEncoded Archival DescriptionFCLAFlorida Center for Library AutomationGPOU.S. Government Printing OfficeHVACheating, ventilating and air conditioningIMLSInstitute for Museum and Library ServicesIPIImage Permanence Institute at Rochester Institute of TechnologyITSinformation technology systems/servicesISTORScholarly Journal Archive (database)LCLibrary of CongressLGNon-ARL Land Grant libraryLOCKSSLots of Copies Keep Stuff Safe); to safeguard Web journalsLPlong playing record (78 rpm)MUSEProject MUSE; Scholarly Journals OnlineNEDCCNortheast Document Conservation CenterNEHNational Endowment for the HumanitiesNELINETNew England Library AssociationOCLC(Formerly) Online Computer Library Center, now simply OCLCOG </th <th>ALA</th> <th>American Library Association</th>	ALA	American Library Association
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	ORBIS	Consortium of 20 libraries, Oregon region
RAP Regional Alliance for Preservation		Preservation and Access Service Center for Colorado Academic Libraries
8		Regional Alliance for Preservation
RLG Research Libraries Group		
SAA Society of American Archivists		
	SOLINET	Southeastern Library Network
5	ULG	libraries of the University Library Group
ULG libraries of the University Library Group	USAIN	United States Agricultural Information Network
	ULG	libraries of the University Library Group
ULG libraries of the University Library Group	USAIN	United States Agricultural Information Network

I. INTRODUCTION

he last two decades of the twentieth century witnessed a nationwide movement to preserve endangered library and archival material. This activity was spurred by concerns surrounding the at-risk state of printed materials from the past 150 years and by the ready availability of resources for preservation from government and private foundations. In the 1980s, the National Endowment for the Humanities (NEH) launched its nationally coordinated programs to preserve the intellectual content of U.S. newspapers and brittle books through preservation microfilming. Organizations such as the Association of Research Libraries (ARL), the American Library Association, the Commission on Preservation and Access, the Council on Library Resources, the Library of Congress, and the Research Libraries Group exerted national preservation leadership. They articulated both a vision and an advocacy campaign to promote preservation awareness through such measures as the adoption of acid-free paper by the publishing industry and the annual gathering of preservation statistics. By the early 1990s, most academic libraries were supporting some forms of preservation activities, and many research libraries had established preservation programs distinct from other library functions, with their own managers.

By the turn of the century, however, it was evident that emphasis on one program was not a complete answer. NEH had already expanded its programs to include education and training, research and development, and initiatives aimed at special collections. The library community, faced with new opportunities created by digital technology, realized it could not maintain concentration on a single approach. In addition to microfilming brittle books, deacidification and digitization became important approaches to consider. Data from ARL, which conducts annual surveys of preservation activities, suggested that the microfilming of brittle books had declined and that number of preservation staff had also dropped. The Brittle Books program, which provided the focal point for a national preservation agenda in the 1980s and 1990s, had lost momentum.

Such trends can be documented in part though the statistics on the largest North American research libraries that are readily available from ARL. Much less is known about the state of preservation in libraries that are smaller, by some criteria, than ARL member institutions, but that hold important research material.

This research report represents a first attempt to set up a methodology for assessing these non-ARL libraries and to establish benchmark data for subsequent longitudinal comparisons. The report builds on information currently available by focusing on what library staff members identify as key concerns and strategies that would not be reflected in statistical surveys.

II. EXECUTIVE SUMMARY

With funding from the Institute for Museum and Library Services (IMLS), the Council on Library and Information Resources (CLIR), ARL, the University Libraries Group (ULG), and the Regional Alliance for Preservation (RAP) conducted a joint study in 2001 to examine the state of preservation programs in American academic libraries.¹ The study was conducted in two phases and relied on qualitative as well as quantitative data gathering.

In Phase I, statistical information and other quantitative data relevant to preservation activity were collected in a survey ("IMLS survey") of 116 libraries from the University Libraries Group (ULG), major non-ARL land grant institutions (LG), and leading liberal arts colleges in what is informally known as the Oberlin Group (OG).² These data were compared with information that had been published in ARL Preservation Statistics for 2000-2001 (ARL 2002).

Phase II focused on obtaining qualitative data to complement the statistical data. Qualitative data were gathered by means of 20 site visits to institutions that represented the three surveyed groups plus the ARL.

Key Findings from Phase I

Institution Size

Library size was defined in terms of expenditures, volume count, and staff size. With respect to these measures, institutions in the four groups studied fall consistently along a continuum, with ARL libraries emerging as largest. ULG and LG libraries fall at points near one another, and OG libraries are notably smaller than those in any of the other three groups. (Specific data are found in Section V.) In all three categories of measure, ARL libraries are more than six times larger than OG libraries and three times larger than ULG and LG libraries. With respect to preservation activity, ARL libraries are by far the most active per institution; ULG libraries follow them, in some cases

¹ Information about these organizations may be found at their respective Web sites: CLIR (www.clir.org), ARL (www.arl.org), ULG (www.lehigh.edu/~inulg/), and RAP (www.rap-arcc.org/).

² The list of land grant institutions includes those that were not members of ARL, did not represent university systems, and had total annual expenditures of \$2 million or more. The one exception was Tuskegee, which had a total library budget of just over \$1 million in 1998.

quite closely. LG and OG libraries pair naturally in several categories, especially where the relationships of data touch on size of preservation staff. In some instances, LG statistics suggest the least amount of activity.³

Preservation Expenditures

Preservation expenditures as a percentage of the library's total budget are below 3 percent for all institutional groups and below 2 percent for the LG and OG institutions. Table 1 presents staffing patterns for preservation activities library-wide. ARL data are derived from the *ARL Preservation Statistics 2000-2001*, which present data for four size groupings of ARL libraries. These are institutions with collections of more than five million volumes (Group 1); three to five million volumes (Group 2); two to three million volumes (Group 3); and less than two million volumes (Group 4). ARL data are presented as medians; data for the other groups represent the means, unless otherwise noted. Because the average collection size for both ULG and LG libraries is under two million volumes, the most useful basis of comparison may be the ARL Group 4 institutions. The OG libraries are significantly smaller, with average collections of less than half a million.

A notable pattern emerging from this analysis is that the number of professional staff members devoted to preservation activities in Group 4 ARL libraries is nearly three times greater than that in the ULG and LG institutions and more than four times that in the OG libraries. Conversely, these latter groups rely more on student assistance than do the ARL Group 4 institutions. In total full-time equivalents (FTE), the four groups fall into two pairings: ARL Group 4 is similar to ULG, and the LG and OG resemble each other.

Table 1. Staffing Patterns of Preservation Activities Library-wide							
	Professional Staff	Support Staff	Students	Total FTE			
ARL Group 1	6.2	14.4	4.0	26.2			
ARL Group 2	1.6	5.6	3.0	10.7			
ARL Group 3	1.1	4.6	2.1	8.8			
ARL Group 4	1.7	4.2	0.3	4.6			
ULG	ULG 0.6 1.9 1.4 3.5						
LG	0.6	1.0	0.7	1.8			
OG	0.4	0.9	0.8	2.0			

The IMLS survey included a set of questions on preservation policies and practices that do not appear in the ARL Preservation Statistics. The responses to these questions provide another useful way to measure the state of preservation activity at these institutions.

³ As ARL notes in its statistical reports, interpreting preservation information can be problematic, especially in institutions where preservation is a decentralized activity. This is true for all the groups surveyed and may be especially true for the LG libraries, which may define "preservation staff" narrowly and therefore underreport the extent of participation in preservation-related activities.

Most libraries in the three groups surveyed report having a disaster plan. Most ULG and OG institutions report that they provide secure and environmentally controlled storage facilities, and that they regularly review items for preservation. Less than half of all reporting institutions have training programs for staff and users, environmental monitoring programs, and written preservation policies, or are involved in cooperative preservation activities. Very few have developed a preservation plan for digital resources.

Table 2. Preservation Policies and Practices					
Percentage of Libraries Indicating "Yes" to the Question, "Does your library have "	IMLS Total Respondents (68)	ULG (17)	LG (10)	OG (41)	
Written disaster plan?	78%	82%	90%	73%	
Secure/environmentally controlled storage facilities?	71	82	40	73	
Regular review of items for preservation treatment?	66	82	50	63	
Preservation training program for staff?	46	60	40	41	
Environmental monitoring program?	46	41	30	51	
Written general preservation policy or strategy?	37	41	40	34	
Involvement in any consortial preservation activities?	32	41	40	27	
Preservation training program for users?	15	12	20	15	
Preservation plan for digital resources?	6	12	10	2	

Key Findings from Phase II

Commitment to Preservation

The 20 site visits confirmed that academic libraries of all types are deeply committed to protecting their collections for current and future use. Most libraries support some forms of preservation activity, although not all of these functions may be identified as part of a formal program. Almost all library staff members expressed interest in improving their skills and programs in this area. Many libraries, and especially smaller ones, need outside help for their preservation programs in the form of advice, instruction, opportunity for learning, contact with those active in the field, involvement in collaborative efforts, and funding.

Dominant Themes from Interviews

Drawing from interview data, project staff members identified several dominant themes that indicate the nature of preservation as it is conceived and practiced within the libraries under discussion. These themes represent, in the main, a summation of what interviewees told project staff members about the state of preservation in their institutions and their preservation needs. The conclusions do not necessarily represent an accurate picture of what is happening in the preservation field, nor are they a comprehensive presentation of all needs, stated and unstated. They are listed here in two categories: the state of presentation activity today and librarians' stated needs.

- 1. The state of preservation activity today as indicated by the data
- Awareness and enthusiasm: Assumptions about the nature and scope of preservation vary widely, even within a single library. Preservation staff members, understandably, and library administrators, to a large degree, support preservation, at least in principle. The enthusiasm of front-line staff members varies, sometimes reflecting the degree to which they feel their work is embraced by the concept. Interest in and awareness of preservation surges in response to outside stimuli, such as emergencies and disasters.
- *Library functions:* Staff members indicate a full familiarity with functions traditionally associated with preservation (e.g., binding, housing, shelving), but the relationship of these functions to an overall preservation strategy is not always apparent to those engaged in this work.
- *Grasp of preservation issues:* Library staff members indicate a general understanding of the basic issues of preservation (e.g., environment, space, care and handling, repair and treatment, reformatting, and digitizing). However, when speaking of preservation, library staff members sometimes assumed a narrow definition that includes only some of these processes.
- *Preservation and strategic planning:* In library planning, staff members may demonstrate an awareness of preservation, but the concept is seldom central to the process of strategic planning. Preservation is often not fully developed in the strategic plans themselves.
- *Funding:* Library staff members are energetic and inventive in developing strategies for using existing funding structures to obtain resources for preservation activity. Dedicated funding lines are still difficult to establish in some categories of libraries, and there is considerable ambiguity about how and to what degree preservation is funded within institutions.
- *Training:* Strong interest and, at some institutions, considerable effort go into training library staff members in preservation through a variety of modes, even though resources for this activity are severely limited.

2. Needs identified by library staff members

- *Funding:* Staff members identified the need to increase funding as critical to the success of preservation efforts (including expanding sources, improving accounting methods, planning, and engaging cooperatively with funding agencies to rethink assumptions about the utility of such programs).
- *Consciousness-raising:* It is essential to raise awareness of preservation among those outside the library, including college and university administrators, custodial staff, the institutional community, and the wider public.
- Degree to which preservation information is authoritative and reliable: Staff members would like help in clarifying and communicating authoritative opinion and reliable data relating to preservation.

