



## **SURVEY RESULTS**



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## EXECUTIVE SUMMARY

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### Introduction

Increasingly, academic and research libraries are becoming involved in reformatting materials from their collections to create digital content and are providing access to that content through metadata. As the management of digital projects and initiatives is a relatively new endeavor for most libraries, there is a significant impact on libraries' budgets, organizational structures, and staffing.

Digitization activities require different models for funding, collection development (to provide broad access to otherwise inaccessible materials), acquisitions (the material being digitized is already part of the collection), cataloging (metadata standards may differ depending on the material being digitized), preservation (migration of formats between software platforms and file formats is critical), and systems office support (for a suite of software instead of just the integrated library system). Staff skill sets are different, as are supporting equipment and computer hardware and software.

This SPEC survey was designed to identify the purposes of ARL member libraries' digitization efforts, the organizational structures these libraries use to manage digital initiatives, whether and how staff have been reassigned to support digitization activities, where funding to sustain digital activities originated and how that funding is allocated, how priorities are determined, whether libraries are outsourcing any digitization work, and how the success of libraries' digital activities has been

assessed. The focus of the survey was on the digitization of existing library materials, rather than the creation of born-digital objects.

### Background on Digitization Activities

This survey was distributed to the 123 ARL member libraries in February 2006. Sixty-eight libraries (55%) responded to the survey, of which all but two (97%) reported having engaged in digitization activities. Only one respondent reported having begun digitization activities prior to 1992; five other pioneers followed in 1992. From 1994 through 1998 there was a steady increase in the number of libraries beginning digital initiatives; 30 joined the pioneers at the rate of three to six a year. There was a spike of activity at the turn of the millennium that reached a high in 2000, when nine libraries began digital projects. Subsequently, new start-ups have slowed, with only an additional one to five libraries beginning digitization activities each year.

The primary factor that influenced the start up of digitization activities was the availability of grant funding (39 responses or 59%). Other factors that influenced the commencement of these activities were the addition of new staff with related skills (50%), staff receiving training (44%), the decision to use digitization as a preservation option (42%), and the availability of gift monies (29%). An additional factor that motivated many survey respondents was the need to improve access to library resources. Others commented that participat-

ing in digitization activities was a strategic goal of the library.

In addition to being one of the instigating factors in many libraries' decision to begin digitizing library materials, improving access to the library's collection was cited by all of the respondents as an ongoing purpose behind these efforts. Other purposes that were highly ranked by respondents are support for research (85%), preservation (71%), and support for classroom teaching (70%). For a smaller number (24 or 36%), the purpose of their efforts is to support distance learning. Several respondents reported that promoting the library and its collections was also a reason to participate in digitization activity.

Only four libraries reported that their digitization activities are solely ongoing functions; the great majority (60 or 91%) reported that their digitization efforts are a combination of ongoing library functions and discrete, finite projects.

### Staffing

The survey asked whether staff efforts for selecting material, digitizing material, creating metadata, and administering digitization activities are centralized in one unit or distributed across the library. The majority of the responding libraries distribute some or all digitization activities across various library units; only five appear to have a totally centralized organizational structure. Material selection is distributed across the library organization at 50 of the responding institutions (76%) and centralized at 10 (15%); six respondents (9%) report both structures. Material digitization is decentralized at 37 institutions (57%), centralized at 20 (31%), and eight respondents (12%) report both structures. Metadata creation is distributed at 45 institutions (68%) and centralized at 12 (18%), while nine (14%) report both structures. Administration is more evenly divided, with 29 respondents (45%) indicating that it is centralized and 30 (46%) that it is distributed; six (9%) report both structures.

Centralized units that manage digitization activities are, in the majority of cases, specifically

designated digitization units with names such as "Digital Initiatives Program" or "Digital Library Center." In other cases, the centralized unit is the special collections library or department (13%), or the preservation department (9%). In most cases, the head of the centralized unit reports to a high-level library administrative officer such as an assistant or associate library director (38%), or reports directly to the library director (30%).

Survey respondents were asked to indicate the names of units in which specific digitization activities (material selection, material digitization, metadata creation, and administration) take place. The units with primary responsibility for material selection are, unsurprisingly, collection development and special collections. Material digitization occurs in preservation and special collections units, as well as in units designated specifically to support digital initiatives. Even in those libraries that have a unit designated to support digitization activities, material digitization often occurs in other units in addition to that unit. Metadata creation is also widely distributed, although cataloging, metadata, and technical services units were indicated by two-thirds of the respondents. Other units responsible for metadata creation are digitization, special collections, and other public services units. Surprisingly, the word *metadata* only appeared in five of the unit names reported. Administration is the most centralized of the functions and is the least likely to be distributed over a second or third unit. The digital library program was most often mentioned as the administrative unit, followed by archives / special collections, systems, preservation, and library administration.

Decisions about the allocation of staff support for digitization efforts are likewise widely distributed across the library. They are made most often by the heads of the centralized units (64%) or a digitization team, committee or working group (55%). Heads of cataloging, collection development officers, and bibliographers also share this responsibility at a number of libraries. In only two cases do the library business office staff have this responsibility.

In addition, respondents indicated that high-level library administrators and the heads of special collections and other units also help make these decisions (23 and 12 responses, respectively).

In order to address staffing needs for digitization activities, all of the responding libraries redefined some existing positions *to add responsibility for* digitization activities, primarily for selection (80%), but also for metadata creation (66%) and digitization (63%). More than half redefined existing positions *to be dedicated to* digitization and metadata creation. Seventy-seven percent also created new positions to be dedicated to digitization activities, most often for digitization (93%) and metadata creation (67%). Staff who select material for digitization and create metadata for the new items most often had their positions redefined to add this responsibility to their other duties. Digitization staff positions also were most often redefined, though a significant number were newly created (72%).

Survey respondents were asked to estimate the number and full-time equivalence (FTE) of librarians, other professionals, support staff, student assistants, and other staff who participate in digital activities. Forty-eight respondents reported a total of 277 staff who are involved in selecting material for digitization. Librarians make up the largest portion of that group (188 or 68%). The number of librarians per institution ranges from one to 14, but at the majority the number is three or fewer. Only 28 of the 188 librarians work full-time on digitization; the remainder spend only a small portion of their time on this activity. Support staff is the second largest category. Thirteen respondents reported a total of 36 support staff, ten of whom work full-time selecting material for digitization. The number ranges from one to six per institution, but the majority have three or fewer. Of the 22 other professionals involved in selection at 11 reporting institutions, three are full-time. One respondent has four staff in this category, but half of the remainder have only one. Only five respondents report using student assistants for selection and, not surprisingly, all of the 16 work part-time. One respondent

reported that faculty also make selection decisions, but that activity is a very small percentage of their time.

Of the 501 staff who reportedly digitize material, the largest categories are student assistants (256 or 51%) and support staff (110 or 22%). There are almost an equal number of librarians (67) and other professionals (60) who participate, too. Five libraries involve a few others, including interns, volunteers, and a programmer. Support staff are most likely to be employed full-time with digitizing material (43 or 39%). Only 16 librarians (24%) and 17 other professionals (28%) do this task full-time. Three libraries report a small number of full-time student assistants.

Survey respondents reported 327 staff who create metadata. These are most often librarians (124 or 38%) but there are also a large number of students who assist (103 or 32%). While the number of metadata librarians ranges from one to 13 per institution, at most libraries the number is one or two. The number of student assistants ranges from one to 16, but only a few have more than five. Only 23 librarians have this as a full-time responsibility; none of the students do. Twenty-seven respondents report a total of 70 support staff who also create metadata, 14 of them full-time. At 17 libraries other professionals create metadata, although only four of these 28 are full-time. Two libraries report using interns for this work, too.

## **Budget**

Slightly more than half of the respondents reported that they have no dedicated budget for digitization activities. Only 19 (30%) reported that there was a dedicated budget for both start-up and ongoing costs for digitization activities. Six (9.5%) reported a dedicated budget for start-up costs but not for ongoing costs. The 19 reported start-up budgets range fairly widely, from a minimum of \$5,000 to a maximum of over \$366,000 with a mean of \$97,027. The ongoing budgets vary even more widely, from a minimum of \$5,000 to a maximum of over \$1,000,000 with a mean of \$303,916.

The sources of funding for start-up costs are most often the library's budget (85%), grants (57%), and one-time supplemental funds (40%). Less than a third of the respondents received funds from gifts, the parent institution, or information technology units. A few respondents received income from fees, consortial money, and development funds. Sources of funding for ongoing costs for digitization activities are mostly the library's budget (97%), grants (49%), and gifts (33%). Less than a quarter of respondents receive support from one-time supplemental funds, the parent institution, or information technology units. Some receive income from contract scanning, from hosting journals, and other fee-based services. As digitization activities move from start-up to ongoing status they increasingly rely on the library's permanent budgets, gifts, and information technology funds. Another noteworthy trend is the reliance on fee-based service income to support ongoing costs for digitization efforts.

