

SURVEY RESULTS

EXECUTIVE SUMMARY

Introduction

Libraries are undergoing profound transformations as digital networked resources alter how library users interact with library staff, collections, and spaces. ARL member libraries are responding to changing use patterns and pedagogical trends by creating more spaces for digital resource access, group studies, media laboratories, and technologybased learning spaces. As reported in the Chronicle of Higher Education for September 30, 2005, James G. Neal, University Librarian at Columbia University, stated that we are now seeing "trompe l'oiel libraries" that have the appearance of a traditional library "but, in fact, what we are creating is something far more progressive and far more dynamic inside, in terms of social space, academic space, and learning space." This transformation requires more library space, usually in a location central to campus. As library collections continue to grow, administrators are faced with the choice of trying to create new central library spaces to accommodate growing collections and new services or developing other alternatives for housing lesser-used materials. More and more, the development of remote shelving facilities is a response to these space pressures.

Remote shelving facilities have been a strategy for ARL member libraries for a long time and a number of SPEC surveys have been conducted to document design, selection of materials, costs, and services. Building upon this work, this SPEC survey will focus on user services and how they

have changed since the last survey in 1998. The results of that survey were published in May 1999 in SPEC Kit 242 *Library Storage Facilities, Management, and Services*. We have continued to use the previous definition of this type of facility: "the housing of more than 50,000 volumes in a site remote from the collections of which they are a part." For libraries that use more than one facility, respondents were asked to describe the facility to which they send the most material (primary facility).

Background

Eighty-five of the 123 ARL member libraries (69%) responded to the survey. Of that group, 68 (80%) use at least one remote shelving facility or are currently planning for one. A sizeable number of libraries have relatively new facilities; 25 of the respondents reported that they send material to a facility that has been in operation fewer than six years. Of that group, eight reported an existing facility in the 1998 survey. Most of the responding libraries (45 or 71%) use only one remote shelving facility; 13 (21%) use two facilities; and four (6%) use three facilities. One respondent sends materials to four remote shelving facilities.

Management of Remote Shelving Facilities

Forty respondents (63%) use one or more facilities that are not shared by libraries from other institutions. Forty-eight of these 60 facilities are owned and/or managed by the reporting library and

three are managed by the library system; ownership of the remaining nine facilities was unspecified. Twenty-three respondents (37%) report using a total of 18 unique shared facilities. Nine of these are managed by a library (either the responding library or a partner at another institution), four are managed by a consortium, two by a library system, and three by commercial firms engaged in document storage and management.

Description of Facilities

Remote shelving facilities have grown not only in number but also in size since the 1999 survey. On average, a facility today has a capacity of more than 1.5 million volumes and currently holds more than 820,000 print volumes, a 43% increase over the 1998 average volume count of 572,000. Most of the facilities also house non-print material, such as microforms, and to a lesser extent, archival boxes and flat files. The average facility added over 200,000 new items last year. The materials in remote shelving facilities now average approximately 18% of respondents' entire library collections. The majority of facilities have been in operation fewer than 10 years, are within six miles of the main library, hold under two million volumes, and are more than 70% full.

Although many of the facilities use standard or compact shelving units, a majority now have high-density storage similar to the Harvard model (33 responses or 52%) and the trend has been to install more of this type of shelving. Of the 35 new remote shelving facilities developed in the past 10 years, 23 (66%) installed some high-density shelving. In addition, materials are stored in various kinds of cabinets (e.g., file, map, or microfilm), tube shelving (for architectural drawings), and archival boxes on pallets.

While statistics provide the quantitative aspect of facility description, many libraries have developed Web sites that provide narrative and visual descriptions of their facilities that more fully describe the operations and environment. The Minnesota Library Access Center, for example, has created a highly visual virtual tour of a remote shelving facility hosted by an initially reticent inductee to the facility, Bib the Book (see http://www.minitex.umn.edu/mlac/bib.asp).