- Usability of information: The authoritative information that does exist needs to be processed and packaged into modes that are practical, efficient, and effective for local training and other applications.
- *Environmental concerns:* Staff members would like to obtain information and training in all aspects of the environmental setting, with particular focus on HVAC systems, water damage, storage conditions, and the effects of deferred maintenance.
- *Care and handling of library materials:* Effective training materials and services need to be developed, especially for staff members, to meet the overwhelming needs and strong interest in this area.
- *Non-book materials:* Staff members expressed a strong need for the development of services, institutions, methods, standards, and cooperative projects for preserving non-book materials (e.g., legacy audiovisual formats and photographic materials).
- *Storage facilities:* Recognizing the growing importance of off-site library facilities, staff members support the development of methods for preserving materials that reside in such facilities.
- *Training:* Pragmatic, cost-effective preservation training programs and materials need to be developed for staff members and users in structured teaching situations as well as in one-on-one situations ("teachable moments").

III. ACTION RECOMMENDATIONS

On the basis of its analysis of the quantitative and qualitative data gathered for this report, the Advisory Committee has concluded that academic libraries of all sizes and types must develop greater self-help capabilities and that professional organizations, consortia, and funding agencies promoting preservation can help in this process. The committee has also recommended six areas for action. We are aware that some of these recommendations have already been incorporated into the preservation agendas of the various sponsoring partners. Our findings suggest that while the partners' agendas are based on the perceived needs of their constituents or members, their agendas also reflect the needs of a broader group of academic and research libraries. We are also aware that some of the recommendations listed here do not have a particular organizational champion. We have not identified potential players in this report; as a next step, we suggest that stakeholders review the recommendations to determine how relevant they are to groups that are concerned about preservation. We encourage the sponsoring partners of this project and other interested parties to consider the means to facilitate such a review.

Six Recommendations

- 1. Encourage a common and more inclusive understanding of preservation to support program development.
- 2. Focus attention on pragmatic and measurable approaches.
- 3. Tailor knowledge and techniques to targeted audiences.
- 4. Address the digital preservation challenge at the local level.
- 5. Explore collaborative solutions that demonstrably benefit the home front.
- 6. Secure sustainable funding for preservation.

Recommendation 1: Encourage a common and more inclusive understanding of preservation to support program development. The study revealed that the definitions of what constitutes "preservation practice" differ greatly among academic library staff members. Some, for example, define it in very narrow terms. When preservation is viewed narrowly, it gets separated from mainstream functions, becomes identified as someone else's domain, and is considered a luxury. This is particularly problematic in chronically underfunded libraries, where the message offered by one interviewee needs to be reinforced: "Preservation isn't just for the well-to-do institutions." Even institutions whose resources are comparatively large are beginning to suffer from retrenchment caused by the current economic crisis. Encouraging the development of a common understanding of what constitutes preservation would improve communication among those involved in its functions.

Concerned parties can promote a common, more inclusive understanding of preservation that

- encompasses all actions and policies designed to prolong the useful life of information
- speaks to the mission of the library and the institution
- looks to the long-term national preservation of scholarly output and recognizes that the national interest is met when local interests are met
- stresses access and the patron's right to information
- promotes fiscal accountability
- incorporates measurement and evaluation
- · entails a wide-ranging set of programmatic activities

This approach suggests the need to create entirely new ways to measure preservation activity across a range of institutions. Research libraries have assessed preservation capability by collecting data on such measures as whether the library has a preservation administrator, the number of staff in a preservation unit, and the number of staff performing preservation functions outside the preservation unit. Application of such measures may cause some non-ARL institutions to feel inadequate or to assume that preservation is something that they cannot afford. Whatever the measures used, they need to incorporate outputs and effectiveness. The message must be clear that preservation is everyone's job, and that preservation cuts across all library operations. Assisting library staff members to develop an appreciation for their roles in preservation would help the library understand and meet its preservation objectives more effectively and smoothly.

Recommendation 2: Focus attention on pragmatic and measurable approaches.

Scientific research and development that supports preservation is most successful when it can be applied in the greatest number and type of libraries. The study revealed a hunger for practical advice and assistance based on proven approaches. There must be a measurable payoff for resources expended. Greater emphasis must be placed on providing practical assistance and services, establishing realistic goals, and delivering information in useful forms. It is also essential to acknowledge that some complex preservation problems may be beyond the capabilities of the staff; the focus on the pragmatic should include advice on what not to attempt and when to seek outside help.

Concerned parties can respond to this need by

- determining the barriers to the discovery and use of preservation information
- providing practical as well as authoritative filtering of advice and recommendations
- publicizing standards and best practices of interest for current library use
- identifying needs for new standards and best practices and setting priorities for their development
- focusing information provision on preservation basics and on what is immediately relevant
- identifying levels of service appropriate to needs, significance of the materials, resource availability, and institutional mission
- using local library record keeping and measurements to assess the impact of preservation on library operations
- · defining, generating, and sharing evaluation data
- determining appropriate means for delivering the information (e.g., case studies, checklists, vendor and supplier directories, exhibits, information kiosks)
- encouraging funding for projects to create practical tools (e.g., tools to automate quality control)
- investigating electronic means for two-way information exchange so that people can seek advice or clarify topics when necessary

Recommendation 3: Tailor knowledge and techniques to targeted audiences.

Organizational context and timing are as important as content is. The delivery of information should respect differences among and be tailored for various institutions. What works in a large institution may not be effective in a smaller one; the missions and operating procedures of public institutions are different from those of private institutions. Good preservation information may not be useful unless it is packaged for implementation in a particular milieu. Such information may be hard to find and use at the point of need. The study revealed some of the distinctions among institutional types that should influence how material is presented, when it is presented, and what is emphasized. Services and guidance designed to aid preservation work in local institutions must take into account circumstances, size, mission, and other factors characteristic of these institutions.

Concerned parties can respond to this need by

- packaging information for various audiences
- providing access to information that others can tailor to meet local needs
- focusing on guidance and assessment tools rather than on absolute requirements
- assembling profiles of institutional practices and success stories at peer institutions
- identifying preservation benchmarks (including statistics gathering) appropriate to a particular group of institutions
- establishing a "problems anonymous" database that allows institutions to share experiences and concerns without fear of reprisal or embarrassment

Recommendation 4: Address the digital preservation challenge at the local level.

Of all the preservation challenges, none is more pressing than developing solutions to digital preservation. Staff members in academic libraries understand the general problem, but most do not know how to address it. Institutions in the survey range along a continuum. At one end are those who are only beginning to appreciate the impact of digital preservation at the local level; at the other are those who are taking concrete, if tentative, steps to meet the challenge. Some feel disenfranchised because they are not at the table in discussions that have an impact on the long-term care of digital content; others, with very limited resources, fear becoming solely responsible for developing solutions. At the institutional level, addressing this need requires recognition of joint responsibilities with related units, such as information technology. At the interinstitutional level, it entails engaging in consortial opportunities.

Concerned parties can step into the breach by

- developing authoritative literature to assist libraries in raising the level of institutional awareness of what is at stake
- identifying and making available an annotated knowledge base of current and emerging standards, best practices, research results, consultants, and implementation strategies
- offering professional development opportunities and training programs aimed at promoting realizable and effective short-term digital preservation responses that can simplify day-to-day management

- publicizing workable solutions, policies, practices, and standards undertaken at institutions that have addressed the issue
- vigorously campaigning with funding agencies such as NSF to promote digital preservation research and standards development focusing on the pragmatic and near term (e.g., next 10 years)

Recommendation 5: Explore collaborative solutions that demonstrably benefit the home front.

When a single institution's resources are inadequate, interinstitutional collaboration might ease the burden. This approach has been underused in preservation, and it deserves further exploration and adoption where appropriate. At present, libraries focus mainly on the needs of their own institutions; all cooperative initiatives must be justified on the grounds of compelling benefit to the home institution. Making the case for interinstitutional cooperation will depend on how effectively it can be tied to local interests, and not be seen simply as a worthy goal in and of itself.

Concerned parties can contribute by

- publicizing collaborative preservation approaches that are grounded in real-world experience, especially those that attract funding, achieve better economy of scale, promote longevity, or improve services
- increasing opportunities for those working in relative isolation to develop contacts with those active in the field to facilitate information sharing and a sense of community interest
- supporting collective efforts in various regions with common needs
- uniting in collaborative efforts at the national level to share costs, expertise, and infrastructure
- encouraging expanded funding for organizations, such as those belonging to the Regional Alliance for Preservation, that serve the needs of libraries that cannot afford full-time preservation administrators or highly skilled experts on staff (e.g., conservators, digital preservation specialists)
- developing a means for measuring the success of collaborative preservation efforts through annual reporting of statistics

Recommendation 6: Secure sustainable funding for preservation.

The study revealed that most academic libraries consider the resources available in their institutions for preservation woefully lacking. Adequate preservation resources, as defined by study participants, typically are not built into general operating budgets, and in many institutions programs have developed only with outside grants. Some library directors have not made their commitment to preservation explicit in terms of funding and priority. In some cases, preservation is looked on favorably but is deferred when it involves additional staff, time, and money. All too often, the consequences of deferred preservation or inadequate preparation (e.g., disaster planning) are insufficiently understood or fail to be compelling in comparison with more immediate concerns, such as maintaining library hours, supplying Internet connections, or staffing the reference desk. When an institution is considering how to use limited resources most effectively, the decision not to invest in preservation may be made on the basis of inadequate information. Until preservation is seen as a worthy and equal programmatic objective, it will not secure adequate resources. Solutions must take into account the shortage or inflexibility of resources for preservation that exist in most libraries.

Concerned parties can address funding concerns by

- investigating the use of the business risk model as a preservation measure⁴
- identifying alternative administrative structures and funding models for preservation within a library
- identifying and promoting advocacy strategies to increase institutional support for preservation
- supporting research and development in inexpensive preservation processes and equipment
- identifying the preservation implications of alternatives for various functions, their expense, and the advantages and disadvantages of each approach
- reexamining traditional assumptions about the treatment of unbound materials, given the centrality of binding to library preservation and the complexities associated with this function (including budget vulnerability, new storage modes, and the effects of digital subscriptions)
- engaging public and private funding sources in assessing the effect of preservation grants on the development of programs within institutions

IV. BACKGROUND AND METHODOLOGY

The purpose of this project was to study the preservation efforts and concerns of college and research libraries across the nation. The participating institutions were drawn from members of ARL (123 institutions) and the ULG (22 midsize universities), as well as 74 leading liberal arts colleges (all members of the OG) and 20 major non-ARL land grant institutions. Together, these institutions represent a large proportion of the academic libraries—large and small, private and public—that are concerned with preserving important research materials.

The study was conducted in two phases and relied on both quantitative and qualitative data gathering. *Phase I* consisted of the collection of statistical information and other quantitative data relevant to preservation activity in the 116 libraries representing ULG, OG, and major non-ARL land grant institutions. The survey of these libraries was designed to provide documentation on current preservation efforts that was comparable to the information available for ARL members. The project consultant adapted the *ARL Preservation*

⁴ See, for instance, Price and Smith 2000.

Statistics survey for the target group.⁵ She augmented the survey instrument to include questions that cover basic statistics on library collections, expenditures, staffing, and service activities to provide an institutional context for evaluating preservation efforts. To minimize the demands on participating institutions, these questions were derived from surveys already conducted by members of the OG and from the ARL Statistics and the ARL Supplementary Statistics surveys, which are national standard surveying instruments used by ARL and The Association of College and Research Libraries.⁶ Additional questions probed the use of digitization for retrospective conversion of library and archival materials and institutional responses to the growing concerns for digital preservation. These questions were drawn from those used in a recent ARL survey on preservation and digitization (Mohlhenrich 2001). Appendix A contains the questionnaire and the accompanying instructions.