Budget allocations for digitization activities differ somewhat from start-up to ongoing operations, as is to be expected. Hardware and software acquisition and staff are the major expenses during start-up, followed by vendor fees. Ongoing operations shift a higher percentage of their budgets to staffing and benefits, vendor fees, and hardware and software maintenance; they decrease the percentage for hardware and software acquisition. Only a few respondents expend any funds on promotion or assessment of digitization activities and then only a small amount.

The survey asked how operational costs are covered when there is not a dedicated budget for digitization activities. Most of the respondents reported that all or part of the expenses are absorbed by the library's operations budget; several also rely on gifts and grants. One respondent replied, "Creatively." Some libraries allocate and manage funds on a project-by-project basis. Funds are distributed through unit budgets. This is to be expected as the majority of responding libraries' digitization activities are managed in a distributed fashion,

and as was noted above, much of the ongoing costs are staffing and benefits.

Over the past five years, the majority of respondents have seen expenditures for staff, hardware, software, and vendor fees increase. Expenditures for hardware and software maintenance, promotion, and assessment have remained more level. Only a few report any decrease in expenditures in any category.

### **Material Selection**

A wide variety of materials are being selected for digitization. The most popular include still images and photographs, archival material, manuscripts, rare books, monographs (complete volumes), audio recordings, and moving images and videos. Fewer than half, but still a substantial number, of the respondents digitize parts of monographs, complete issues of journals, and journal articles. Other materials selected for digitization range from art works to university photographs and include maps, newspapers, 3D objects, slides, prints, and theses and dissertations. It is noteworthy that the materials most likely to be digitized (still images and photographs, archival materials, manuscripts, and rare books) are those for which access would be extremely limited without digitization.

An item's subject matter is the top criterion for selection for digitization, followed closely by whether it is part of a collection that's being digitized, and its rarity or uniqueness. Items that fit the criteria of a cooperative digitization project, or are in suitable physical condition or format are also likely candidates. Other respondents select items based on requests from users, faculty or student needs, a high demand for or use of the material, or its research value, among other criteria.

### **Material Digitization**

Sixty percent of respondents reported that they outsource some or all parts of digitization production work. A wide variety of vendors were identified, including OCLC Preservation Services, TechBooks, Apex CoVantage, Backstage Library Works, and

iArchives, along with 31 others. The high number of vendors likely indicates that the widely dispersed survey respondents are using local vendors.

### **Metadata Creation**

The most widely used metadata standards in digitization projects are Dublin Core (92%), MARC (84%), XML (75%), and EAD (69%). Fewer than half of the respondents, but still a substantial number, use TEI (45%), METS (38%), VRA Core (31%), and MODS (25%); 25% report using a range of other standards.

### **Assessment**

How libraries evaluate the success of their digitization efforts varies according to whether they are assessing material selection, material digitization, or metadata creation. Material selection is most often assessed through user feedback, testing, and surveys, but also through usage data. Material digitization is most often assessed through quality control inspections, but also through user surveys and

feedback, and usage statistics. Benchmarking, best practices, and meeting project deadlines also serve as assessment tools to assess material digitization. Metadata creation is most often evaluated based on quality assurance reviews and inspections. Best practices and user surveys and feedback are also used.

### **Conclusion**

Comments throughout the survey indicate that many libraries are in a period of transition as they attempt to determine the best organization, staffing, and budgeting models for their particular digitization operations. Small-scale operations are ramping up for more substantial activity. Collaborative projects are common. Digitization activities increase the availability and access to information for everyone, not just an institution's local users. As libraries continue to pursue digitization activities, it's important to share what is learned in order to benefit from each other's experiences and develop a collective knowledge of best practices.





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## SURVEY QUESTIONS AND RESPONSES

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The SPEC survey on Managing Digitization Activities was designed by Rebecca Mugridge, Head of Cataloging Services, Pennsylvania State University. These results are based on data submitted by 68 of the 123 ARL member libraries (55%) by the deadline of March 20, 2006. The survey's introductory text and questions are reproduced below, followed by the response data and selected comments from the respondents.

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Increasingly, academic and research libraries are becoming involved in both reformatting materials from their collections to create digital content and also providing access to that content through metadata. As these digitization efforts grow and mature, they have a significant impact on libraries' budgets, organizational structures, and staffing. Funding needs must be determined and strategies realized, regardless of whether that funding comes from the library, parent institution, a funding agency, or a donor. Work that crosses organizational boundaries and requires a high level of cooperation and collaboration must be integrated into already established organizational structures and workflows. And, because the nature of the work related to digitization efforts is similar to but different from that of traditional library activities, staff need to be reassigned and retrained.

Digitization activities require different models for funding, collection development (to provide broad access to otherwise inaccessible materials), acquisitions (the material being digitized is already part of the collection), cataloging (metadata standards may differ depending on the material being digitized), preservation (migration of formats between software platforms and file formats is critical), and systems office support (for a suite of software instead of just the integrated library system).

During the current economic climate of budgetary challenges, it is important for libraries to manage their activities in the most effective way possible. This survey is intended to address the budgetary and organizational impact of libraries' participation in digitization efforts, particularly those related to the reformatting of library or archival material, rather than the development of "born digital" items.

In an effort to better understand how libraries manage their digitization budgeting processes and organizational structures, this survey will explore:

- The purposes of libraries' digitization efforts.
- Where the funding comes from to support those efforts.
- What percentage of the budget is spent on materials, operations, staff, equipment, software, etc.
- How academic and research libraries are organized to manage digitization activities and create metadata.
- How funding, staffing, material selection, and other priorities are determined and monitored.
- Whether staff are full-time or part-time and how many are dedicated to selection, cataloging, scanning, etc.
- Whether libraries are outsourcing to vendors or doing the work in-house.

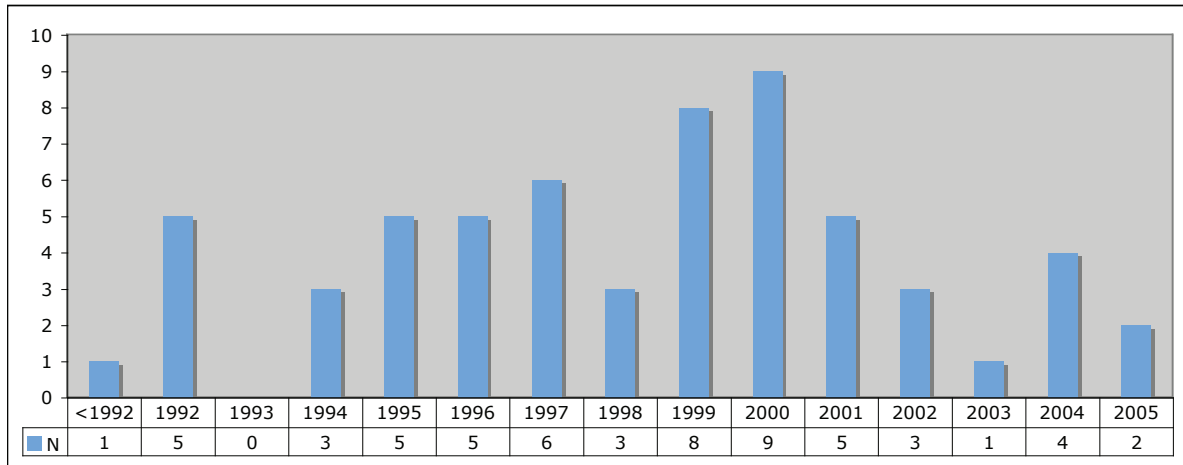
This assessment of current library practices may help libraries improve their procedures, as well as inform decision making for future digitization projects.

## BACKGROUND

1. Is your library engaged in activities to select, digitize, and create metadata for materials from the library's collections? N=68

<b>Yes</b>	66	97%	Please complete the survey.
<b>No</b>	2	3%	Please submit the survey now.

If yes, in which year did these activities begin? N=60



2. What driving factor(s) influenced the initiation of these digitization activities? Check all that apply. N=66

Grant funding became available	39	59%
Staff with digitization skills joined the organization	33	50%
Staff received digitization training	29	44%
Digitization was chosen as a preservation option	28	42%
Gift money became available	19	29%
Other factor	41	62%

**Please describe the other factor.**

- "Access to special and unique materials identified as important."
- "Access to unique resources."
- "Advent of statewide projects."
- "Awards by the library to faculty to create digital scholarly works."
- "Chancellor requested executive documents be digitized; demand for e-reserves."
- "Commitment to be early adopter of this aspect of cooperative collection development and preservation."
- "Desire to contribute the unique strengths of the collections and staff to the national digital library effort."
- "Desire to do Web site on particular topic and having a library school student with scanning and Web skills."
- "Desire to enhance access to library content."
- "Desire to make an archive collection more widely available."
- "Desire to make collections more accessible via the Internet."
- "Digital library development became a strategic goal for the library."
- "Digital presentations became imperative."
- "Digitization was a byproduct of other preservation activities."
- "Digitization was an optimal means of delivery content internationally."
- "Digitization was chosen as a means of improving access."
- "Digitization was chosen as an access option to make content more accessible to users on the Web."
- "Digitization was chosen as an access tool."
- "Increasing access to highly sought materials."
- "Interest in increasing access."
- "Interest in providing broader awareness and use of library collections by presenting/disseminating assets in digital format over the Web."
- "Library organization concluded an agreement with the graduate school on an electronic theses and dissertations program. Occurred within nine months of the first digitization grant award in 1999."
- "Making Special Collections materials accessible and the development of finding aids (EAD)."
- "Management decision based on strategic direction for the library."
- "Opportunity to partner with other ARL institutions to test the viability of digital technologies for library collections."
- "Policy decision to create program to pursue digitization for both access and preservation."