Facility Names

The most commonly used terms for remote shelving facilities are "annex" (usually as part of the phrase library annex) and "storage;" these terms are each used 14 times in reported facility names. "Storage" is frequently used as a noun, as in "Harper Storage," but more often as an adjective and has apparently lost its negative connotation. "Facility" appears in 12 names, "depository" in six. There doesn't seem to be a trend in naming, however. Names of facilities developed over the past five years show little or no consistency. There is a trend for more proactive sounding names such as "service center," though. Ironically, only two sites use the word "shelving" in the name of their facility.

Staffing

This survey did not attempt to capture one-time workloads related to planning a new facility and relocating entire collections. Rather, the focus was on the ongoing workload of receiving new material, retrieving material, making copies, and maintaining the collections. Support staff and students are the most common staff categories in a remote shelving facility (52 responses or 95% and 31 responses or 56%, respectively). There are administrative staff at 23 facilities (42%). Only ten (18%) have librarians on staff; seven (13%) have other professionals. Eleven report having other categories of staff, typically temporary project staff. Three respondents explained that the facility is not staffed. Rather, library staff make trips to the facility periodically to add, retrieve, or reshelve items.

In the facilities that are staffed the number of support staff ranges from 1 to 26; the FTE ranges from .05 to 25 and averages 3.65. The number of student employees ranges from 1 to 45; the FTE ranges from .18 to 10 and averages 2.35. Typically, there is only one administrator, librarian, and/or

other professional assigned to the facility. Fewer than half of the administrators or librarians work full-time for the facility; all of the other professionals do.

Although there is variation in the services that each remote shelving facility provides, the core activity is processing requests for loans and copies. Support and/or student staff most often handle these requests. The average remote shelving facility had a total of 6 FTE and processed 11,749 retrieval requests last year. This indicates that one FTE can process 1,958 requests per year. The sites that receive more requests seem to make more efficient use of FTEs. The five sites that filled the most requests averaged 11.45 FTE and 48,833 requests or 4,265 requests per FTE. It is not clear from the data if sites that did more article delivery (whether print or electronic) needed more staff time per request.

Catalog Record

Most respondents reported that the catalog records for materials in the remote shelving facility are similar to those for other materials in the library's collection. Typically, the name or code for the facility is in the location field in the item or holdings record. Many libraries highlight retrieval options by adding requesting information to the item record. Some libraries include information in the location field and add a note to the item status, for example, "Location=LDRF, Status=Request item." While most respondents want to indicate the "remote" nature of their shelving facility, one reported, "We use a location code that does not suggest remote storage, since we don't want to dissuade users from requesting materials. Plus, it's not really remote—only about six blocks from the main library." A few libraries (10 or 16%) have made cataloging enhancements to provide more information about material in the remote shelving facility, mainly by providing tables of contents. Others have developed online finding aids for highly specialized or archival collections. Two report that links to images are provided. Another has created a "...request form which auto-fills with item information and includes information on how they will be able to pick up and use item when retrieved." Overall, it appears that additional descriptive information about materials in remote shelving facilities has not been a high priority for most responding libraries.

Planning

A majority of responding libraries (34 or 55%) reported that they did not involve the user community in planning for their remote shelving facility. Those that did typically worked with their university library committees to review plans for the facility. A few had faculty as active participants in a facility planning committee, though most decisions focused on the selection of materials and the services to be provided. A few libraries reported the use of surveys and public meetings to discuss facility planning. One respondent reported extensive consultation with user communities including faculty and student participation in planning, review and approval of plans by the university's library committee, and solicitation of feedback at presentations for student and faculty groups.

Services

All respondents retrieve materials from their remote shelving facility. More than half also make print copies of items. Copies are frequently scanned and delivered electronically to the requestor's desktop. Some respondents will make photographs of items in the facility. Fifty-eight percent assist patrons with identifying items that might be in the remote facility and verifying citations.

A surprising number of facilities (38 or 61%) allow on-site user access. Most of these have reading rooms with photocopiers (32 or 84%) and computers (28 or 74%) for public use. A sizeable number (17 or 45%) have special equipment for viewing non-print media. Ten have wireless Internet connections and six provide scanners. On-site reference assistance is provided at eight facilities.