ARL mounted the Phase I ("IMLS") survey on the Web in January 2002 as part of the ARL Statistics and Measurement Program. By early April, ARL had received 68 completed online forms, a response rate of 59 percent. A review of the sample returns indicated that they were representative of the targeted groups and revealed no evidence of response bias. The greatest response came from the ULG; 17 out of 22 (77 percent) of its member libraries completed the survey. Next came libraries of leading liberal arts colleges; 41 out of 74 of these libraries (55 percent) responded. At the lower end were LG institutions; 10 of 20 institutions solicited (50 percent) responded. This latter group does not have an organization that brings together all LG institutions. This may account for the lower response rates from this category and suggests that group identity may play an important role in securing institutional participation. For instance, the response rate to the 2000-2001 ARL Preservation Statistics Survey was 92 percent. Appendix C lists the institutions responding to the Phase I survey.

The results of this survey, representing for the most part a new kind of information for LG, OG, and ULG institutions, constitute baseline data that is both interesting now and potentially useful in the future for longitudinal comparisons. The degree of interest that these data generate in the field and the amount of interpretation they inspire will indicate whether this data collection process should be repeated at regular intervals in the future.

Phase II of the project focused on obtaining qualitative data to complement the statistical data collected in Phase I. The objective of Phase II was to elicit information on attitudes, opinions, and emotions relating to the topic of preservation in order to gain insight into the quality of programs and the motivations and commanding fac-

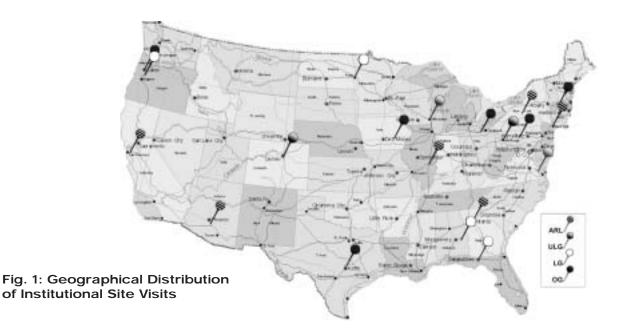
⁵ Since 1988/89, ARL has conducted annual surveys of preservation activities. See http://www.arl.org/stats/pres/index.html.

⁶ The ARL Statistics (www.arl.org/stats/arlstat/) have been collected and published annually for ARL members since 1961-1962. The Association of College and Research Libraries, with the permission of ARL, has administered the ARL annual statistics survey to all postsecondary institutions for the past two years. Almost 1,400 institutions reported data for the 1999 survey (www.ala.org/acrl/statshp.html).

tors for change. Discussions with library directors, preservation administrators, and other personnel engaged even tangentially in preservation issues and activities helped clarify how people working in libraries think about preservation and carry out preservation-related activities. In brief, the project was designed to address the divide between theorists and practitioners and to listen particularly closely to what practitioners have to say.

The data were gathered by means of daylong site visits from late April to late June 2002 at 20 libraries representative of the four target groups. The libraries were part of institutions that were large, midsize, and small; public and private; distributed across the country; and willing to host a site visit. Table 3 represents the organizational breakdown of institutions that participated in the site visits, and Figure 1 shows their geographic spread. The Advisory Committee chose institutions that represented a variety of needs and circumstances, but also typified the range of groups surveyed; it also remained alert to notable deviations from patterns. In total, 76 interviews were

Table 3. Institutions Hosting Site Visits						
ARL (6)	ULG (4)	LG (4)	OG (6)			
Arizona State U.	Carnegie Mellon	Florida A&M U.	Amherst College			
UC-Berkeley	Marquette U.	North Dakota State U.	Franklin & Marshall College			
Cornell U.	U. of Denver	Oregon State U.	Grinnell College			
Emory U.	College of William and Mary	Tuskegee U.	Oberlin College			
U. of Illinois			Trinity U. (Texas)			
New York U.			Willamette U.			



conducted with 111 individuals involved at some level in preservation at their home institutions; of these, 55 came from ARL and ULG libraries and 56 from LG and OG libraries.⁷

Qualitative Methodology

The primary data collected in Phase II consisted of transcripts containing the subjects' responses to a set of 17 questions (see Appendix B). Interviewers were not aiming for the "truth" of the situation, but for an understanding of the subjects' assumptions about the institutional settings in which they work. Interviewers gave all individuals equal weight and respected their unique interpretations of the institutional frameworks in which they work. Interviewers concluded that, for the most part, staff at the same institution held a fairly uniform sense of institutional priorities, program status, and needs. The multiplicity of interviewers and interviews contributed to the reliability of findings.

Section VI provides general summaries of the responses to questions posed during the interviews. (A fuller analysis of the data drawn from the 76 submitted reports, each consisting of about nine pages of notes, is available at www.clir.org.) Dividing the data into two files, one for larger (ARL and ULG) and one for smaller (LG and OG) institutions, the consultant coded all data using the computer program ATLAS to derive a list of topics that emerged from the data themselves.

V. SURVEY RESULTS: SUMMARY OF FINDINGS AND TRENDS

The purpose of the quantitative portion of this study was to provide a snapshot of preservation activity among specific groups of libraries at the end of 2001. The results, shown on the following pages, provide base data indicating absolute levels of activity among LG, OG, and ULG libraries. This information can be used for making comparisons with data from other surveys, for benchmarking against statistics from one's home institution, and for tracking changes over time through follow-up surveys of all or part of the activity.

The survey data should be treated with some caution. The participating libraries had never before been asked to provide exactly this set of statistics, although some of them had provided significant pieces of these data to other surveys. In some cases, the data gathered from previous surveys conformed roughly, but not exactly, to our definitions. Where it was not possible to obtain exact responses to the survey questions, respondents were asked to provide estimates. Additionally, the sample was quite small, with individual

⁷ The number of interviewees might vary, depending upon whether one counts as a "subject" the few extra people—beyond full-fledged interviewees—who contributed to informal conversations during the interviewers' visits.

anomalies strongly affecting the composite numbers. This is particularly true for the non-ARL land grant institutions.

The data presented in this report, in contrast to the information in ARL statistical reports, are not associated with particular institutions. To encourage full and frank participation, participating institutions were promised that their institutional data would not be individually identifiable. Thus, the data are grouped by category of library (ULG, LG, and OG) and compared, when possible, with ARL data for the same period. Also in contrast to the ARL statistical publications, which should be consulted in tandem with this report, the analysis here is relatively brief, since historical data are not available and it is not possible to track changes over time as is done regularly in ARL statistical analysis.

The graphic displays in this section represent relationships among selected statistics. Most displays were generated specifically for this study. Others were derived from a presentation prepared by Martha Kyrillidou (2002), who has kindly granted permission to reuse her data. In a few cases, the numbers developed for the ARL presentation differ slightly from those appearing in this study. This slight inconsistency occurs where ARL uses median figures in contrast to the mean figures that were generated by project staff members. The differences are few and small, and do not significantly alter the meaning of the graphic presentations.

The graphic displays begin with the "big picture," including comparisons of total library expenditures, numbers of volumes, and total preservation expenditures. Various relationships among data are highlighted. Following are finer-grained analyses, including breakdowns of preservation expenditures, staff costs and numbers, conservation treatments, and contract expenditures.

General Library Measures

Table 4 presents general library statistics on the four target groups plus the overall data from the IMLS survey. As noted in Section I, ARL numerically dominates the other groups in sheer size of holdings, expenditures, staff, and circulation. Comparing one category with another reveals consistent patterns, indicating that size by one category bears a consistent relationship to size in another. For instance, when total expenditures are compared with the number of professional staff members for each group, there is a fairly consistent ratio across all institutional groups (ranging from a high of \$224,000 per professional staff member in the ULG to a low of \$199,451 per professional staff member in OG). Indeed, there is a relatively consistent staffing ratio across all categories. Although most ratios follow consistent patterns, one slight anomaly is worth noting. When circulation figures are compared with volume holdings, the ULG group experiences the highest circulation rate at 17 percent. ARL libraries are next at 15 percent, and both LG and OG libraries are at about 11 percent.

Table 4. Median Library Size, Holdings, and Operations						
	Volumes	Expenditures	Circulation	Professional Staff		
ARL	2,909,643	\$17,406,167	427,277	80		
IMLS (all)	713,396	3,235,460	84,065	17		
ULG	1,083,179	6,063,986	182,850	27		
LG	1,227,738	5,174,710	127,175	24		
OG	490,489	2,393,421	52,800	12		

Preservation Expenditures in Relation to Total Library Expenditures

Table 5 presents totals reported from each group. In some instances, data from the IMLS survey were missing for preservation expenditures, and in others, figures included expenditures in response to atypical circumstances (e.g., disasters). Ratios for these figures are therefore not meaningful. The most one can say about these figures is that even if they grossly underreport preservation expenditures, the total amount spent by the field on preservation is significant enough to warrant considerable attention.

Table 5. Preservation Expenditures Compared with Library Expenditures						
Group Total Preservation Total Library						
ARL (113 institutions)	\$70,456,479	\$2,211,928,465				
IMLS (68 institutions)	6,639,296	265,015,684				
ULG (17 institutions)	2,172,156	98,705,861				
LG (10 institutions) 2,249,436 54,404,427						
OG (41 institutions)	2,217,704	111,905,396				

Preservation Expenditures as a Percentage of Total Library Expenditures

Preservation expenditures account for less than 3 percent of the total library budget across all institutional groups and less than 2 percent for the LG and OG libraries (Table 6). These numbers should be considered cautiously, because they may represent an underreporting, especially by LG libraries. In ULG and OG libraries, preservation expenditures fall into a pattern consistent with other statistics from these institutions.

Table 6. Preservation Expenditures as Percentage of Library Expenditures					
Medians per Institution	Total Preservation Expenditure	Preservation as % of Total Library Expenditure			
ARL	\$486,248	2.71			
IMLS (all)	98,917	1.59			
ULG	95,555	2.11			
LG	50,394	1.08			
OG	36,639	1.55			

Expenditures for Preservation Staff Compared with Total Library Expenditures

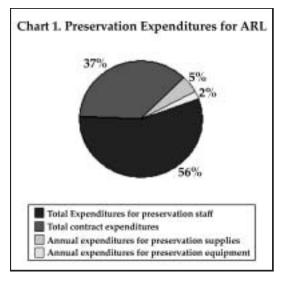
Table 7 includes information from almost all libraries participating in the IMLS survey. Because the number of institutions reporting in each category varies, the total expenditures are not particularly meaningful; however, the percentages they yield are of interest. The percentages for ARL libraries were calculated slightly differently from those for the IMLS survey (representing the median per institution, not the totals) but are generally in line with the percentages reported by the smaller academic libraries.

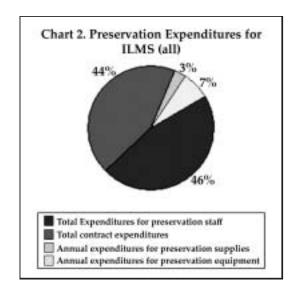
The similarity in percentages between ULG and OG libraries is striking, particularly when contrasted to the data from the LG libraries. However, as noted earlier, LG libraries may have underreported preservation efforts in comparison with the other groups. Whether LG libraries indeed have a lower ratio of preservation staff expenditure to total expenditure, or whether they simply define their preservation staff more narrowly, is an open question. The survey instructions did define these terms, but interviews at LG libraries indicated differences in the ways preservation terminology, including staff designations, were used.