- "Preservation technology changing, online exhibitions, R&D, administrative decision."
- "Provide our users with better and easier access to some collections."
- "Requests for digital information."
- "Response to consultant's report."
- "Revised library mission and strategic planning statement."
- "Substantial digital collections were created through grant funding in the 1990s. After a hiatus of several years, in 2004 the creation of an in-house digitization facility was identified as being an important component of a 'digital library'."
- "The libraries wanted to initiate a digitization program and sought out funding opportunities for specific digitization projects."
- "To improve and promote user access."
- "To make library resources more accessible to users."
- "To provide improved public access."
- "User preference of online materials"
- "Vision of Deputy Librarian who supplied resources; staff learned digitization skills."
- "Wanted to develop skills in this area."
- "We assigned digitization a high priority, part of our library's mission."
- "We benefit from our consortium's digital collection processing center."

**3. What is/has been the purpose of these digitization efforts? Check all that apply. N=66**

Improved access to library collections	66	100%
Support for research	56	85%
Preservation	47	71%
Support for classroom teaching	46	70%
Support for distance learning	24	36%
Other purpose	16	24%

**Please explain the other purpose.**

"Collection building."

"Easy online access to materials."

"E-commerce."

"Efforts are currently limited to digitization of library-held materials with improved access as the primary goal, however, the Digital Production Center has completed two grant-funded fee-based digitization projects weighed more heavily toward support for classroom teaching and/or specific research."

"Explore new technologies & issues in building digital collections."

"Increase the dissemination of scholarly communications."

"Institutional & library promotion and development."

"Interest from and appeal to alumni."

"Online exhibits."

"Partnerships, collaboration, knowledge sharing."

"Preservation of the original material through reduced handling of the items."

"Public relations—exposure of collections to Web users."

"Representation of Special and Area Studies Collections."

"Service to users."

"Support library fundraising/development activities."

"Web Access."

**4. Are digitization activities managed as discrete, finite projects or as ongoing library functions?  
N=66**

Finite projects	0	—
Ongoing functions	4	6%
Some of both	60	91%
Other arrangement	2	3%

**Please explain the other arrangement.**

"Project not completed. Feasibility study only done thus far."

"We have done a few discrete projects and are doing a larger one with Internet Archive, but also intend to generally move to ongoing functions. We also have a very large e-Reserve system that does regularized digitization."

## STAFFING

5. In the table below, please indicate whether any of the staff who participate in and administer digitization efforts are centralized in one unit or distributed across the library organization. Check all that apply. N=66

	N	Centralized N=37	Distributed N=57	Both N=16
Material selection	66	10	50	6
Material digitization	65	20	37	8
Metadata creation	66	12	45	9
Administration	65	29	30	6

6. If there is a centralized unit for any or all of these activities, please indicate the following: Name of the unit; Title of the head of the unit; Title of the position to whom the unit head reports. N=47

Name of Unit	Title of Unit Head	Unit Head Reports To
Archives and Special Collections	Acting Head, Archives and Special Collections/Assistant Professor/Archivist	Associate Dean for Learning
Center for Digital Initiatives	Head, Digital Services	Associate University Librarian
Digital and Multimedia Center	Assistant Director for Information Technology	Director of Libraries
Digital Collections Program	Director	Curator-in-Chief, Rare Books Division
Digital Consulting and Production Services	Associate Director for Digital Library and Information Technologies	Associate University Librarian for Digital Library and Information Technologies
Digital Initiatives Lab	Digital Initiatives Lab Manager	Digital Initiatives Program Manager
Digital Initiatives	Assistant Dean for Scholarly Communication	Dean of Libraries
Digital Initiatives	Digital Initiatives Coordinator	Dean of Libraries
Digital Initiatives Program	AUL for Technical Services and Technology	University Librarian
Digital Library Center	Director, Digital Library Center	Associate Director for Technology Services
Digital Library Development Services	Director, Digital Library Development	Deputy University Librarian

Digital Library Initiatives	IT Manager	Director, Library Computing & Media Services
Digital Library of Georgia	Director, Digital Library of Georgia	University Librarian and Associate Provost
Digital Library Production Service	Head, DLPS	Associate University Librarian
Digital Library Production Services (DLPS)	Head	Director, Content Management Services
Digital Library Program	Head	Associate University Librarian for the Electronic Library
Digital Library Program	Digital Library Head	Executive Director of ITS.edu Services and Director, Digital Library Program
Digital Library Program Office	Digital Library Program Manager	AUL, Technology and Technical Services
Digital Library Services	Coordinator for Digital Initiatives	Associate University Librarian and Director of Collections and Content Development
Digital Production Center	Manager	Director of Collections Services
Digital Programs	Head of Digital Programs	Director, Preservation and Digital Programs
Digital Services & Development Unit	Head	Associate University Librarian for Information Technology Policy & Planning
Digital Services Department	Head of Digital Services	Associate Dean for Research and Access
Digital Technologies	Head of Digital Technologies	Head of Information Technology
Digitizing and Copying Center	Web and Digital Initiatives Coordinator	Director of Technical Services
Educational Technology Center	Director, Educational Technology Center	Associate Vice President for University Libraries
e-Reserves	Head, Reserve, Media, and Annex Services	Head of Information Resources
Library Digital Programs	Associate Director for Library Digital Programs	Dean of University Libraries
Library Systems	Head, Library Systems	Assistant Director, Library Systems and Facilities
Library Systems and Digital Library Programs	Director	University Librarian

Materials digitization performed in the Preservation Department; metadata creation performed in Cataloging Department	Judith O. Sieg Chair for Preservation; Head, Cataloging Services	Dean, University Libraries and Scholarly Communications; Assistant Dean for Technical and Collections Services
Metadata Services Unit	Metadata Coordinator	Associate Dean for Collections Services
New Media Office and Preservation Services	Head	Assistant Director for Digital Library and Systems
Office of Strategic Initiatives (OSI) and Library Services (LS)	Associate Librarian for Strategic Initiatives, and AL for Library Services	Librarian of Congress
Preservation	Preservation Librarian	Head, Collection Development and Preservation
Preservation and Imaging Services	Team Leader	Director, Sound and Images Division
Preservation Department	Head of Preservation	Deputy Director
Preservation Department	Head, Preservation Department	Assistant Director for Library Collections
Preservation Team (centralized as of November 2005)	Preservation Librarian	Director, Collections Services
Recherche et développements numériques	Chef de section, recherche et développements numériques	Directeur des services de développement et de support
Special Collections	Head of Special Collections	Head of Public Services
Special Collections	Curator	Associate Dean
Special Collections	Associate Dean for Collections, Preservation and Digital Initiatives	Dean, University Libraries
Special Collections	Head, Special Collections	Associate Director for User Services
University Archives	University Archivist	University Librarian
University Libraries Systems Department	Director of Library Technology	Dean of Libraries
Within Library Administration	Assistant to the Director of Libraries	Director of Libraries



7. If any of the staff who participate in these activities are distributed across the organization, please indicate in which unit(s) (e.g., collection development, cataloging, systems, etc.) the staff who has responsibility for each digitization function resides. List up to three units for each function, if applicable. N=59

	N	Unit 1 N=58	Unit 2 N=54	Unit 3 N=44
Material selection	58	58	42	27
Material digitization	54	54	40	24
Metadata creation	57	57	46	25
Administration	53	53	37	17

### Material Selection

Unit 1	Unit 2	Unit 3
Administration	Special Collections library	Information Technology unit
Archives	AV Archives	Oral History
Archives and Special Collections	Architecture and Fine Arts Library	
Archives and Special Collections	Collection Development	Digital Initiatives
Archives and Special Collections	Collection Development librarians	Faculty
Archives and Special Collections		
Archives/Special Collections		
Branch libraries		
Collection Development	Archives	
Collection Development	Digital Library Initiative	
Collection Development	E-Scholarship	
Collection Development	Faculty & graduate students	Special Collections and Archives
Collection Development	Preservation	
Collection Development	Special & Area Studies Collections	Digital Library Center (content for technology development projects only)
Collection Development	Special Collections	
Collection Development	Special Collections	
Collection Development	Special Collections	Preservation
Collection Development	Special Collections	Reference
Collection Development	Special Collections	Subject librarians
Collection Development		