Thirty-four facilities provide some collection management services. Of these, 11 provide conservation treatment including cleaning and wrapping. Nine will scan and digitize print items, five do preservation reformatting, and one microfilms theses. One facility is weeding journal backfiles as online content becomes available.

All but a few respondents (53 or 85%) report that users can request items directly from the online catalog. Perhaps because most integrated library systems limit requests to currently registered borrowers and libraries want to provide access to, if not borrowing of, materials to a larger community, the majority also accept requests from a non-catalog Web form, in-person, and by e-mail. Slightly less than half of the respondents accept requests by telephone, as well. A few will process ILL, fax, and mail requests.

All respondents report that staff process requests during weekdays. Thirty-four percent process requests at least once a day; 59% process them more often. Only one respondent processes requests less often than daily. Some facilities with on-site staff process requests throughout the day as they come in and also process requests for on-site requesters. The frequency for filling copying requests generally parallels the schedule for physical item retrieval although a few libraries report that copying is done less frequently. Only 18 facilities do any weekend processing, usually once a day or on demand.

Calculating average turnaround times is somewhat problematic, but all but a few respondents estimate that requests are filled within 24 hours; a few take two to three days. Some respondents noted that the average time for material to get to a requester is highly variable given that the request could come from another campus or library unit. For physical delivery of items, turnaround times are dependent on when the request was made. Libraries usually set request deadlines, so, for example, a request received before 9 a.m. would be available for pickup by noon. Requests received close to the deadline will be processed much faster than requests that just miss the deadline.

Most facilities (44 or 71%) will deliver physical items to any library service point while a smaller number will deliver direct to faculty offices (11 or

18%). Some respondents mentioned that rare or fragile materials may only be delivered to certain units, such as an archives reading room. In other cases, materials are directly mailed to off-campus patrons or off-campus distance education sites.

A majority of respondents who provide copies of items (24 or 53%) reported that they scan and place copies on a Web/ftp server for user download, 14 (31%) scan and send PDFs via e-mail. Photocopies can also be delivered to library units (20 or 44%), to a central library point (13 or 29%), or faxed to the user (10 or 22%). Some libraries report that requests are made and delivered through the ILL system. Most deliveries are handled by library staff (35 or 58%) or remote shelving facility staff (24 or 40%) who are typically library staff. Thirteen respondents (22%) use the campus mail and eight (13%) use a contract courier service. Many libraries report using multiple delivery modes. One, for example, reports using couriers, staff, UPS, and US mail.

Service Evaluation

There is little evidence of formal evaluation specific to remote shelving facilities. Only seven have surveyed users and only two have conducted focus groups. One included questions about their remote shelving facility in a general survey on library facilities and services. Sixteen of the 23 respondents who report doing any evaluation primarily rely on informal feedback. Other methods include analysis of turnaround time and fill rate for requests, an internal flowchart study, and an evaluation of environmental conditions. One respondent reported they were "evaluating all aspects of service through routine statistical analysis." Another reported that every instance of a service failure was reviewed to identify the problem and determine possible action, such as enhancing the catalog record or retraining staff.

Changes to Services

There have been a number of changes in services over the past seven years, mostly additions or improvements to services and facilities, but also a few discontinuations. New services fall into several categories. Electronic/desktop delivery of documents was the most frequently reported with 14 remote shelving facilities adding this service. Enhancements to the frequency or site of delivery were reported by 13 libraries. Many of these are offering more frequent deliveries and shorter turnaround times and will also deliver to more locations than before. Improvements to the facility was a third category. Some added walk-in hours or expand open hours. Others added wireless service to the publicly accessible reading rooms. Two opened new, climate-controlled facilities. All of these changes were intended to either improve patron service or protection the collections.