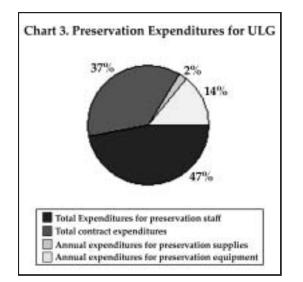
Table 7. Preservation Staff Expenditures Compared with Total Library Expenditures						
Preservation Staff Total Library Expenditures Percentage						
ARL (median/institution)	\$277,788	\$17,406,167	1.6			
IMLS (total for 68 institutions)	2,949,190	265,015,684	1.1			
ULG (total for 17 institutions) 1,239,347 98,705,861 1.3						
LG (total for 10 institutions) 389,655 54,404,427 0.7						
OG (total for 41 institutions)	1,320,188	111,905,396	1.2			

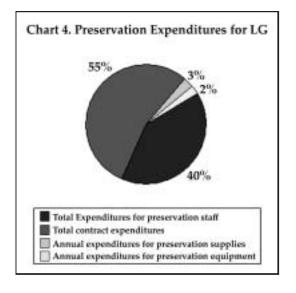
Total Preservation Expenditures by Category

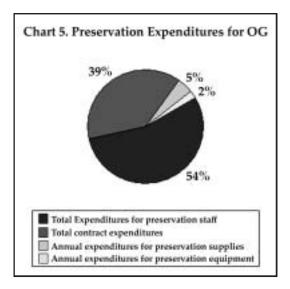
Total expenditure patterns for three of the four groups of institutions, taken by category and as a whole, suggest a "rule of thumb" for staff expenditures. Staffing represents the largest category of expense—accounting for about half of all preservation expenditures. The lone exception is the LG group, where contract expenses are higher than staff expenditures. However, this disparity may largely be attributable to the considerable expense associated with preservation contract work last year at one institution that was recovering from a major disaster. Contract expenditures, which include binding, reformatting, and other preservation work, are another dominant expense—with binding typically representing the lion's share. Details for ARL, IMLS (all), ULG, LG, and OG libraries, respectively, are presented in the Charts 1 through 5.











Total Preservation Staff to Total Library Staff

Table 8 compares the number of staff members identified with preservation with the total number of library staff members. Because the number of institutions participating in each group varies, the absolute numbers are not meaningful for comparison across groups; however, the percentages are enlightening. ARL libraries represent the strongest support for preservation by this measure, with OG libraries not far behind. LG libraries report a markedly lower percentage than the other groups do.

Table 8. Preservation FTE Staff Compared with Total Library Staff						
	Preservation FTE	Total Staff	Percentage			
ARL (113 institutions)	1,800.04	40,355	4.5			
IMLS (all)	137.25	4,363	3.2			
ULG (17 institutions)	56.35	1,760	3.2			
LG (10 institutions) 12.39 845 1.4						
OG (41 institutions)	68.51	1,758	3.9			

Preservation Administration

For ARL, one traditional measure of the progress of preservation efforts has been the existence of preservation programs managed by a preservation administrator. As illustrated by Table 9, ARL libraries are well along in establishing separate preservation programs. More than two-thirds of them staff such programs with at least a half-time preservation administrator, and more than half report having a full-time preservation administrator. By this measure, libraries in the IMLS study are not as well positioned; however, one should be cautious about drawing firm conclusions. Recall that the ARL libraries are on average three times larger than ULG and LG libraries and six times larger than OG libraries. If one were to use a weighting factor of 3 for the ULG libraries, for example, the number of institutions reporting full-time administrators would rise to six, representing 35 percent of the total. The number of institutions with at least a half-time administrator would rise to 12, representing 70 percent of the total.

Table 9. Preservation Administrators						
Time Spent on Preservation	Full-time	50%-99%	25%-49%	1%-24%	None	
ARL (113 libraries) 62 (55%) 14 (12%) 6 (5%) 31 (27%)*						
ULG (17 libraries)	2 (12%)	2 (12)	0 (0)	8 (47)	5 (29)	
LG (10 libraries)	0 (0%)	0 (0)	0 (0)	2 (20)	8 (80)	
OG (41 libraries) 1 (2%) 3 (7) 2 (2) 12 (29) 22 (54)						
* On the ARL Preservation survey, "None" and "Less than 25%" are combined into one category. Thirty-two ARL members reported themselves to be in that category.						

Conservation Treatment

Table 10 provides comparative information on conservation treatment in the ARL-defined levels, based on the amount of time required to complete a treatment. Level 1 treatment represents work that requires 15 minutes or less to perform. Level 2 treatments require between 15 minutes and 2 hours, and Level 3 treatments require more than 2 hours. Information reported in the IMLS survey was sparse, but available data suggest that hands-on repair and conservation treatments are not a significant activity for LG and OG libraries. ARL libraries significantly outstrip their counterparts in the other groups, even if one introduced a weighting factor to compensate for size differences.

Table 10. Conservation Treatments					
Medians for 2000/2001:	Number of Volumes: Level I Treatment	Number of Volumes: Levels II and III Treatment			
ARL	3,685	1,226			
ULG	403	66			
LG	50	0			
OG	15	47			

Contract Expenditures

Contract expenditures are the second-largest preservation expense in all but LG libraries. These expenses include binding, microfilming, preservation photocopying, and other conservation work. Binding is by far the most significant of these expenses, approaching two-thirds or more of all contract expenses in ARL, ULG, and OG libraries. The dependence on contract work for an essential preservation function is troubling, given recent economic trends that leave non-staff expenses particularly vulnerable to budget cuts. As noted earlier, the LG expenses for other conservation contract work is inflated as a result of major expenses associated with disaster recovery at one institution. Charts 6 through 10 reflect the percentages of contract expenditures for the groups studied.

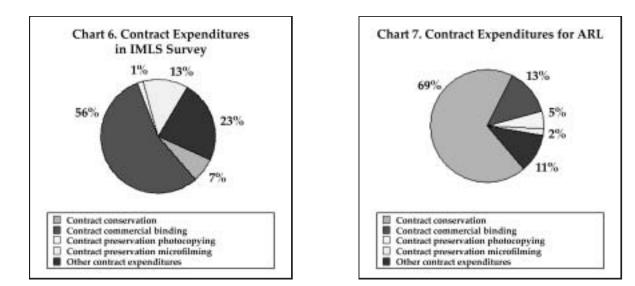
VI. SITE VISIT RESULTS: SUMMARIES

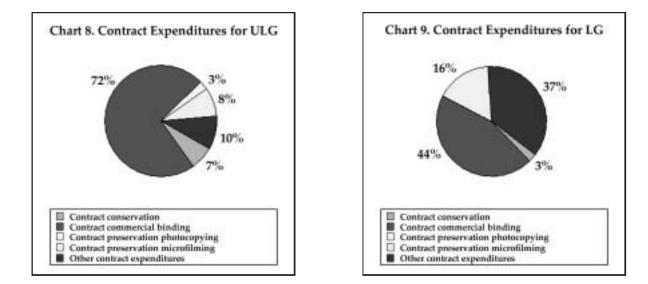
Appendix B contains the interview protocol used during the 20 site visits. Responses to each of the questions asked during the interviews have been reviewed and distilled to the following summaries.

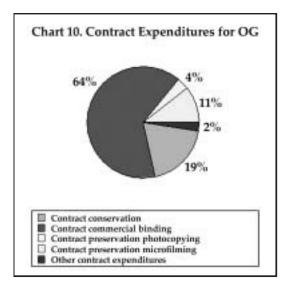
Questions and Summaries

1. What is your role in preservation here?

Many job titles fall under the rubric of "preservation." Some role descriptions emphasize activities; others focus on objectives. Some staff members involved in binding and other functions considered basic to preservation by many in the broader preservation field do not identify themselves as working in the preservation area.







2. Preservation priorities

- a. What are the current priorities, in terms of collections and user groups, for preservation resources?
- b. Do you foresee the emphasis shifting over the next five years? In what directions?

Library staff members strongly agree that general collections come first, with service to students as an additional major concern. Future concerns include digital matters, although this change may be an add-on rather than a shift in priorities.

3. Contemplating changes in resources

- a. If resources currently directed toward preservation were to increase by 30 percent tomorrow, where would you put the additional resources? Why?
- b. If resources now used for preservation were to decrease by 30 percent tomorrow, where would you apply the cuts? Why?

Increases in funding would be directed first to staff and next to structures. Collection care would rank third. Cuts in funding would affect binding most radically; staff and collection treatments ranked second and third, respectively. Funding is already short, and cuts would be devastating to most preservation programs.

4. Training of staff

- a. If staff throughout the library receive preservation training, how is that done? Who are trained?
- b. If not, what kinds of staff training would be most beneficial?
- c. What aspects of your own training have proved particularly valuable on the job from a preservation perspective? What skills would you like to acquire?
- d. Do you see a role for regional or national organizations in assisting with your training activities or that of other staff in your library?

Most libraries report that they train staff. Programs range from structured situations to ad hoc instruction. Interviewees expressed a strong preference for hands-on experiences. They particularly value their own training in treatment methods, although other aspects of preservation were mentioned. Their training has taken place largely in workshops, short courses, and private study.

5. User education

- a. Does your library conduct user education in the care and handling of materials?
- b. If so, what is the focus of this training?
- c. Has this training helped?
- d. How might national or regional organizations assist you with user training?

Very few libraries conduct formal user education programs, although many make use of one-to-one encounters when problems occur. Problems most often have to do with bringing food and drink into the library, photocopying, and treatment of materials. Staff members are skeptical about the utility of user education efforts.

- 6. Information sources about preservation
- a. Do you think there is a need for additional information about preservation beyond what is currently available?
- b. In what forms should it be delivered?

Preservation information exists in abundance, but gaining access to the right kind of information at the moment of need can be difficult. Available information should be repackaged for specific needs, audiences, and objectives. Preferred formats begin with electronic communication but also include also workshop demonstrations, print materials, and conventional audiovisual modes.

7. Cooperative ventures in preservation

- a. Is your library engaged in any cooperative activities that have had an effect on preservation?
- b. Which cooperative ventures have had the largest effect on your preservation work here?
- c. What kinds of cooperative projects or organizations should exist to help you with preservation work here?

The record on cooperative activities is mixed. Specific activities that were suggested were highly varied. Some people are frankly skeptical about cooperative activities; the high level of cooperative activity that marked past decades seems to have waned. The "wish list" for cooperative activities is diverse. There is at least tempered interest in sharing skills and experience.

8. Best practices and standards

- a. Have you identified best practices or standards that have proved helpful to you in preservation activities here?
- b. Have any generally recognized best practices or standards been adopted in policy statements here?

Although they may not think of them as "best practices and standards," many interviewees report, albeit tentatively, that they have adopted solutions that are generally approved in the preservation field. Practitioners seem to think more in terms of specific procedures than of conceptual approaches in this area. Policy documents rarely include references to best practices or standards.

9. Collection preservation issues

- a. If you have conducted any preservation surveys of your collections, please describe them.
- b. What are the most serious challenges or concerns for you now in terms of preservation collections?

Asked about major challenges relating to collection preservation, interviewees had ready responses: digital concerns, space/buildings, basic collection management issues, time, staff conscious-raising, non-print materials, and training of selectors. Large-scale, formal surveys are rare these days, but surveys are occasionally undertaken to examine a particular area or problem.

10. Suppliers of materials and services

- a. If you purchase preservation supplies or services, are you satisfied with the suppliers that now exist?
- b. What materials, supplies, and services would you like to see developed or improved?

Interviewees are quite satisfied with their suppliers and supplies, especially with binding services and materials. Nonetheless, interviewees readily named improvements that they would like to see. For example, materials are not always archivally sound, although they are advertised as such. Many expressed concern about the cost of supplies.

11. Policies

- a. In what areas have you developed policies that affect preservation?
- b. Can you describe your experience in implementing these policies?
- c. How might outside organizations assist you in improving the implementation of locally defined policies?