Collection Development		
Collection Development in Special Collections	Special Collections	Faculty
Collection Management	Special Collections	Design Library
Collections librarians	Head, Special Collections & Archives	Head, Information Resources
Custodial divisions		
Digital Library of Georgia		
DISC/CDRH: Digital Initiatives & Special Collections/Center for Digital Research in the Humanities	ABS: Access & Branch Services	Scholarly Communication
Humanities & Social Sciences Services	Science Libraries	Arts Cluster (Fine Arts, Music, Media)
Individual libraries select material		
MASC	Systems	Humanities/Social Sciences Reference
Preservation	Collection Development	
Public Services		
Reader Services		
Regional history/Special Collections	Map Collection	
Research and Educational Services	Collections Services	
Scholarly Resources		
Selectors, archivists, public services staff, faculty, etc.		
SPE	Preservation	
Special Collections	Agricultural Resource Economics Library	
Special Collections	Collection Development	Administrative Council
Special Collections	Cuban Heritage Collection	Faculty in Schools
Special Collections	Digital Library Program	
Special Collections	Electronic Reserves	ILL/Document Delivery
Special Collections	Fine Arts and Humanities	Social Sciences
Special Collections	Government Documents	
Special Collections	Government Pubs, Maps, and Law	Research Services
Special Collections	Instructional Support Services	Research Requests
Special Collections	Preservation	Collection Development
Special Collections	University Archives	Collection Access and Management
Special Collections	Various subject libraries	
Special Collections		

Special Collections		
Special Collections		
Special Collections		
Systems	Cataloging	Special Collections
Turfgrass Information Center	Special Collections	Africana
User demand of Archives/Photo Services and Special Collections	Collections and Technical Services Coordinating Council	Donors
Western History Collections	History of Science Collections	Collection Development

### Material Digitization

Unit 1	Unit 2	Unit 3
Archives	Collection Development outsource	
Archives and Special Collections	Architecture and Fine Arts Library	External vendors
Archives and Special Collections	Collection Development	Digital Initiatives
Archives and Special Collections		
Archives/Special Collections	Library Technology	
Branch libraries		
Digital Library Center	Health Science Center Archives	Special & Area Studies Collections
Digital Library Initiative		
Digital Library of Georgia		
Digital Library Program	Preservation	Special Collections
Digital Library Program	Preservation Imaging	External vendors
Digital Media Group		
Digital Production Center		
Digital Programs	AV Archives	
Digital Services	Scholarly Resources	
Digital Services	Some subject libraries	
Digital Services	Special Collections	
Digital Technologies	Special Collections	
Digitizing and Copying Center	History of Science Collections	Outsource
DISC/CDRH	ABS	Scholarly Communication
DLPS	Fine Arts	Rare Materials Digital Services (RMDS)
DLPS		
Educational technology center	Archives	Central IT media unit

e-Reserves assistants	Special Collections Associates	Outsource—Internet Archives
Imaging Lab		
Individual libraries (depends on project)	Library administration (depends on project)	
Information Technology unit		
Instructional Support Services	Special Collections	
ITS Scan Center	Prints & Photographs/Geography and Map	Contractors
Library Digital Programs	Special Collections	Access Services
MASC	Systems	Humanities/Social Sciences Reference
Photo Services/Digitization Lab	Donor funded lab/Advancement	Systems
Photographs, pamphlets, rare books, newspapers, manuscript collections	Photographs, manuscript collections	Slides, images in books
Preservation	Digital Library Initiatives	
Preservation	Special Collections	Information Arcade/Commons
Preservation	Special Collections	
Preservation		
Preservation		
Public Services		
Regional History/Special Collections	Map Collection	
SPE	Preservation	Systems
Special Collections	Digital Media Lab	Design Library
Special Collections	Electronic reserves	ILL/Document Delivery
Special Collections	Government Documents	
Special Collections	Preservation	Systems Department
Special Collections	Preservation	
Special Collections	Systems	
Special Collections	University Archives	Collection Access and Management
Special Collections		
Special Collections		
Systems	Cataloging	Special Collections
Systems	Document Delivery	
Systems	E-Scholarship	Media
Systems	Library Technology Centers	Special Collections & Archives

## Metadata Creation

Unit 1	Unit 2	Unit 3
Archives and Special Collections	Architecture and Fine Arts Library	Bibliographic Control
Archives and Special Collections	Collection Development	Digital Initiatives
Archives/Special Collections	Library technical services	
Bibliographic Services	Administration	
Branch libraries		
Catalog Department	Digital Library Center	University Archives
Catalog Services Division		
Cataloging	Digital services	Subject libraries
Cataloging	DLPS	Other archives and libraries on campus
Cataloging	Educational technology center	
Cataloging	Fine Arts	Digital Research and Instructional Services (DRIS)
Cataloging	Imaging Lab	Special Collections
Cataloging	Special Collections	
Cataloging	Special Collections and Archives/ Photo Services	Systems
Cataloging	Systems	Special Collections & Archives
Cataloging and Metadata Center	Digital Library Program	
Cataloging divisions	Custodial divisions	
Digital Library Initiatives		
Digital Library of Georgia		
Digital Library Program	Cataloging	Special Collections
Digital Programs	AV Archives	
Digital Services	Cataloging	Special Collections
Digital Services	Technical Services	Scholarly Resources
Digital Technologies	Cataloging	Special Collections
Digitizing and Copying Center	Western History Collections	Cataloging
e-Reserves assistants	Special Collections Associates	Outsource—Internet Archives
Finding aids	Finding aids	Dublin Core descriptions
Individual libraries (depends on project)	Cataloging (depends on project)	
Information Management and Systems Services		

IT/Data Services	Digital Production Center	
MASC	Systems	Humanities/Social Sciences Reference
Metadata Group		
Metadata Unit	Collection Development	
Monographs Department	Special Collections	Preservation Department
Preservation	Special Collections	Cataloging
Preservation		
Public Services	Metadata Services Department	IT Department
Regional History/Special Collections	Map Collection	
SPE	Cataloging	
Special Collections	Cataloging	
Special Collections	Electronic reserves	ILL/Document Delivery
Special Collections	Government Documents	
Special Collections	Metadata & Cataloging	Design Library
Special Collections	Technical services	
Special Collections	University Archives	Collection Access and Management
Special Collections		
Special Collections		
Systems	Cataloging	Media
Systems	Cataloging	
Technical Services	Archives	
Technical Services	Collection Development Librarians	
Technical Services	Digital Library Initiative	
Technical Services	DISC/CDRH	ABS
Technical Services	Preservation	
Technical Services	Special Collections	
Technical Services		
Technical Services/Cataloging		

### Administration

Unit 1	Unit 2	Unit 3
Administration	Information technology unit	
Advancement	Archives/Photo Services	Library Administration
Archives	Information Resources	Technical Services

Archives and Special Collections	Architecture and Fine Arts Library	Library Electronics Technology and Services (LETS)
Archives and Special Collections	Collection Development	Digital Initiatives
Archives and Special Collections		
Archives/Special Collections	Library Technology	
Branch libraries		
Collections & User Services	Systems & Technical Services	
Digital Consulting and Production Services		
Digital Library Center		
Digital Library of Georgia		
Digital Library Program	Special Collections	
Digital Library Program		
Digital Library Program Office		
Digital Programs		
Digital Services	Special Collections	
Digital Services		
Digital Services	Systems office	
Digital Technologies		
Digitizing and Copying Center	Dean's Office	History of Science Collections
DISC/CDRH	TS	ABS
DLPS	Library Administration	
Head, e-Reserves	Head, Special Collections & Archives	Head, Information Services
Information Systems & Support	Collections Services	
Information Systems	Special Collections	Technical Services
Information Technology Management Team	Systems	Special Collections & Archives
Instructional Support Services	Special Collections	
Library Administration	Special Collections	Design Library
Library Administration		
Library Administration		
Library Computing & Media Services		
Library Digital Programs	Special Collections	
OSI	LS	
Preservation	Digital Library Initiatives	

Preservation	Information Commons Production Service	
Preservation	Information Technology Services	
Preservation	Special Collections	Digital Library Development Center
Preservation		
Production & Technology Services	User Services	
Special Collections	Dean's Office/Library Administration	
Special Collections	Electronic reserves	ILL/Document Delivery
Special Collections	Government Documents	Systems
Special Collections	Library IT services	OUL
Special Collections	Preservation	
Special Collections	Systems	
Special Collections	Technical Services	
Special Collections	University Archives	Collection Access and Management
Systems	Reference	Collection Services
Systems	Technical Services	
Systems		
Systems		
University Library Administration	Preservation Department	I-Tech Department

**8. Who makes decisions about the allocation of staff support for digitization efforts? Check all that apply. N=66**

Head of centralized unit	42	64%
Digitization team/committee/working group	36	55%
Head of cataloging	14	21%
Collection development officer	9	14%
Bibliographer/selector	6	9%
Library business office staff	2	3%
Other person	41	62%

**Please specify the other person category.**

Assistant/Associate/Deputy Dean/Director (9 responses)