Only nine respondents reported eliminating any services. Three reduced the number of deliveries, two eliminated photocopying, and one eliminated public service hours either because of low user demand or a need to reduce costs. One respondent has stopped adding items to the facility because the available shelving is full. Another lost a staff member and did not finish adding holdings information to catalog records. On the up side, a legacy storage facility was discontinued because the collections were moved to a new high-density storage facility.

A majority of respondents (40 or 54%) said that they are planning new services for their facilities. Initiating or improving document delivery service, particularly desktop delivery by e-mail or secure Web page, leads the list. Others will respond to ILL requests. Two sites report the development of preservation services for the collection. Additional plans include on-demand paging/scanning/digitizing, mass digitization, microform scanning, reference service, and linking catalog records to order forms, among others. One facility expects "to purchase Remote Film Access software and carrier for microfilm scanners when commercially available in summer 2006. This will allow users to advance, rotate, crop, etc., images remotely from film loaded at the shelving facility."

Future of Remote Shelving Facilities

Thirty-nine respondents have current plans to develop additional library remote shelving facilities. Of this group, 16 are planning additions to an existing facility, 11 are planning new facilities, and six are at an early stage of planning with no specific type of facility determined. Libraries in the early stages of planning are looking at different alternatives for solving space issues and therefore the need for a shelving facility; these include weeding existing collections and installing compact mobile shelving in existing libraries. Five libraries are evaluating the use of a consortial facility operated by another university. Two libraries will be installing high-density shelving systems in new additions immediately adjacent to the main libraries on campus. One of these will be a robotic storage facility with space for 1.2 million volumes. Material will be delivered automatically to the circulation desk in about one minute.

Forty-nine respondents expect to be planning for a new or additional space in the next five years. Many of these will be adding modules to existing facilities and construction on a few of these is imminent. Others are still in the planning stage but expect building to begin within five years. Others are searching for funding before planning can advance.

Conclusion

ARL member libraries' use of remote shelving facilities as a response to space needs has increased since 1998 and, judging from the responses to this survey, this trend will continue. Another upward trend is the use of shared facilities; 22 respondents to this survey use shared facilities compared to 11 in the 1998 survey. A new option found in this survey is the use of commercial firms specializing in document storage and retrieval; three different commercial facilities were reported. Two libraries also report the development of new on-site automated storage and retrieval systems installed adjacent to main libraries on campus.

As new facilities are built and older facilities are upgraded, new services and improvements to existing services have increased access to remote collections. In 1999, eight libraries reported that they scanned documents and delivered them electronically. In 2006, 33 libraries reported that the remote shelving facility delivered documents by e-mail or FTP and 15 more plan on adding this service in the near term. It appears that desktop delivery will become the standard delivery method in the next few years for documents such as articles, book chapters, and microforms. In addition, many libraries have improved access to physical items from the remote shelving facility by increasing the number of deliveries and adding deliveries to more locations.

Although some libraries reported that they are looking at alternatives to new or expanded remote shelving facilities, such as weeding collections for materials that are available digitally, the amount of new print and other space-consuming materials received by libraries continues to require more collection space. In addition, libraries may want to move more materials to a remote facility so that new computer, instructional, or social spaces can be created in prime library space in the heart of campus. The increased use of digital material and the mass digitization of older works may serve to mitigate the growth of physical collections in the next decade, but these trends have not yet had an effect on library planning. As with politics, all library space planning is local and a solution for one library may not meet the curricular and research needs of another. However, in this survey we clearly see that remote shelving facilities continue to be a favored strategy of ARL libraries facing a space crunch.

SURVEY QUESTIONS AND RESPONSES

The SPEC survey on Remote Shelving Facility Services was designed by Thom Deardorff, Coordinator for Access Services, and Gordon J. Aamot, Head, Art, Architecture, and Business Libraries, University of Washington. These results are based on data submitted by 85 of the 123 ARL member libraries (69%) by the deadline of March 31, 2006. The survey's introductory text and questions are reproduced below, followed by the response data and selected comments from the respondents.