Although most libraries in the sample have de facto policies affecting preservation, they may not have a written record of them. The list of areas with "agreements," if not formal policies, is long. Implementation of these "policies" or "agreements" has generally gone smoothly.

- 12. The common needs of special collections, archives, and manuscript collections
- a. What are the preservation needs in this library for special collections (broadly defined)?
- b. Do you foresee a shift in the preservation needs of such collections over the next five years? (In what directions?)

Special collections needs center on environmental/building concerns, non-print materials, and staffing. ARL and ULG libraries anticipate expansion in the digital realm, although this development will represent an expansion of activity, not a shift from the essential focus of special collections on original materials. All libraries anticipate funding needs.

13. Digital technology

- a. Do you consider the preservation of digital information to be a significant concern at your institution?
- b. How does the existence of digital technology affect your preservation activity?
- c. For unique, local information, how are you approaching preservation? Frustrations? Ideas?
- d. What kind of external help would you find helpful?

Concern about digital technology is high in ARL and ULG libraries, and is developing rapidly in LG and OG libraries. The definition of pertinent digital technologies, however, varies considerably from one institution to another, making the extent of development difficult to determine from interview data. In general, libraries consulted here are not yet very active in this area, beyond routine maintenance of basic digital subscriptions and other services provided from the outside. Projects do exist to transfer locally held information to digital form (e.g., scanning), but frequently these are unique initiatives that are unrelated to an overall strategy. Lack of funds, service organizations, and standards are holding back progress in this area. The tone of responses indicated cautious enthusiasm.

14. Space

- a. Is shortage of space a current preservation concern to you? Is it a concern to any other segments of the staff?
- b. Will space be a problem, in terms of preservation, within five years?
- c. If so, how is your library planning to address these concerns?
- d. Is there a role for regional or national organizations in assisting you with this problem?

Shortage of space is a serious concern for all libraries. It is more acute for ARL and ULG libraries than for LG and OG libraries. Space problems are intimately bound up with funding issues. Most libraries anticipate that space will be a concern five years hence. Many libraries are turning to remote storage, with its many variations, as a solution. Some interviewees believe that digitization will offer some relief.

15. How do you think preservation is regarded in your library?

a. Has this exercise engendered significant discussion or action thus far? Staff members who are conscious of preservation generally hold it in high regard. Many staff members, however, are not particularly conscious of preservation. Among the reasons for this lack of awareness are speculation that preservation is so pervasive that it has become invisible and a feeling that staff members are simply not oriented toward it. Administrators are more likely to describe preservation as essential than are staff members on the front lines. This exercise raised awareness of preservation among those directly involved in the study and, in some cases, others in the libraries.

Other Topics

The following additional topics related to preservation emerged from the data as important to interviewees.

Environmental concerns

Heating and air conditioning

Staff members frequently expressed concern about local environmental controls and worried that future cuts in funding could reverse recent progress. Relationships with physical plant staff members are seen as critical to achieving appropriate conditions. The awareness of environmental concerns often arises in reaction to an accident or incident. Interviewees believe that environmental controls are fundamental to preserving collections.

Food and drink

Formerly forbidden in most libraries, beverages and even food are commonly allowed in at least some portions of library buildings. This is a vexing preservation problem with complex public relations implications. Enforcement is difficult. Some libraries try to educate readers in the least harmful approaches to satisfying their desires for food and drink and upholding their responsibilities to the library collections.

Care and handling of library materials

Seen as one of the most basic and effective preservation tools, proper techniques for care and handling enjoy universal support from library staff members. Training in these techniques is common for almost all staff members. The point of circulation is viewed as critical for proper care and handling, but there is less consensus—and little hard evidence—on what constitutes the best techniques from a preservation perspective. Care and handling are most important at the point of circulation.

Treatments

Staff members seemed preoccupied with particular treatment procedures and areas of activity. Prominent among these are binding and microfilming. Interviewees seemed comfortable with the topic of treatments and often lingered there, at the expense of the more conceptual topics of the study. Needs in this area are highly specific, front-line staff see them as critical to the preservation effort.

Outside agencies

Interviewees frequently mentioned interacting with outside agencies that have preservation programs and activities. The list of such agencies is long. The kind of help that is wanted from outside agencies begins with money; it also includes information, standards, disaster assistance, repositories, and more. Staff members welcome visitors who can tell them what is happening in the field. They also welcome training institutions; there is particular need for materials addressing basic issues in appropriate language and modes of presentation.

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APPENDIX A: IMLS Survey Form with Data; Instructions

Note on results: Data are for the period June 30, 2000, to June 30, 2001. The data are grouped for each question according to three library categories:

- UL = University Libraries Group
- LG = Land Grant Colleges and Universities
- OG = Oberlin Group

Results below represent averages of those figures provided. For any single question, some institutions may have chosen not to submit data. For questions 32-37 in particular, the number of responses is quite low. Averages were calculated from the answers submitted (omitting cases where respondents did not provide data or provided only a narrative footnote).

For complex questions, such as 4a-d, which have several parts with the last representing a sum, the numbers sometimes do not add up. We report here the results that we received. Some anomalies are explained by missing or ambiguous data; others are not obviously explicable. Also please keep in mind that even one "outlier" (e.g., unusual response) in so small a sample can radically alter the outcome. This kind of distortion occurs most frequently among the data for Land Grant institutions where the sizes of libraries vary considerably and the sample is particularly small.

State of Preservation: IMLS Questionnaire, 2000-01

A joint project of The Council on Library and Information Resources (CLIR), The Association of Research Libraries (ARL), the Universities Libraries Group (ULG), and The Regional Alliance for Preservation (RAP), with support from leading liberal arts colleges and major non-ARL land-grant institutions; funded by the Institute for Museum and Library Services (IMLS).

The purpose of this inquiry is to develop a realistic picture of current preservation activity among non-ARL academic libraries. (Data on ARL preservation activities are collected separately.) Questions herein are largely derived from annual ARL statistical questionnaires so that comparable clata might be obtained. Only aggregate data will be reported.

Note: The abbreviations "ARL" and "OB" following some questions refer to corresponding questions in the annual surveys conducted respectively by the Association of Research Libraries (ARL Statistics) and the Oberlin Group.

This survey is due March 1, 2002.

Please do not leave any blank lines. Estimate if you must, but please do not make wild guesses. If your library does not perform a given function or had no activity for this function during this period, enter "0". If your library performs a function but data are not available and estimates are not feasible, enter "1" (for unavailable).

Top of Form

Reporting Institution:	
Institution Number: (The "login id" used to access the survey)	
Year when university or college was founded:	
Questionnaire Prepared by (Name):	_
Position Title:	
E-Mail Address:	
Phone Number:	
Contact Person (If Different):	
Position Title:	
E-Mail Address:	
Phone Number:	

INSTRUCTIONS

PRESERVATION ADMINISTRATION (See Instructions Q1-3)

 Does the library have an administrator who has responsibility for preservation? C Yes C No

- 2a. If yes, what percentage of the administrator's total job assignment is dedicated to preservation activities and preservation program management?
- 2b. If yes, what is the job title of this administrator?
- If yes, what is the job title of the person to whom the preservation administrator reports?

PRESERVATION PERSONNEL (See Instructions Q4-5)

4. If the library has a preservation unit, how many staff are in that unit (including the preservation administrator)?

4a.	Professional Staff FTE	4b.	Support Staff FTE	4c.	Student Assistants FTE	4d.	Total Staff FTE
	ULG .29; LG 0 [?]; OG .33		ULG 1.36; LG 2; OG .8		ULG .9; LG .5; OG .7	÷.	ULG 2; LG 2.3; OG 1.4

How many FTE staff are engaged in preservation activities library-wide (including staff reported in question #4 above)?

5a.	Professional Staff 5 FTE		Support Staff 5c. FTE		Student Assistants 5d FTE		. Total Staff FTE	
	ULG .6; LG .6; OG .4		ULG 1.9; LG 1; OG .9		ULG 1.4; LG .7; OG .8		ULG 3.5; LG 1.8; OG 2	

PRESERVATION EXPENDITURES (See Instructions Q6-11)

 Salaries and wages for staff engaged in preservation activities library-wide (as reported in question #5 above) (See Instructions Q6a-d)

6a.	Professional Staff:	\$ ULG 26,605; LG 31,408; OG 25,092
6b.	Support Staff:	\$ ULG 42,032; LG 31,408; OG 25,092
6c.	Student Assistants:	\$ ULG 16,996; LG 15,795; OG 9,236
6d.	TOTAL expenditures for pres	ervation staff:

\$ ULG 77,459; LG 55,665; OG 47,150

7. Contract Expenditures (See Instructions Q7a-f)

ULG 31.8; LG 5; OG 22.8%

	7a.	Contract conservation:	\$ ULG 5,105; LG 3,820; OG 8,876	
	7b.	Contract commercial binding:	\$ ULG 56,441; LG 65,637; OG 30,761	
	7c.	Contract preservation photocopying:	\$ ULG 1,996; LG 314; OG 1,735	
	7d.	Contract preservation microfilming:	\$ ULG 6,392; LG 23,687; OG 5,061	
	7e.	Other contract expenditures:	\$ ULG 7,485; LG 54,000; OG 1,183	
	7£.	TOTAL contract expenditures:		\$ ULG 62,338; LG 76,846; OG 33,334
8.	Ann	ual expenditures for preservation suppli	ies:	\$ ULG 3,942; LG 4,075; OG 3,882
9.	Ann	ual expenditures for preservation equip	ment:	\$ ULG 23,807; LG 3,420; OG 1,816
10.	тот	AL preservation expenditures (Add line	es 6d, 7f, 8, and 9):	\$ ULG 13,5760; LG 10,769; OG 55,443
	-		ATT CO 104 T C 5 01/. O	C 7 44

 Total preservation expenditures that came \$ULG 9,184; LG 5,816; OG 7,466 from external sources:

CONSERVATION TREATMENT (See Instructions Q12-20)

12.	TOTAL number of volumes (including pamphlets) given conservation treatment (If breakdowns are available, provide detail in Questions 13-15):	ULG 2,472; LG 2,451; OG 1,988
13.	Number of volumes given level 1 conservation treatment:	ULG 1,339; LG 1,035; OG 1,453
14.	Number of volumes given level 2 conservation treatment:	ULG 423; LG 883; OG 817
15.	Number of volumes given level 3 conservation treatment:	ULG 675; LG 176; OG 282
16.	Number of unbound sheets given conservation treatment:	ULG 750,637; LG 973; OG 1,824
17.	Number of bound volumes/pamphlets mass deacidified:	ULG 81; others=no data
18.	Number of linear feet of unbound papers mass deacidified:	No data reported
19.	Number of photographs and non-paper items (e.g., audio tapes, motion-picture film) given conservation treatment:	ULG 2583; LG 917; OG 1470

20. Number of custom-fitted protective enclosures constructed:

ULG 223; LG 36; OG 382

COMMERCIAL BINDING (See Instructions Q21)

21. Number of volumes commercially bound:

ULG 7,467; LG 6,575; OG 3,405

PRESERVATION REFORMATTING ACTIVITIES DURING THIS PERIOD (Done either in-house or by contract) (See Instructions Q22-23)

22. Number of bound volumes/pamphlets reformatted in their entirety

22a.	photocopied	22b.	microfilmed	22c.	by digital means
	ULG 73; LG 51; OG 20		ULG 57; LG no data; OG 80		ULG 390; LG 2610; OG 9

 Number of single, unbound sheets reformatted (e.g., one side of one manuscript page, one map)

23a.	photocopied	23b.	microfilmed	23c.	by digital means
	ULG 14,061; LG		ULG 31,811; LG		ULG 139,952; LG
	13,822; OG 2,286		42,958; OG no data		1521; OG 323