- Library administration (8)
- Library Dean/Director (6)
- Heads of units involved in digitization (5)
- Head of Special Collections (4)
- Branch library directors (3)
- University Archivist (2)
- Head of Collection Access (1)
- Head of Instructional Support Services (1)
- Manager, Electronic Technology and Services (1)
- Production & Technology Management Team (1)

9. How many staff participate in digitization efforts? Please indicate the number of individuals and total FTE for each applicable category of staff below. N=53

**Material Selection**

	Librarian	Other Professional	Support Staff	Student Assistant	Other Staff
Total Staff	188	22	36	16	15
Total FTE	67.55	8.95	13.78	3.48	.50

Number of Individuals N=48	Librarian N=45	Other Professional N=11	Support Staff N=13	Student Assistant N=5	Other Staff N=1
1	9	5	5	1	—
2	8	2	2	1	—
3	8	3	2	1	—
4	6	1	—	—	—
5	4	—	3	2	—
6	—	—	1	—	—
7	1	—	—	—	—
>7	9	—	—	—	1
Minimum	1.00	1.00	1.00	1.00	15.00
Maximum	14.00	4.00	6.00	5.00	15.00
Mean	4.18	2.00	2.77	3.20	15.00
Median	3.00	2.00	2.00	3.00	15.00
Std Dev	3.28	1.10	1.88	1.79	—

FTE N=47	Librarian N=44	Other Professional N=11	Support Staff N=13	Student Assistant N=5	Other Staff N=1
<.25	16	2	6	2	—
.25-.49	4	2	1	1	—
.50-.74	3	2	2	—	1
.75-.99	2	—	1	—	—
1.00	6	4	1	1	—
1.01-1.99	4	0	0	0	—
2-3	5	4	—	1	—
>3	4	—	2	—	—
Minimum	.01	.05	.05	.10	.50
Maximum	20.00	3.00	5.00	2.00	.50
Mean	1.54	.81	1.06	.70	.50
Median	.50	.65	.25	.25	.50
Std Dev	3.23	.81	1.77	.82	—

Other staff: faculty

### Material Digitization

	Librarian	Other Professional	Support Staff	Student Assistant	Other Staff
Total Staff	67	60	110	256	8
Total FTE	27.20	37.75	72.05	82.35	2.20

Number of Individuals N=53	Librarian N=31	Other Professional N=25	Support Staff N=38	Student Assistant N=38	Other Staff N=5
1	12	16	15	7	2
2	9	4	7	4	3
3	4	1	5	3	—
4	5	2	2	8	—
5	1	—	3	5	—
6	—	1	2	2	—
7	—	—	1	1	—
>7	—	1	3	8	—
Minimum	1.00	1.00	1.00	1.00	1.00
Maximum	5.00	18.00	8.00	45.00	2.00
Mean	2.16	2.40	2.89	6.74	1.60
Median	2.00	1.00	2.00	4.00	2.00
Std Dev	1.21	3.50	2.26	9.03	.55

FTE N=51	Librarian N=30	Other Professional N=25	Support Staff N=37	Student Assistant N=37	Other Staff N=4
<.25	7	5	3	3	1
.25-.49	5	2	6	3	1
.50-.74	3	2	5	6	—
.75-.99	1	—	—	2	1
1.00	6	9	5	8	1
1.01-1.99	3	2	3	2	—
2-3	4	2	7	7	—
>3	1	3	9	6	—
Minimum	.05	.05	.05	.05	.20
Maximum	4.00	9.00	8.00	2.00	1.00
Mean	.91	1.51	1.95	2.23	.55
Median	.73	1.00	1.00	1.00	.50
Std Dev	.89	2.04	2.09	3.73	.39

Other staff: volunteers (2), interns, programmer, outsourced

#### Metadata Creation

	Librarian	Other Professional	Support Staff	Student Assistant	Other Staff
Total Staff	124	28	70	103	2
Total FTE	51.60	13.05	28.93	24.15	.75

Number of Individuals N=52	Librarian N=48	Other Professional N=17	Support Staff N=27	Student Assistant N=24	Other Staff N=2
1	20	12	10	4	2
2	11	2	5	4	—
3	6	1	3	3	—
4	3	1	2	4	—
5	5	1	3	5	—
6	1	—	3	1	—
7	—	—	—	—	—
>7	2	—	—	3	—
Minimum	1.00	1.00	1.00	1.00	1.00
Maximum	13.00	5.00	6.00	16.00	1.00
Mean	2.58	1.65	2.69	4.29	1.00
Median	2.00	1.00	2.00	4.00	1.00
Std Dev	2.26	1.22	1.83	3.41	—

FTE N=51	Librarian N=46	Other Professional N=17	Support Staff N=26	Student Assistant N=22	Other Staff N=2
<.25	10	5	5	6	—
.25-.49	7	—	4	3	1
.50-.74	3	4	5	3	1
.75-.99	4	1	—	—	—
1.00	11	4	4	4	—
1.01-1.99	3	1	4	2	—
2-3	4	2	2	3	—
>3	5	—	2	1	—
Minimum	.05	.05	.10	.05	.25
Maximum	6.00	2.25	5.00	8.00	.50
Mean	1.12	.77	1.11	1.10	.38
Median	.85	.50	.53	.55	.38
Std Dev	1.29	.65	1.27	1.67	.18

Other staff: interns

10. When staff were reassigned to digitization efforts, how were positions created? Check all that apply. N=60

	N	Selection N=52	Digitization N=60	Metadata N=57
Redefined existing position(s) to add responsibility for this activity	60	48	38	40
Created new position(s) to be dedicated to this activity	46	9	43	31
Redefined existing position(s) to be dedicated to this activity	31	5	24	20

### Selected Comments from Respondents

"No staff have been permanently re-assigned to these activities."

"New positions are sometimes temporary or project-based."

"Initially, a Digital Collections Librarian (1 FTE) position and a Metadata Librarian (1 FTE) position were created. Those positions have since been redefined as a Digital Reformatting Librarian (1 FTE) and a Catalog & Metadata Services Team Leader (1 FTE). In addition, a Preservation Librarian (1 FTE) position was renewed,

after having been vacant for 10 years, and was redefined as having significant oversight of the libraries' digitization program."

"Selection is a shared activity depending on the nature of the project. Includes selectors, reference librarians, archivists, faculty, and other subject specialists."

"Subject librarians and other members of the Digital Collections Council have added materials selection to their duties. Two new FTEs for digitization were created in 2004–05. One existing position (programmer) has been redefined as 1/2 metadata analyst and 1/2 programmer."

"Again, all efforts are currently out of existing lines. We are actively evaluating the creation of a digital services group that will redefine, reallocate, and create entirely new lines."

"Existing positions have been able to take on more digitization activities because as material becomes accessible over the Web, circulation and reference activities for this material are reduced."

"Have added grant-funded positions for scanning techs in the past."

"As mentioned in previous question, we have 0.5 librarian dedicated to coordinating digitization projects and for managing the digital objects management system. This is a new position created in 2004."

"Librarians and staff work on digital projects as add-ons to existing responsibilities. Student Assistant (Timeslip) positions have been created to support projects, are normally paid out of a project's funds."

"Contract position using development as well as library funds."

"Positions were created in different ways depending on the library unit involved."

## BUDGET

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11. Was/is there a dedicated budget for start-up costs and/or ongoing costs for digitization activities? Check all that apply. N=63

	Start-up Costs	Ongoing Costs
Yes	25	25
No	33	30

Start-up Costs	Ongoing Costs	N	%
Yes	Yes	19	30
Yes	No	6	9.5
No	Yes	6	9.5
No	No	32	51

### Start-up Budget N=19

Minimum	Maximum	Mean	Median	Std Dev
\$5,000	\$366,989	\$97,027	\$90,000	82,663

Budget	N
<\$25,000	3
\$25,000–49,999	3
\$50,000–74,999	2
\$75,000–99,999	2
\$100,000–124,999	2
\$125,000–149,999	4
>\$150,000	3

### Ongoing Budget N=19

Minimum	Maximum	Mean	Median	Std Dev
\$5,000	\$1,130,000	\$303,916	\$150,000	300,402

Budget	N
<\$25,000	2
\$25,000–49,999	0
\$50,000–74,999	3
\$75,000–99,999	2
\$100,000–124,999	2
\$125,000–149,999	0
\$150,000	1
\$300,000–499,999	5
\$500,000–699,999	2
>\$700,000	2

### Selected Comments from Respondents

"\$67,500 of start-up costs was for a camera. Ongoing costs are based on FY2006 data."

"At the moment, cost is included with the current library operational budget and is not tracked separately."

"Figures above are primarily for equipment and vendor services. There are additional ongoing expenditures for staff and benefits that are not included in the above figure. Start-up funds were contributed at different times."

"Since 1999, the libraries' Collection Development budget has included \$15,000 per annum for local digitization efforts."

"This amount does not include costs involved in selection, metadata creation, and system development/management. It only reflects digitization and some Web development expenses."

"The Digital Production Center's start-up costs in 2004–05 covered new equipment purchases and physical renovations. Ongoing costs cover computers and scanners and related tools (lenses, light tables, etc.) Salaries and benefits are not represented in these figures."