The September 30, 2005 special issue of the Chronicle of Higher Education noted that, despite predictions that the availability of "everything" online on the Internet would soon make the physical research library obsolete, the library building is regaining its position as the "heart of the campus." This new centrality is based on the development of new or expanded library spaces for digital resource access, group studies, media laboratories, and technology-based learning spaces. Since the number of library print resources continues to grow and universities are reluctant or unable to expand library spaces on central campus, there is a need to recalibrate the allocation of space between physical collections and spaces needed for accessing and working with digital resources. Thanks to the availability of high quality catalog information and a service commitment to rapid turnaround, shelving lesser-used materials in remote facilities has become an increasingly acceptable solution for balancing the demand for both collections and user space.

Shelving low-use materials off-site is not a new strategy for research libraries, nor a new topic for SPEC surveys. Previous SPEC Kits on remote shelving facilities were published in 1977, 1990, and 1999 (numbers 39, 164, and 242, respectively) and provide a wealth of information on physical facilities, user access, selection of materials, costs, and user services over time.

This SPEC survey is intended to update parts of the earlier surveys, but its primary focus is on the value-added service aspects of remote shelving operations. How have services matured and been impacted by changes in technology? Are libraries adding enhanced bibliographic information to their catalogs? Is there a link from the catalog to a request form? Are libraries scanning articles or chapters in lieu of delivering the physical item? Do users have a choice of pick-up locations for print materials? How are libraries evaluating the service?

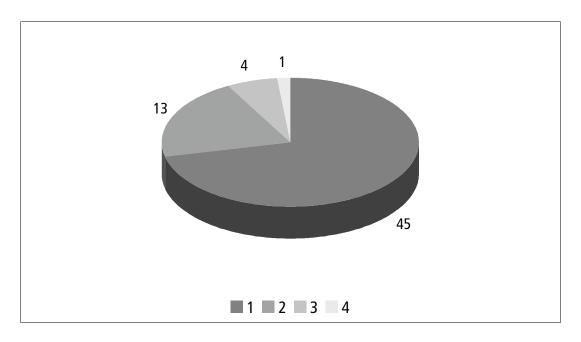
For the purposes of this survey, we use the same definition for "remote shelving facility" as was used for "secondary storage" in SPEC Kits 164 and 242: "the housing of more than 50,000 items at a site remote from the collections of which they are a part." If your library deposits material in more than one remote shelving facility, we ask that you base your answers on the facility to which your library sends the most material (primary facility).

BACKGROUND

1. Does your library currently use a remote shelving facility (either on or off-campus) to house parts of its collection? N=85

Yes	60	71%	Please complete the survey.
No, but planning for one is underway	8	9%	Please answer applicable questions.
No	17	20%	Please skip to question 21.

2. To how many remote shelving facilities does your library send material? N=63



Is space in any of the facilities shared with libraries from other institutions? N=63

Yes	23	37%
No	40	63%

Please list the name(s) of up to three of the facilities and indicate whether each one is a shared facility and whether each is owned and/or managed by your institution, by a consortium to which your library belongs, by a university/library system (such as the University of California regional library facilities), or another entity. N=63

	Owned and/or Managed by:			
	Institution	Consortium	System	Other Entity
Primary Facility				
Shared N=17	6	4	2	5
Not Shared N=46	43		3	
Facility 2				
Shared N=9	_	_	4	5
Not Shared N=9	8		1	
Facility 3				
Shared N=0	_		_	
Not Shared N=5	5		—	

Please name other entity.

Primary Facility

Iron Mountain

Johns Hopkins University

Kentucky Underground Storage, Inc.

TriUniversity Group of Libraries (2 responses)

Facility 2

Advanced Record Management Services, Inc. (2 responses)

Duke University

Harvard University Library

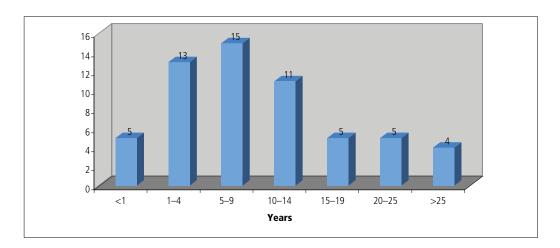
Iron Mountain

If your library sends material to more than one remote shelving facility, for the rest of the survey please base your responses on the facility to which your library sends the most material (primary facility).