(See Instructions Q24-27)

24. Number of photographs and/or negatives reformatted:

24a.	by analog means	24b.	by digital means		
	ULG 40; LG 49; OG 810		ULG 3,164; LG no data; OG 286		

25. Number of videotapes and films reformatted:

	25a.	by analog means	25b.	by digital means
		ULG 19; LG 4; OG 70		ULG 7; LG 4; OG 20
26.	Num	ber of audiotapes reformatted:		
	26a.	by analog means	26b.	by digital means
		ULG 42; LG 15; OG 41		ULG 44; LG 14; OB 81
27.	Num	ber of slide images reformatted:		
	27a.	by analog means	27b.	by digital means
		ULG 15; LG no data; OG 176		ULG 714; LG 30; OG 352

PRESERVATION POLICIES AND PRACTICES

Does your library have:

28a.	a written general preservation policy or strategy?	C	Yes	C	No
28b.	a practice of regular review of items for possible preservation treatment?	С	Yes	C	No
28c.	a preservation training program for staff?	С	Yes	С	No
28d,	a preservation training program for users?	С	Yes	С	No
28e.	an environmental monitoring program?	C	Yes	С	No
28f.	a current written "preparedness and response" plan? (aka "disaster plan")	C	Yes	C	No
28g.	secure and environmentally controlled storage facilities?	С	Yes	C	No
28h.	a preservation plan for digital resources?	C	Yes	С	No
28i.	involvement in any consortial preservation activities?	C	Yes	С	No

Group	1	JLG	1	LG O		LG		OG	
Questions	YES	NO	YES NO		YES	NO			
A written general preservation policy or strategy	7	10	4	6	14	27			
A practice of regular review of items for possible preservation treatment	14	3	5	5	26	15			
A preservation training program for staff	10	7	4	6	17	24			
A preservation training program for users	2	15	2	8	6	35			
An environmental monitoring program	7	10	3	7	21	20			
A current written "preparedness and response" plan	14	3	9	1	30	11			
Secure and environmentally controlled storage facilities	14	3	4	6	30	11			
A preservation plan for digital resources	2	15	1	9	1	40			
Involvement in any consortial preservation activities	7	10	4	6	11	30			
Percentage of the total (%)	12.58	12.42	5.88	8.82	25.49	34.80			

e.7 :	modified	Total library expenditures (ARL:27, OB:05 modified) (<u>See Instructions Q29</u>)				\$ ULG 6,169,116; LG 5,440, 442; OG 2,729,399				
30.	Volumes	/olumes held (ARL:1a, OB:23)			ULG 1,207,090; LG 1,104,288; OG 617,873					
31.	Number of current serials, including periodicals, received (ARL:8 modified; OB: 32 modified)									
	31a,	Pap	er	31b.	Microform		31c.	Digital form		
			G 6,108; LG 3; OG 2228		ULG 55,623 [1135; OG 224			ULG 4994; LG 9732, OG 2154		
32.		Microform units held (ARL:8, OB: 29 modified)		ULG 1,141,362; LG 1,695,047; OG 237,631						
33.	Audiovisual units held (ARL:12 modified; OB: 30 modified)									
2.2.2	33a.	Slide	s	33b.	Digital image	files	33c.	Films		
			37,272; LG 13; OG 12		ULG 5,639; L OG 37, 272	G 1,36	i6,	ULG 2,033; LG 1,822; OG 142		
	33d.	Vida	otapes	33e.	Audiotecor		33f.	CD. / DVD.		
	- 100 Mar	V ROOM	otapes	336.	Audiotapes		501.	CDs / DVDs		
		ULG	6,046; LG ; OG 4,044		ULG 8,428; L OG 4,779	G 6,88		ULG 5,734; LG 1,451; OG 4,871		
		ULG 4,131	6,046; LG		ULG 8,428; L OG 4,779	G 6,88		ULG 5,734; LG		
14.	33g. O	ULG 4,131 ther au	6,046; LG ; OG 4,044 idiovisual u	nits (speci	ULG 8,428; L OG 4,779	G 6,88		ULG 5,734; LG		
34.	33g. O	ULG 4,131 ther au	6,046; LG ; OG 4,044 idiovisual u	nits (speci	ULG 8,428; L OG 4,779 ify type):	34b.	96;	ULG 5,734; LG 1,451; OG 4,871		
14.	33g. O	ULG 4,131 ther au Manusc	6,046; LG ; OG 4,044 idiovisual un ript and arcl Linear feet	nits (speci	ULG 8,428; L OG 4,779 ify type):	34b. mate Yes	6; Do you acc	ULG 5,734; LG 1,451; OG 4,871 Pept MS and archival ital form? G 6; OG 27		
	33g. O	ULG 4,131 ther au Manusc 4a.	6,046; LG ; OG 4,044 idiovisual un ript and arcl Linear feet	nits (speci hive holdi ; LG 8,156	ULG 8,428; L OG 4,779 ify type): ings (ARL:11): 5; OG 3,984	34b. mate Yes	96; Do you acc rials in dig ULG 11; LG	ULG 5,734; LG 1,451; OG 4,871 Pept MS and archival ital form? G 6; OG 27		
34.	33g. O	ULG 4,131 ther au Manusc 4a. ges on	6,046; LG ; OG 4,044 adiovisual un ript and arch Linear feet ULG 5,734	nits (speci hive holdi ; LG 8,156	ULG 8,428; L OG 4,779 ify type): ings (ARL:11): 5; OG 3,984	34b. mate Yes No	96; Do you acc rials in dig ULG 11; LG	ULG 5,734; LG 1,451; OG 4,871		
	33g. O I M J Ima	ULG 4,131 ther au Manusc 4a. ges on	6,046; LG ; OG 4,044 idiovisual un ript and arcl Linear feet ULG 5,734 paper (ARL Maps	nits (speci hive holdi ; LG 8,156	ULG 8,428; L OG 4,779 ify type): ings (ARL:11): 5; OG 3,984 fied) 35b	34b. mate Yes No	6; Do you acc rials in dig ULG 11; LC ULG 6; LG Graphic r	ULG 5,734; LG 1,451; OG 4,871		
5.	33g. O M M 3 Ima 35a.	ULG 4,131 ther au Manusc 4a.	6,046; LG ; OG 4,044 idiovisual un ript and arcl Linear feet ULG 5,734 paper (ARL Maps ULG 16,1	nits (speci hive holdi ; LG 8,156 ;12 modif 95; LG 96	ULG 8,428; L OG 4,779 ify type): ings (ARL:11): 5; OG 3,984 fied) 35b. ,554; OG	34b. mate Yes No	bo you acc rials in dig ULG 11; LG ULG 6; LG Graphic r ULG 78,2 32,350	ULG 5,734; LG 1,451; OG 4,871 ept MS and archival ital form? G 6; OG 27 G 4; OG 14 naterials		

38a. All professionals 38b. Support Staff 38c. Student Assistants 38d. Total FTE FTE FTE

ULG 28; LG 27; ULG 43; LG ULG 37; LG 26; ULG 104; LG OG 12 37; OG 16 OG 16 84; OG 42

Thank you for filling out this questionnaire. Following the analysis of responses, a team of researchers will contact a small number of institutions to obtain qualitative data on preservation activities.

Would you be willing to participate in a phone interview? C Yes

Are there aspects of your preservation program that you believe would contribute to a list of "best practices" to be compiled by the research team? Or do you have any other comments about the areas covered in this survey?

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41	And Statements in the second	E

We would be grateful for documents that further describe the preservation activities of your library (e.g., annual reports, self-study initiatives). Please mail them to Deirdre C. Stam, 2400 Euclid Avenue Syracuse, NY 13224.

FOOTNOTES (See Footnotes Instructions)

1,	Law Library statistics are included?	C _{Yes}
		C No
		C We do not have a Law Library
2.	Medical Library statistics are included?	C Yes
	Included?	C No
		C We do not have a Medical Library
	Main campus libraries not included:	*
3.	Additional footnotes:	
		save data Clear Survey

GENERAL INSTRUCTIONS

Please enter your data on the ARL Statistics Website (accessed via <<u>http://lrc.lis.uiuc.edu/ARL/</u> <u>survey.cgi/</u>>) and provide a paper copy to use for data verification. Be sure to read these Instructions before beginning to input data.

Complete this form by **March 1, 2002**, and retain a copy of the worksheet for your records. Preservation data are not always easy to define or to record in precise categories. If you have difficulty interpreting this questionnaire or are uncertain how its data categories apply in your situation, contact Deirdre C. Stam, Project Consultant, (315) 446-5923 or 443-2598, <u>dcstam@aol.com</u>.

All questions assume a *fiscal year ending June 30, 2001*. If your library's fiscal year is different, please use the FOOTNOTES section to explain, but fill out the questionnaire for the period July 1, 2000-June 30, 2001.

Please read all instructions carefully before you answer the questionnaire. Make sure your responses are as complete and accurate as possible. Give estimates when you must, but please do not make wild guesses. Use the FOOTNOTES section to expand upon or clarify your responses.

Please complete all entries. If your library does not perform a given function or had no activity for this function during this period, enter "0". If your library performs a function but data are not available and estimates are not feasible, enter "1" (for unavailable). **Please leave no blank spaces.** For a law library and/or a medical library, include statistics from those libraries in response to this survey and note the inclusions within the FOOTNOTES section as prompted.

In a university that includes both main and branch campuses, *an effort should be made to report figures for the main campus only*. (The U.S. National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) defines a **branch institution** as "a campus or site of an educational institution that is not temporary, is located in a community beyond a reasonable commuting distance from its parent institution, and offers organized programs of study, not just courses.") If figures for libraries located at branch campuses are reported, please provide an explanation in the "Footnotes" section of the questionnaire.

A **branch library** is defined as an auxiliary library service outlet with quarters separate from the central library of an institution, which has a basic collection of books and other materials, a regular staffing level, and an established schedule. A branch library is administered either by the central library or (as in the case of some law and medical libraries) through the administrative structure of other units within the university. Departmental study/reading rooms are not included.

Specific Instructions

For the purposes of this survey, the elements of a "preservation program" include: *conservation treatment, commercial binding, and preservation reformatting.* While shelf preparation activities (e.g., plating, labeling, insertion of security devices) and stack maintenance have obvious preservation implications and may be supervised by the preservation administrator, these activities are not quantified in this survey.

Question 1. Does the library have a preservation administrator who spends at least some of his or her time managing a partial or comprehensive preservation program?

Question 2. What percentage of the preservation administrator's total job assignment is dedicated to preservation activities? If the library has a full-time preservation administrator, general management activities (e.g., meeting attendance, committee participation) should be considered an integral part of the administrator's responsibilities and the answer to this question recorded as 100%. In contrast, where the preservation administrator is a part-time staff member or has a dual assignment (e.g., she or he is also a

serials librarian, bibliographer, or curator), the percentage of time devoted to preservation activities and preservation management should be recorded. If the library has no preservation administrator enter "0."

Question 3. Record the job title (not the individual name) of the person to whom the preservation administrator reports (e.g., "Associate Director for Collection Development"). If the library has no preservation administrator enter "0."

Questions 4-5. FTE (i.e., "Full-Time Equivalent") is the numerical representation of full- and part-time work activities. A person working full time is represented by an FTE of 1.00; a person working half time by an FTE of 0.50. Five persons working half time are represented by a combined FTE of 2.50. The number of FTE staff should be determined on the basis of the length of the work week in the reporting library. *Round figures to the nearest two decimal places.*

Record FTE staff in filled positions or positions that are only temporarily vacant on the date that ends the library's fiscal year. Also record staff hired for special projects, internships, and grants, but provide an explanatory note in the FOOTNOTES section indicating the FTE of such staff. The FOOTNOTES section should also be used to record such information as the number of hours worked by volunteers (this figure is not recorded in the survey itself), and the number of months that a full-time position was vacant during the year.