"No special budgets. It comes from operating wherever possible. Again, this needs to change."

"These are the personnel lines for FY06. They only include DLG and not the systems personnel involved in making the content available. A large part of this support is central funding through the Board of Regents for GALILEO, Georgia's virtual library."

"Start-up is easier to estimate, as it was equipment, etc. Ongoing is my best guess at staffing cost in e-reserves that do the digitization, as opposed to other reserve processing, like copyright clearances, paper reserve, etc. The digitization is not broken out, or dedicated."

"There is an annual \$10,000 within the acquisitions budget for on-going digital services."

"Our Roots project is granted by Canadian Culture Online (cooperative digitization project). Érudit project is financed by hosted journals, and our etd project is financed in-house. Start up costs for Érudit were around 1 million (CN \$) a few years ago. We did not mention start-up costs for projects realized in collaboration with other universities (e.g., Érudit with Université de Montréal, Early Canadiana Online with University of Toronto)."

"DCP has never had an annual operating budget. Funds are generated through grants and scanning/consulting revenues. A gift in 2001 prorated over 5 years has funded one FTE position. The same gift has been the source for capital equipment purchases. Regardless, DCP has operated in a deficit financing mode for a number of years."

"Annual budgets are crafted from grants."

"Funding for start-up costs are received through grants or special one-time funding. There is a technology budget and a varying portion of that budget is used for the ongoing purchase, maintenance, and support of hardware and software."

"The digitization is project-based, including some very major projects. Projects tend to overlap so that expertise on selection, digitization standards, and metadata standards and creation are retained."

"As we have only recently started on digitization projects, and are budgeting mostly by projects, it is difficult to assess ongoing cost apart from the salary of the 0.5 FTE librarian who works on the project, which is approximately \$32,000 CAN including benefits."

"Use a variety of funding sources to cover digitization efforts."

"The ongoing costs change depending on grants and gifts."

"Materials and supplies budget was created, but most funding has come from grants and from contract

scanning work.”

“Start-up funds were obtained through the Washington State Library’s/LSTA Digital Imaging Initiative. State Library/LSTA funding was obtained for the following two years. These three years laid the foundation for our digitization efforts. The second and third grants (both, map digitization) had major preservation components.”

“Our start up was funded by grant money.”

“Received two one-time funding approvals to provide digitized content for experimentation (\$85,000 x 2 years).”

“There were budgets for some aspects and not for others, depending on the unit. Some units cannot remember their initial start up costs as they were given a long time ago.”

12. What was/is the source of the funds for digitization activities? Check all that apply. N=65

	N	Start-up Costs N=60	Ongoing Costs N=61
Library	61	51	59
Grant	45	34	30
One-time supplemental funds	28	24	13
Gift	27	17	20
Parent institution	18	15	10
Information Technology	16	12	13
Other source	14	8	10

Please describe the other source of funds.

**Start-up**

“Initial positions were funded by the library in its information technology group.”

“UF Libraries; Mellon Foundation project; Governor C. Farris Bryant Endowment.”

“Alumni gifts.”

“Income from fees for digitized images and recordings.”

“Consortial money.”

“University of Michigan Press, University of Michigan Media Union.”

“Undesignated development funds.”

“CCOP.”



**Ongoing**

"The Digital Production Center has an operating budget and also receives fees for grant-funded digitization within library grant projects."

"Currently: UF Libraries; NEH; IMLS; USDE-TICFIA; Governor C. Farris Bryant Endowment."

"Revenue from hosting, etc."

"Fee-based services."

"Board of Regents via GALILEO, Georgia's statewide virtual library."

"Hosted journals (Érudit)."

"Revenues generated from scans and consulting contracts."

"Annual funding from State Library Services to support services offered to the Commonwealth."

"Contract scanning."

13. If there was/is a dedicated budget, please estimate the percentage of the budget allocated to each of the following categories. N=23

Start-up Costs N=15	N	Min	Max	Mean	Median	Std Dev
Staffing and benefits	8	11.00%	100.00%	46.64%	45.00%	27.87
Hardware acquisition	14	8.78%	100.00%	51.73%	43.00%	27.78
Software acquisition	12	5.00%	100.00%	32.36%	22.50%	27.12
Hardware maintenance	2	5.00%	5.00%	5.00%	5.00%	—
Software maintenance	1	2.00%	—	—	—	—
Vendor fees (if scanning is outsourced to an external vendor)	5	2.00%	95.00%	31.18%	4.90%	40.95
Promotion	2	.03%	2.00%	1.02%	1.02%	1.39
Assessment	1	3.00%	—	—	—	—
Other category	4	3.00%	10.00%	5.93%	5.36%	2.95

Please describe the other budget category.

- 3% supplies and equipment
- 5% acquisitions budget
- 5.72% staff training
- 10% non-computer items related to digitization and digital photography (lenses, targets, archival boxes, etc.)

Ongoing Costs N=19	N	Min	Max	Mean	Median	Std Dev
Staffing and benefits	15	5.00%	100.00%	72.50%	76.00%	23.75
Hardware acquisition	11	3.00%	100.00%	29.15%	20.00%	27.37
Software acquisition	11	.75%	100.00%	26.46%	15.00%	37.09
Hardware maintenance	12	1.00%	100.00%	29.49%	8.50%	39.29
Software maintenance	7	1.00%	100.00%	35.90%	20.00%	44.43
Vendor fees (if scanning is outsourced to an external vendor)	9	1.00%	100.00%	31.75%	10.00%	39.46
Promotion	2	1.00%	2.00%	1.50%	1.50%	.71
Assessment	2	3.00%	4.00%	3.50%	3.50%	.71
Other category	3	1.50%	20.00%	8.70%	4.60%	9.91

Please describe the other budget category.

- 1.5% travel
- 4.6% supplies and miscellaneous
- 20% unspecified

14. If there is not a dedicated budget for digitization activities, please describe how operational costs are covered and who has primary responsibility for monitoring expenditures for digitization projects. N=49

How operational costs are covered	Who has responsibility for monitoring expenditures
Absorbed into existing budgets for staffing, computer equipment, vendor charges, and supplies.	Preservation Department Head is responsible for operational costs (vendor charges, part-time student labor, supplies); Assistant Director for Library Systems is responsible for hardware, software, and maintenance costs.
Activities are so limited that operational costs are absorbed into regular operations.	N/A
Allocated on a project by project basis or a team reallocates resources to do the work.	Would depend on the project.
As noted in question 11, DCP has attempted cover operation costs from grants and supplemental revenues from scanning and consulting.	Director, Digital Collections Program

Digitization activities are viewed as part of the library's regular activities, not as something special or extra. Operational costs associated with them are funded out of the central library budget, or (occasionally) by grant money.	Director of Library Technology, Library Business Manager, Dean of Libraries
Budgets vary from year to year among many distributed projects.	
Costs are absorbed into libraries budget. Some are covered as matching costs for grants.	Dean of Libraries, Libraries Business Officer, PIs on Grants, Project Managers of Grants
Covered from staff salaries as well as charging patrons for digitization requests.	Unit head and library business office
Creatively	Associate University Librarian for Systems and Administration
Dedicated budgets are distributed by function to several departments for staff, equipment, and vendor services.	Department heads have the responsibility for monitoring expenditures. Project managers are responsible for managing grant funds.
Each unit manages their own operational costs—digitization, Web development, metadata, systems, etc.	Distributed responsibility as creating digital collections is a complex process that involves several units.
For the units outside of DLPS (Fine Arts, RMDS, Robertson Media Center) budget is requested as part of OTPS through annual budget cycle.	Unit head in each area
From departmental budgets as needed and as available	Department heads, Dean
From libraries operating budget	Libraries Business Office
From the operating budget	Director, Digital Library Program, and Digital Library Coordinating Committee
Funds are allocated each year to cover projects. Grants cover operations as do private donations.	Dean, Associate Deans, Center for Digital Research in the Humanities
Gifts, grants, library operations budget	Ad hoc by project
Grant and gift funding; unit budgets	Unit heads
If the \$10,000 dedicated budget is expended, additional projects will be paid on a project-by-project basis from other library funds.	Head, Digital Services Department
Library budget with occasional supplemental funding and grants	Library administration
Library funds	Associate directors and departments
Library operational budget	AUL for Technical Services and Technology
Library operational budget	Head of Preservation; Budget Officer; Head of Digital Library Initiatives; Deputy Director
One unit has sales of digital copies of material that funds their ongoing digitization.	Systems staff

Operating funds; gifts, grants, etc. as they come in.	Head, New Media Office and Preservation Services
Operating services, such as document delivery activities, are covered out of existing information technology and office supply support activities. Special project scanners and anything in the extreme realm of cost (over \$5000) are directed to special fund allocations.	Local department head, overseen by admin group and financial officer
Operation costs are either folded into existing budget or support with gift or grant money.	Director
Operational costs are absorbed in the current library operations budget. It includes selection and preparation of source material, digital conversion, metadata creation and data management.	Responsibility is monitored at the Department Head level.
Operational costs are covered and monitored by divisional AULs.	Project manager and divisional AUL
Operational costs are covered as part of existing unit budgets and grant funding.	Director, Library Computing & Media Services
Operational costs are covered by grants and hosted journals. Finance department is monitoring expenditures.	
Operational costs are covered within the general library budget.	Operational costs are monitored by the Head of Special Collections and, by extension, the Assistant Dean for Public Services.
Part of day-to-day operations.	Manager, Instructional Support Services Associate Dean for Support Services
Personnel, hardware and software costs are currently represented within library unit budgets.	Participating unit heads track expenditure for discrete digitization projects; management and budget tracking for libraries-wide digitization projects are overseen by centralized unit/project director.
Projects are mostly funded by gifts and grants, and internal reallocation of staff.	Director, Library Systems and Digital Library Program
Projects that are not grant-funded (or where grant funding has ended) are covered primarily by the library's general fund and occasionally with support from the library's collection development fund.	Day-to-day oversight by the coordinator for digital initiatives and other department heads; administrative oversight through the library's executive council.
Some operational costs are covered by grants and some are covered by the libraries' technology budget.	The grant recipients are responsible for monitoring expenses from those funds. The Associate Director of Services & Systems is responsible for monitoring the technology budget.
Staffing & technology (hardware & software) are included in other area budgets.	