Report trained professional conservators and photographers (senior practitioners-not technicians) in the "professional" category whether or not they have a master's degree in library studies.

Question 4. Only the preservation administrator and staff who report directly to him or her, or to someone supervised by him or her, should be recorded here. If the library has no preservation administrator, or if the administrator does not have direct line responsibility for staff, enter "0."

Question 5. This figure includes staff who report to the preservation administrator, as recorded in **Question 4**, *and* staff outside the preservation unit who are involved in preservation activities. The following activities should be included regardless of the department or library to which staff report: conservation, preparation for commercial binding, all activities associated with preservation reformatting (including selection for preservation, searching, and cataloging), and service on preservation committees.

For staff members with dual assignments, record only that time devoted to preservation activities. For example, a student assistant who works 0.40 FTE and devotes half of his or her time to book repair and the rest to serials check-in would be recorded as 0.20 FTE.

Question 6-11. Report all expenditures, regardless of the source of funding (e.g., funds may come from the regular institutional budget, grants, or fees for services).

Questions 6a-6c. Record salaries for staff reported in response to **Question 5**, the number of staff engaged in preservation activities library-wide. Do not include fringe benefits.

Question 6d. This answer is the sum of the answers to Questions 6a through 6c. **Attach any footnotes for Questions 6a-6c here**, as only this figure appears in the data reports.

Question 7. "Contract expenditures" refers to expenditures for preservation services for which the library is invoiced by an outside vendor, organization, or individual (e.g., a commercial library binder, commercial microfilming service, or professional conservator in private practice).

Question 7a.

Conservation: Refers to the remedial and protective treatment (both mechanical and chemical) of bound volumes, manuscripts, maps, posters, works of art on paper, photographic materials, magnetic tapes, and other library materials to restore them to

usable condition and/or to extend their useful lives. Note that conservation involves preserving information in its original form. The reproduction of materials (e.g., the copying of information onto the same, similar, or new media) is recorded in the preservation reformatting section of this survey. Conservation also refers to the construction of protective enclosures (e.g., wrappers, jackets, boxes) for library materials. Use of archivally sound methods and materials is presumed.

Conservation encompasses a wide range of treatments, including pamphlet and paperback binding, temporary serials binding, tipping in inserts, making pockets for loose parts, slitting uncut pages, making paper repairs, removing tapes and stains, tightening hinges, replacing endpapers, rebacking, recasing, rebinding, repairing sewing structures before sending volumes out for commercial binding, and item-by-item deacidification. Treatments range from minor procedures that can be done relatively quickly by technicians to major procedures that are chemically and mechanically complex and require the skill and judgment of a conservator.

Conservation may also include item-by-item treatment of materials damaged by water, fire, and mold. Because mass freeze drying and fumigation can involve very large numbers that would mask the size and nature of the in-house conservation effort, such activities are recorded in response to Question 7e, "other contract expenditures" and explained in the FOOTNOTES section, but are not recorded in response to Questions 12-16. Exhibit preparation is recorded as conservation activity when an item is treated (e.g., a print is cleaned), but not when a temporary support (e.g., a book cradle) is constructed to display an item. In the latter case, total FTE staff suffices as a measure of effort.

Question 7b.

Commercial binding: Refers to the binding, rebinding, and recasing performed by commercial library binderies, as described in "Library Binding," ANSI/NISO Z39.78-2000. (Available as a free dowenload in a PDF file format from <u>http://</u><u>www.techstreet.com/cgi-bin/pdf/free/234511/Z39-78.pdf</u>.)Commercial library binderies use oversewing machines; Smythe-type sewing machines; double-fan adhesive binding equipment; and automated rounders and backers, hydraulic presses, and spine stamping equipment, in a high-production environment.

Question 7e. Other contract expenditures might include fees paid for commercial freeze-drying, fumigating, or mass deacidification of library materials; membership fees for use of regional conservation facilities; or equipment repairs. If answers are recorded in response to Questions 22c, 23c, 24b, 25b, 26b, or 27b (number of items reformatted by digital means), record expenditures here. Use the FOOTNOTES section to note the amount and nature of major expenditures.

Question 7f. This answer is the sum of the answers to Questions 7a through 7e.

Question 8. Supplies include materials used for conservation treatment (e.g., papers, book cloths, adhesives, pamphlet binders, box board, chemicals, disposable filters for water systems); commercially available archival quality boxes, wrappers, file folders, and envelopes; paper used for preservation photocopying and digitizing; and film, chemicals, and other supplies used for preservation microfilming. Expenditures for equipment and tools costing under \$100 should be recorded here. Expenditures for security labels and stamps, book pockets, call number and bar code labels, and book plates fall outside the scope of this survey and should not be recorded.

Since housing of commercially available boxes, wrappers, folders, and envelopes can involve very large numbers that would mask the size and nature of the in-house conservation effort, the use of such supplies to protect books, manuscripts, maps, microfiche, photographs, videotapes, and other library materials is recorded only here-not in response to **Questions 12-16**.

Question 9. Record expenditures for equipment and tools costing over \$100, such as machinery (e.g., board shears, fume hoods, microfilming cameras, photocopy machines and scanners exclusively used for preservation reformatting), furniture (e.g., laboratory benches, chemical supply cabinets), and computer hardware purchased for exclusive use by a preservation department for such purposes as conservation management, bindery preparation, and bibliographic searching related to preservation reformatting. Capital expenditures for building renovations (e.g., the construction of a conservation facility) or for construction that results in improved housing of library materials (such as replacement of heating, ventilating, and air conditioning systems) should be recorded only in the FOOTNOTES section.

Question 10. This answer is the sum of the answers to **Questions 6d**, **7f**, **8**, **and 9**. (At this time it is not possible to enter online the total independently of the component figures so be certain to record "0" in response to **Questions 6d**, **7f**, **8**, **and/or 9** where no funds have been expended.)

Certain preservation-related expenses are not requested in this survey (e.g., the cost of staff training, conference attendance, and other staff development activities; printed brochures and posters; purchase of reference materials). If significant, these should be noted in the FOOTNOTES section.

Question 11. Record total preservation expenditures that were funded by external agencies in the form of grants. Funds allocated from the library's regular operating budget (including gifts, royalties, endowment income, and special funds provided to the library by its parent institution) are regarded as internal and should not be reflected here.

Questions 12-20. See definition of conservation under instructions for Question 7a above. *Record the number of volumes (including pamphlets) given conservation treatment, not the total number of treatments performed. Answers to these questions should be mutually exclusive. While any given volume may receive several treatments, it should be recorded only once, as a Level 1, 2, or 3 treatment depending on the amount of time devoted to the volume. For example, when an errata sheet is tipped into a volume, three pages are repaired, and its hinges are tightened, and these procedures take a total of 25 minutes to perform, the volume should be recorded only once, as a Level 2 treatment. The repair of several pages of a volume or pamphlet should not be recorded under "unbound sheets" (Question 16), even if the volume is disbound at the time the pages are treated. Rather, treatment of the volume should be recorded once, as a Level 1, 2, or 3 book treatment, depending on the time required to perform all procedures.*

When a volume receives conservation treatment and a box is made for it, however, the conservation should be recorded as a Level 1, 2, or 3 treatment, and the boxing should be recorded in response to Question 20 (number of custom-fitted protective enclosures constructed). Likewise, when two pages of a book are repaired and the book is sent to a commercial bindery, the volume should be recorded as a Level 1 conservation treatment and as a "commercial binding" (Question 21).

Because the nature of procedures and the level of in-house conservation expertise varies significantly across ARL libraries, treatments are recorded based on the length of time they require, time being a meaningful and comparable measure of effort. Use of archivally sound methods and materials is presumed.

Question 12. Report the total number of volumes, including pamphlets, that were treated - not the total number of treatments performed. If breakdowns by level of treatment are available, provide details in questions 13-15.

Question 13. Level 1 conservation treatments require 15 minutes or less to perform.

Question 14. Level 2 treatments require more than 15 minutes but less than two hours to perform.

Question 15. Level 3 conservation treatments require two hours or more to perform. Where an extraordinary number of hours is required to treat selected items, this information can be recorded in the FOOTNOTES section.

Question 16. Unbound sheets include items such as manuscripts, maps, posters, and works of art on paper. Procedures include a variety of mechanical and chemical treatments (e.g., paper repair, surface cleaning, washing, deacidifying, encapsulating, mounting, matting) that lengthen the life of the item. Use of archivally sound methods and materials is presumed. *Report the total number of sheets of paper that were treated-not the total number of treatments performed.*

Questions 17-18.

Mass deacidification is a process by which books and papers are treated to neutralize acidity and to introduce an alkaline buffer. Materials are deacidified in batches, in chambers that hold several (or many) items.

Item-by-item deacidification of bound volumes and papers, performed by conservators and technicians, should be recorded in response to Questions 12-16.

Question 19. Record conservation treatment of photographic materials here, including photographs printed on paper, glass, plastics, and other materials. "Non-paper items" include materials other than bound volumes, unbound paper, and photographs. Treatment of non-paper items might include such activities as conserving globes, cleaning videotapes, and repairing motion picture film. Report activities such as remastering videotapes, copying photographs, re-recording sound, and other activities involving duplication of media in response to **Questions 24-27**.

Question 20. Custom-fitted enclosures are distinguished from the commercially available boxes and other enclosures identified in Question 8 as "supplies," in that the former are custom-made to fit their contents and the latter are standard-sized enclosures available through supply catalogs. Custom-fitted enclosures include paper and polyester book jackets, paper and board wrappers, portfolios, phase boxes, double-tray boxes, and other boxes. (Polyester encapsulation of single sheets should be reported in response to Question 16-not here.) Use of archival quality methods and materials is presumed.

Question 21. See definition of commercial binding under instructions for Question 7b above. Record all volumes (including pamphlets) bound or rebound by a commercial bindery.

Questions 22-23. "Number of bound volumes/pamphlets" refers to the reformatting of volumes in their entirety (i.e., each page is copied to produce a facsimile volume in paper, on film, or in digital form). "Number of unbound pages" refers to the sum of the number of full pages copied. For a manuscript written on one side of a sheet, record one page. For a manuscript written on two sides of a sheet, record two pages. For one frame of film that captures one page, record one page. For one frame of film that captures two pages, record two pages.

Preservation photocopying refers only to items photocopied on paper that has a minimum pH of 7.5, a minimum alkaline reserve equivalent to 2% calcium carbonate based on oven-dry weight of the paper, and includes no ground wood or unbleached pulp. Images must be properly fused to the paper.

Preservation microfilming presumes adherence to relevant American National Standards Institute (ANSI) and Association for Information and Image Management (AIIM) standards as well as microfilming guidelines published by the Research Libraries Group and National Library of Canada.

For microfilming, record data only for first-generation microforms. For a monographic set of three volumes, record three volumes; for thirty volumes in a serial run record thirty volumes. Include data for projects that are undertaken cooperatively with other libraries, but not for commercial projects wherein a commercial vendor borrows library materials for filming and subsequent sale of the film. When the library serves as a commercial microfilming vendor for another institution, this filming should be reported by the library that contracts for the filming-not by the library that does the filming. Dissertations that are sent to UMI for filming should not be recorded.

Record preservation microform masters produced by copying non-archival or damaged film, or produced from digitized text. Use the FOOTNOTES section to indicate the scope and nature of such activity.