State of Florida (UF Libraries) and Governor C. Farris Bryant Endowment funds are leveraged for grant funding. We are currently fully leveraged.	Director, Digital Library Center with assistance of co-PI, grant coordinator, and Business Services accounting officers.
They are requested on an annual basis and from our temporary services budget and are augmented with grants and gifts.	Head of Special Collections
The salary of the 0.5 FTE librarian is covered by the library budget.	Depends on the project.
The work is project-based. Ideally, all projects map closely to the library's and university's strategic plan. For each project, budget decisions are made, including the acceptable amount of in-kind contributions, hiring of student assistants, and hardware/software acquisition. There is always an identified project leader, who may or may not be the Head, Library Systems. The leader may be a clearly identified PI in a grant or it may be a leader designated by a library unit head (for example, for a donor project). That person manages the budget and staff commitments for the project.	Head, Library Systems, but again, there is a great deal of decentralization.
There are 12 staff in the e-Reserves unit. They were reformed from reserve and by transfers from other areas two years ago. Monitoring of expenditures is done by the supervisor of e-Reserves, and then Head of Information Resources for costs charged to the Acquisitions Budget for copyright, out-sourcing for contract work, etc.	Supervisor of e-Reserves, then Head of Information Resources
This is mostly staff time that is absorbed.	Associate University Librarian, Information Resources for selection and receipt of digital content Archivist for in-house digitization Archivist and Director, Library Technical Services, for metadata creation
Undesignated development funds to special collections were used and were further supplemented by library operating funds.	Head, Special Collections on a "project" basis
University Librarian, grants, gifts, income from Photo Services, reallocation of library budget	Library Business Office, Advancement, Archives/Photo Services, Special Collections
Using CCOP funding.	Project Coordinator/Director
We already own the scanning equipment, do Web work internally, and use students, professional staff, or paraprofessionals as necessary in the course of their duties.	

<p>We have internal funds, gifts, and grants that pay for the actual digitization (by a vendor) of the material. This year it is \$50,000. Each unit that provides staff manages their own budgets. I would estimate that the total staff expenditure with benefits is in the area of \$150,000 this year.</p>	<p>The Preservation Librarian with the Library Business Manager monitors the expenditure of grant funds and funds for the actual digitization. The Mann Library Director is responsible for the management of staff funding.</p>
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15. In the past five years, how have expenditures on digitization efforts in each of the following categories changed? Check all that apply. N=63

	N	Increased N=55	Decreased N=13	Stayed about the same N=51
Staffing and benefits	61	51	2	8
Hardware acquisition	61	46	3	12
Software acquisition	61	40	3	18
Hardware maintenance	59	31	2	26
Software maintenance	59	33	2	24
Promotion	46	22	2	22
Vendor fees (if scanning is outsourced to an external vendor)	45	26	4	15
Assessment	45	13	1	31
Other category	8	2	—	6

Please describe the other category.

**Increased**

Digital Library systems migration; Digital archiving; Institutional repository

**Stayed the Same**

Planning

## MATERIAL SELECTION

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16. What types of materials does your library digitize? Check all that apply. N=66

Still images, photographs, etc.	64	97%
Archival material	57	86%
Manuscripts	55	83%
Rare books	46	70%
Monographs, complete volumes	40	61%
Audio recordings	39	59%
Moving images, videos, etc.	35	53%
Monograph chapters or other parts	27	41%
Journals, complete issues	27	41%
Journal articles	24	36%
Other material	23	35%

Please describe the other material.

Maps (6 responses)  
Newspapers (4)  
3D objects (4)  
Slides (2)  
Prints (2)  
Theses and dissertations (2)  
State agency publications (1)  
EAD finding aids (1)  
Exams (1)  
Art works (1)  
University photographs (1)  
Graphic design work (1)  
Annual reports (1)

17. What are the criteria for selecting material to be digitized? Check all that apply. N=66

Subject matter	60	91%
Material is part of a collection that is being digitized	58	88%
Rarity or uniqueness of the item(s)	52	79%
Material fits criteria for a cooperative digitization project	45	68%
Physical condition	44	67%
Format	42	64%
Other criteria	23	35%

**Please describe the other selection criteria.**

User requests (6 responses)

Faculty/students needs (4)

High demand for or use of material (3)

Research value (2)

Appeal to donor community

Part of donor agreement

Broadens topical, geographical, institutional representation

Product development and licensing

Material is part of strategic promotional and development goals

Images needed for 50th anniversary program

To support an online or physical exhibit, for e-publications such as electronic books, CDs/DVDs, media-integrated learning materials

**Selected Comments from Respondents**

“The project has associated grant funding (e.g., we can digitize for fee). Note that proposers, who may be any library staff, are asked to speak to multiple other criteria: particularly broad or deep coverage of the subject area; supports the curriculum or existing research; builds a critical mass of digital material in a subject area; enhances or promotes a significant strength of our collections; meets high or increasing demand for or solves a problem with access; supports collaboration with institutional partners. Any/all of these criteria may be considered.”



## MATERIAL DIGITIZATION

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18. Does the library outsource any or all of the digitization production work (e.g., scanning)? N=65

<b>Yes</b>	39	60%
<b>No</b>	26	40%

If yes, please name the vendor(s).

OCLC Preservation Services (7 responses)

TechBooks (6)

ACME Bookbinding (4)

Apex CoVantage (3)

Backstage Library Works (3)

iArchives (3)

ByteManagers, Inc. (2)

JJT (2)

Luna Imaging (2)

OCLC Canada (2)

SPI (2)

Trigonix (2)

Vidipax (2)

AEL Data

ArchProteus

Boston Photo Imaging

Brechin Group

Campos

Captiva

Chicago Albumen Works

Cinetech

CSM Services

Digicolor  
Eastview Cartographic  
Florida Center for Library Automation  
General Bookbinding Company  
GeoAssessment Services  
Heritage  
H-F Group  
Innodata Isogen  
Internet Archive  
Kirtas Technologies  
MicroCom  
Northern Micrographic  
Olive Software, Inc.  
ProQuest  
University Photo Services

## **METADATA CREATION**

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19. What metadata standards does the library use? Check all that apply. N=64

Dublin Core	59	92%
MARC	54	84%
XML	48	75%
EAD	44	69%
TEI	29	45%
METS	24	38%
VRA Core	20	31%
MODS	16	25%
Other standard	16	25%

Please identify the other metadata standard.

- AAT
- Darwin Core
- DDI
- FGC
- IPTC (imbedded) which adheres to the XMP framework
- OAI-PMH
- PBCore
- PREMIS Rights
- RDF
- RVM DocBook
- Various geographic referencing standards (phasing out TEI)
- Western States Metadata Standard

### Selected Comments from Respondents

“Much metadata has been created ad hoc.”

“Much of the metadata were created prior to extensive use of EAD or DC, but map adequately. We have converted some into EAD (xml-flavored).”

### ASSESSMENT

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20. What methods are used to assess the success of digitization activities? Describe up to three assessment methods for each type of activity. Mark NA if an activity is not assessed. N=60

	N	Method 1 N=38	Method 2 N=23	Method 3 N=13	NA N=39
Material Selection	57	24	13	6	33
Material Digitization	60	33	16	9	27
Metadata Creation	58	27	17	9	31
Other function	25	11	1	—	14

## Material Selection

Method 1	Method 2	Method 3
Content relevancy	Visual assessment	No content loss from digitization process
Customer use and satisfaction		
Demand by users		
End user testing		
Faculty review	Expert curatorial review/selection	
Inclusion in bibliography		
Involving scholars	Gathering usage info	Using annotated bibliography
Outcomes based evaluation	Web statistics	
Peers evaluation/editorial committee		
Project completion on time		
Project Team or Advisory Board	User focus group	Application of best practices and standards
Public library survey		
Reference requests		
Statistics	Sales	
Subject specialist review	User feedback	
Usage	Requests for copies	
Usage data	Online surveys	
Use of digital version	Use of original and related materials	Anecdotal evidence
Use statistics	Use assessment [selected projects]	Completeness (against bibliography) [selected projects]
User response and usage	Gifts resulting from increased visibility	
User survey		
User survey		
User surveys		
Web logs	E-mail	Course integration

## Material Digitization

Method 1	Method 2	Method 3
Benchmark assessment	Technical targets	
Best Practices guidelines; compare with practices (Example: CDP Digital Imaging Best Practices)		
Completion	Quality control	
Online surveys	Quality control	Referrals
Online surveys		
Outcomes based evaluation	Web statistics	
Production objectives	Number of pages	Quality assurance
Project Completion _Web It.		
Project completion on time		
Project reports		
Project Team or Advisory Board	User focus group	Application of best practices and standards
QA done by outsource agency		
QC processes		
Quality assurance		
Quality control—visual & audio	File format/compatibility	Usage statistics
Quality control & following standards		
Quality control (now)		
Quality control inspection by staff		
Quality of image	Unit cost	Volume processed
Quality review		
Selective in-house		
Spot check	User feedback	
Standards compliance	Quality assurance	
Usage statistics	Feedback from users	Use of materials in publications
Use of digital version	Use of original and related materials	Anecdotal evidence
Using DLF benchmarks	Using targets	Proofing/QC checks
Various quality control techniques		
Visual inspection		
Visual quality		
Visual quality control	Client feedback	

Web logs	E-mail	Course integration
Work done is examined by librarians for quality control.	Procedures for digitization are assessed following a digitization project and have been reviewed.	

### Metadata Creation

Method 1	Method 2	Method 3
Adequacy (per standards)	Appropriate authority (selected projects)	
Best Practices guidelines; compare with practices (Example: CDP Dublin Core Metadata Best Practices)	Compliance Checker (example, RLG EAD Report Card)	
Compliance with standards appropriate to the collection		
Feedback from users		
Feedback on cataloguing level has been solicited from users in one project.		
Following standards	Using controlled vocabulary	Establishing templates
Format validation	Stats on # of records created	Stats on backlogs
Monitoring and consultation		
Outcomes based evaluation	Web statistics	
Periodic review	Functional interoperability	
Production objectives	Number of books	Quality assurance
Project completion on time		
Project Team or Advisory Board	User focus group	Application of best practices and standards
Quality assurance	Usability	
Quality control (now)	System testing (future)	Usability testing (future)
Quality control inspection by staff		
Quality of metadata	Ability to utilize in presentation layer	
Quality review		
Review by cataloger		
Spot checks	Complete reviews	User feedback
Standards compliance	Quality assurance	
Usability studies	Quality control	

Use of digital version	Use of original and related materials	Anecdotal evidence
Various quality control techniques		
Vocabulary and terms	Spell check	User feedback
Web logs	E-mail	Course integration

### Other Functions

Function	Method
Collection use	Web log analysis (Crystal Reports tool)
Delivery system	Technical reports, user response
End products	Outcomes based evaluation
Entire project	Outcome assessment
Usability	Usability testing/stakeholder review
Usability studies	Web site creation
Usage	Web logs
User interface	Response from users, overall workability
User satisfaction	Online user survey (voluntary)

## ADDITIONAL COMMENTS

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21. Please enter any additional information regarding the management of digitization activities at your library that may assist the author in accurately analyzing the results of this survey. N=20

### Selected Comments from Respondents

"We are in the process of creating a new unit, the Digital Services Unit, that will be responsible for all digitization activities."

"We have formed a working group to study the implications of digital preservation. That process is ongoing."

"While we are decentralized, we are decentralized by function, not by location. We keep functions in units that have always performed those functions. We do not have many repetitious activities in multiple places."

"In November 2005, the libraries hired a Preservation Librarian whose responsibilities include oversight of digitization activities."

"In the section on staff and their activities you should include the following: pre-scanning preparation; quality control; post-scanning enhancements (that are not metadata), like OCR; IT functions; administration. These all involve a substantial amount of staff time. Limiting the categories to selection, digitization, and metadata creation is only the tip of the iceberg. These responses represent the two units that do the most digitization. For 2004–05, two other units reported much smaller amounts of digitization. Most of the digitization for these

smaller units was done in-house, but one outsourced some. One unit that has materials digitized through DCAPS is considering reporting metadata creation statistics in the future.”

“The library has not yet utilized vendors for digitization, OCR, encoding, or metadata, however, it is expected that as our program grows, outsourcing some of these functions will prove to be the most economical choice for some projects.”

“Digitization activities are increasing in every aspect of the library, as well as the wider campus at large. I am pushing an effort to bring the library into the wider campus activities as we look to create a true enterprise-wide digital asset management, storage, and preservation infrastructure.”

“In addition to the digital conversion costs described above, the DLG receives substantial support for hardware, programming, and other IT aspects through GALILEO.”

“Digitization is not centralized, except for that done in e-Reserves, and they have done special projects like entire back files of a science journal cited on the campus. But it is done in whatever venue where people are interested, and digitization is a highly valued strategic goal of the library, to promote our collections.”

“2005–06 is a period of digitization transition in our library. While a lot of projects were previously grant-funded and done on a small scale, we are now looking at ramping up digitization production activities throughout our library.”

“We are in the process to hire a full-time Digital Initiatives Librarian who will serve as a centralized digitization authority. Our responses reflect this imminent shift from an almost exclusively distributed pattern of digitization efforts to one that has a more centralized element.”

“In 1997, the University Library launched the Digital Library Project. Over the course of the past nine years the program has grown and flourished in large part because of the funding opportunities that were available to the library through a number of public funding agencies. While the program has been very, very successful, DCP has had to find a number of creative ways to stay afloat. While a major gift has enabled the library to acquire adequate disk storage, excellent digital photography equipment, and a robust infrastructure, the issue of maintenance and ongoing support remain problematic. Grants do not replace institutional support and I have estimated that over the past 8 years that we have run an ongoing operating deficit of 30 per cent.”

“The libraries continues to grow and advance its digitization program through collaborative projects and the development of digital management practices.”

“Have not yet engaged in significant assessment given that we have taken only baby steps in digitization.”

“We are currently partnering with Google to digitize our entire collection.”

“Answers to this survey reflect what we have done in our pilot projects and may differ from what we will be doing in other projects. One bigger project at this point is evaluating different digital objects management systems for our needs in order to select one that would be used for most of our digital objects.”

“In the past, digitization efforts were very distributed, although the majority was done in Archives and Special Collections by digital projects personnel. This year, 2006, is a planning year for us, but we are leaning toward a more centralized approach. Many of the answers in this survey should be different next year.”

“We have a central digital production unit (Digital Library Production Services) but there is also production



in several other areas: Rare Materials Digital Services, Fine Arts (for images), and Robertson Media Center (images, video, etc.). Answers apply only to DLPS unit.”

“As noted, we have a decentralized digital projects program. I believe that this survey has helped me in understanding how we can better publicize information about our efforts. Currently, on the systems side, I work closely in a number of developmental issues, including creation/support of Encoded Archival Description (EAD) searching, a function not well supported by available market tools. Additionally, we have a major Institutional Repository effort underway which has some local development, applying the DSpace software to our local environment. The policies for digital collection user/Web interfaces are created by a cross-unit Working Group, which also underscores the decentralized nature of our effort.”

“We have prepared a feasibility study for a project and are applying for funds to carry out this project. Image bank also funded by gift/library funds.”

## RESPONDING INSTITUTIONS

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University of Alabama	Université Laval
University at Albany, SUNY	Library and Archives Canada
University of Alberta	Library of Congress
University of Arizona	University of Louisville
Arizona State University	McGill University
Auburn University	University of Manitoba
Boston College	University of Massachusetts Amherst
Brigham Young University	University of Miami
University of British Columbia	University of Michigan
Brown University	Michigan State University
University at Buffalo, SUNY	University of Minnesota
University of California, Davis	Université de Montréal
University of California, Irvine	University of Nebraska–Lincoln
University of California, Los Angeles	University of New Mexico
University of California, Riverside	New York University
University of California, San Diego	North Carolina State University
Case Western Reserve University	Ohio University
University of Chicago	University of Oklahoma
University of Connecticut	Pennsylvania State University
Cornell University	Purdue University
University of Delaware	Queen’s University
Duke University	Smithsonian Institution
University of Florida	Southern Illinois University Carbondale
George Washington University	Syracuse University
University of Georgia	Texas A&M University
University of Guelph	University of Utah
University of Houston	Vanderbilt University
University of Illinois at Chicago	University of Virginia
University of Illinois at Urbana-Champaign	Virginia Tech
University of Iowa	Washington State University
Iowa State University	University of Waterloo
Johns Hopkins University	Wayne State University
University of Kansas	University of Western Ontario
Kent State University	Yale University
University of Kentucky	