Digitizing for preservation purposes is the reproduction of bound volumes, pamphlets, unbound sheets, manuscripts, maps, posters, works of art on paper, and other paper-based materials for the purpose of:

a) Making duplicate copies that replace deteriorated originals (e.g., by digitizing texts and storing them permanently in electronic form and/or printing them on alkaline paper).

b) Making preservation master copies and thus guarding against irretrievable loss of unique originals (e.g., by making high-resolution electronic copies of photographs and storing them permanently and/or printing them.

c) Making surrogate copies that can be retrieved and distributed easily, thereby improving access to information resources without exposing original materials to excessive handling.

Do not include, for example, scanning for presentations, temporary exhibits, and e-reserves.

Record the total number of items that were digitized-not the total number of versions of these items that were created. Where a photograph is scanned and printed, and a low-resolution image mounted on the World Wide Web with images having higher resolution recorded on CD-ROM, report one photograph digitized.

Questions 24-27. Refers to the copying of all types of photographs, and non-paper media such as audio tapes, videotapes, various types of disks, and motion picture film for preservation purposes (see instructions for digitizing for preservation purposes, above). A photograph copied using a 35mm camera is an analog reproduction; a photograph copied using a digital camera is a digital reproduction. Refer to number of items copied, and not to number of copies made.

Questions 29-38. Each of these questions corresponds to a line on either the *ARL Statistics* or the Oberlin Group survey.

Question 29: Total Library Expenditures. Report all expenditures of funds that come to the library from the regular institutional budget, and from sources such as research grants, special projects, gifts and endowments, and fees for service. Do not report encumberances of funds that have not yet been expended. Report 100% of student wages regardless of budgetary source of funds. Include federal and local funds for work study students. Exclude expenditures for buildings, maintenance, and fringe benefits. If fringe benefits cannot be excluded, please footnote.

Question 30: Volumes in Library. Use the ANSI/NISO Z39.7-1995 definition for volume as follows:

a single physical unit of any printed, typewritten, handwritten, mimeographed, or processed work, distinguished from other units by a separate binding, encasement, portfolio, or other clear distinction, which has been cataloged, classified, and made ready for use, and which is typically the unit used to charge circulation transactions.

Include duplicates and bound volumes of periodicals. For purposes of this questionnaire, unclassified bound serials arranged in alphabetical order are considered classified. Exclude microforms, maps, non-print materials, and uncataloged items. If any of these items cannot be excluded, please provide an explanatory footnote in the "Footnotes" section of the questionnaire.

Include government document volumes that are accessible through the library's catalogs regardless of whether they are separately shelved. Exclude microforms, uncataloged government documents, and maps. Documents should, to the extent possible, be counted as they would if they were in bound volumes (e.g., 12 issues of an annual serial would be one or two volumes). Title and piece counts should not be considered the same as volume counts. If a volume count has not been kept, it may be estimated through sampling a representative group of title records and determining the corresponding number of volumes, then extrapolating to the rest of the collection. As an alternative, an estimate may be made using the following formulae:

52 documents pieces per foot 10 "traditional" volumes per foot 5.2 documents pieces per volume

If either formulae or sampling are used for deriving your count, please indicate in a footnote.

Question 31: Serials. Report the total number of subscriptions, not titles. Include everything received, whether by purchase, gift or some other arrangement. Include also duplicate subscriptions and, to the extent possible, all government document serials even if housed in a separate documents collection. Exclude unnumbered monographic and publishers' series. Electronic serials acquired as part of an aggregated package (e.g., Project MUSE, Academic IDEAL) should be counted by title. A **serial** is

a publication in any medium issued in successive parts bearing numerical or chronological designations and intended to be continued indefinitely. This definition includes periodicals, newspapers, and annuals (reports, yearbooks, etc.); the journals, memoirs, proceedings, transactions, etc. of societies; and numbered monographic series.

Question 32: Microforms. Report the total number of physical units: reels of microfilm, microcards, and microprint and microfiche sheets. **Include all government documents in microform**; provide a footnote in the "Footnotes" section of the questionnaire if documents are excluded.

Question 34a: Manuscripts and archives. Include both manuscripts and archives measured in linear feet.

Question 35a: Maps (on paper). Include two-dimensional maps. Include also satellite and aerial photographs and images.

Question 35b: Graphic materials. Include the number of images on paper. Examples are prints, pictures, photographs, and postcards.

Question 36: Computer files. Include the number of pieces of computer-readable disks, tapes, CD-ROMs, and similar machine-readable files comprising data or programs that are **locally held as part of the library's collections** available to library clients. Examples are U.S. Census data tapes, sample research software, locally mounted databases, and reference tools on CD-ROM, tape or disk. Exclude bibliographic records used to manage the collection (i.e., the library's own catalog in machine-readable form), library system software.

Question 37: Circulation (excluding reserves). Count the number of initial circulations during the fiscal year from the general collection for use usually (although not always) outside the library. Do not count renewals. Include circulations to and from remote storage facilities for library users (i.e., do not include transactions reflecting transfers or stages of technical processing). Count the total number of items lent, not the number of borrowers.

Question 38: Personnel. Report the number of staff in filled positions, or positions that are only temporarily vacant. ARL defines temporarily vacant positions as positions that were vacated during the fiscal year for which ARL data were submitted, for which there is a firm intent to refill.

Include cost recovery positions and staff hired for special projects and grants, but provide an explanatory footnote indicating the number of such staff. If such staff cannot be included, provide a footnote in the "Footnotes" section of the questionnaire. To compute full-time equivalents of part-time employees and student assistants, take the total number of hours per week (or year) worked by part-time employees in each category and divide it by the number of hours considered by the reporting library to be a full-time work week (or year). **Round figures to the nearest whole numbers.**

Question 38a: Professional Staff. Since the criteria for determining professional status vary among libraries, there is no attempt to define the term "professional." Each library should report those staff members it considers professional, including, when appropriate, staff who are not librarians in the strict sense of the term, for example computer experts, systems analysts, or budget officers.

Question 38c: Student Assistants. Report the total FTE (see instruction for Question 38) of student assistants employed on an hourly basis whose wages are paid from funds under library control or from a budget other than the library's, including federal work-study programs. Exclude maintenance and custodial staff.

Footnotes. Explanatory footnotes will be included with the statistics. Reporting libraries are urged to record in the footnote section any information that would clarify the figures submitted, e.g., the inclusion of branch campus libraries. (See the two paragraphs below for a definition of Branch Institution and Branch Library.

Definition of Branch Institution. In a college or university that includes both main and branch campuses, an effort should be made to report figures for the main campus only. (The U.S. National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) defines a **branch institution** as "a campus or site of an educational institution that is not temporary, is located in a community beyond a reasonable commuting distance from its parent institution, and offers organized programs of study, not just courses.") If figures for libraries located at branch campuses are reported, please provide an explanation in the "Footnotes" section of the questionnaire.

A branch library is defined as an auxiliary library service outlet with quarters separate from the central library of an institution, which has a basic collection of books and other materials, a regular staffing level, and an established schedule. A branch library is administered either by the central library or (as in the case of some law and medical libraries) through the administrative structure of other units within the university. Departmental study/reading rooms are not included.

APPENDIX B: Site Visit Interview Questions

Background information:

- a. Interviewer: b. Date:
- c. Institutional name:
- d. Person interviewed in this session:
- e. Job title:

Questions directed to the interviewee(s):

- 1. What is your role in preservation here?
- 2. Preservation priorities:
 - a. What are the current priorities, in terms of collections and user groups, for preservation resources?
 - b. Do you foresee the emphasis shifting over the next five years? In what directions?
- 3. Contemplating changes in resources:
 - a. If resources currently directed toward preservation were to increase by 30% tomorrow, where would you put the additional resources? Why?
 - b. If resources now used for preservation were to decrease by 30% tomorrow, where would you apply the cuts? Why?
- 4. Training of staff:
 - a. If staff throughout the library receive preservation training, how is that done? Who are trained?
 - b. If not, what kinds of staff training would be most beneficial?
 - c. What aspects of your own training have proved particularly valuable on the job from a preservation perspective? What skills would you like to acquire?

- d. Do you see a role for regional or national organizations in assisting with your training activities or that of other staff in your library?
- 5. User education:
 - a. Does your library conduct user education in the care and handling of materials?
 - b. If so, what is the focus of this training?
 - c. Has this training helped?
 - d. How might national or regional organizations assist you with user training?
- 6. Information sources about preservation:
 - a. Do you think there is a need for additional information about preservation beyond what is currently available?
 - b. In what forms should it be delivered?
- 7. Cooperative ventures in preservation:
 - a. Is your library engaged in any cooperative activities that have had an effect on preservation?
 - b. Which cooperative ventures have had the largest effect on your preservation work here?
 - c. What kinds of cooperative projects or organizations should exist to help you with preservation work here?
- 8. Best practices and standards:
 - a. Have you identified best practices or standards proved helpful to you in preservation activities here?
 - b. Have any generally recognized best practices or standards been adopted in policy statements here?
- 9. Collection preservation issues:
 - a. If you have conducted any preservation surveys of your collections, please describe them.
 - b. What are the most serious challenges or concerns for you now in terms of preservation collections?
- 10. Suppliers of materials and services:
 - a. If you purchase preservation supplies or services, are you satisfied with the suppliers that now exist?
 - b. What materials, supplies and services would you like to see developed or improved?

11. Policies:

- a. In what areas have you developed policies that affect preservation?
- b. Can you describe your experience in implementing these policies?
- c. How might outside organizations assist you in improving the implementation of locally defined policies?
- 12. The common needs of special collections, archives and manuscript collections:
 - a. What are the preservation needs in this library for special collections (broadly defined)?
 - b. Do you foresee a shift in the preservation needs of such collections over the next five years? (In what directions?)
- 13. Digital technology:
 - a. Do you consider the preservation of digital information to be a significant concern at your institution?
 - b. How does the existence of digital technology affect your preservation activity?
 - c. For unique, local information, how are you approaching preservation? Frustrations? Ideas?
 - d. What kind of external help would you find helpful?
- 14. Space:
 - a. Is shortage of space a current preservation concern to you? Is it a concern to any other segments of the staff?
 - b. Will space be a problem, in terms of preservation, within five years?
 - c. If so, how is your library planning to address these concerns?
 - d. Is there a role for regional or national organizations in assisting you with this problem?
- 15. How do you think preservation is regarded in your library?
 - a. Has this exercise engendered significant discussion or action thus far?
- 16. Unique circumstances
- 17. Interviewer's observations:

APPENDIX C:

Institutions Responding to Statistical Survey, Phase I

Oberlin Group Libraries

Agnes Scott College Albion College Alma College Amherst College Augustana College Bates College Beloit College Beloit College Bryn Mawr College Carleton College The Claremont Colleges Colgate University Connecticut College Davidson College Denison University Dickinson College Franklin & Marshall Grinnell College Hamilton College Haverford College Hope College Lawrence University Mount Holyoke College Oberlin College Randolph-Macon College Reed College Rollins College St. John's University/College of St. Benedict Simmons College Skidmore College Smith College Trinity University Vassar College Wellesley College Wesleyan University Wheaton College Whitman College Whittier College Whittier College Willamette University Williams College

Non-ARL Land Grant Libraries

Tuskegee University University of Arkansas, Fayetteville Florida A & M University University of Idaho Kansas State University North Dakota State University Oregon State University University of Rhode Island North Carolina A & T State University University of Wyoming

University Libraries Group-

American University Baylor University Carnegie Mellon University Catholic University of America College of William and Mary DePaul University Lehigh University Loyola University-Chicago Marquette University Miami University of Ohio Northeastern University Tufts University University of Denver University of Richmond Villanova University Wake Forest University Yeshiva University