REMOTE SHELVING FACILITY DESCRIPTION

3. Please provide the following information for your primary remote shelving facility. N=62

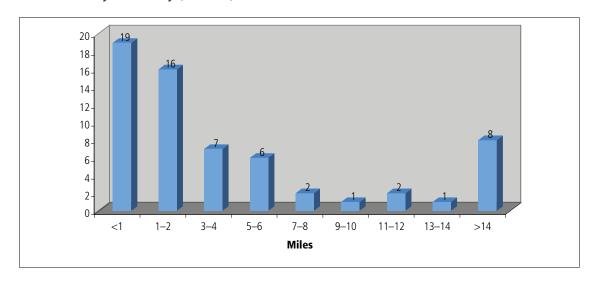
Number of years in operation at present site. N=58



Years	N
<1	5
1–4	13
5–9	15
11–14	11
15–19	5
20–25	5
>25	4
20–25	5

Minimum	Maximum	Mean	Median	Std Dev
.10	36.00	10.17	8.25	8.46

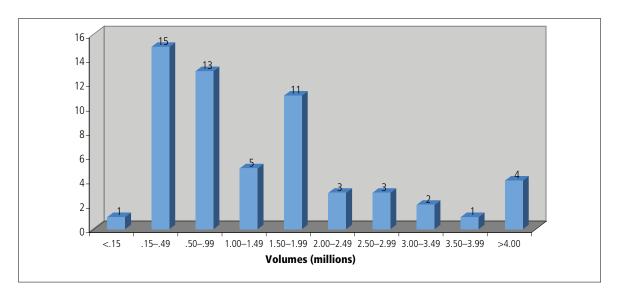
Distance from your library (in miles). N=62



N
19
16
7
6
2
1
2
1
8

Minimum	Maximum	Mean	Median	Std Dev
0	52.00	6.59	2.00	11.10

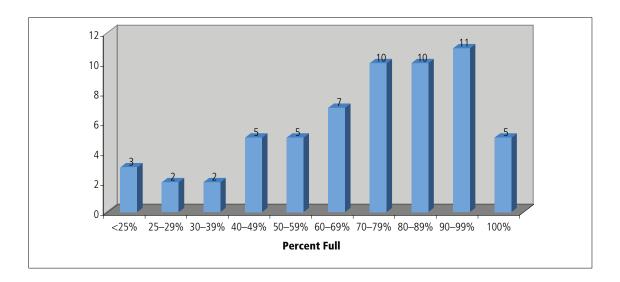
Capacity in volume equivalents. N=59



Volumes	N
<150,000	1
150,000–499,999	15
500,000-999,999	13
1,000,000-1,499,999	5
1,500,000-1,999,999	11
2,000,000-2,499,999	3
2,500,000-2,999,999	3
3,000,000-3,499,999	2
3,500,000-3,999,999	1
>4,000,000	4

Minimum	Maximum	Mean	Median	Std Dev
56,000	7,500,000	1,502,759	900,000	1,663,643

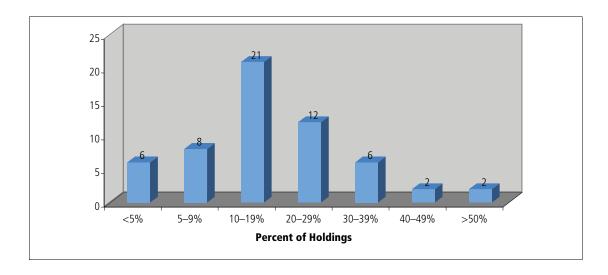
Percent full. N=60



Percent	N
<25	3
25–29	2
30–39	2
40–49	5
50–59	5
60–69	7
70–79	10
80–89	10
90–99	11
100	5

Minimum	Maximum	Mean	Median	Std Dev
0	100	69.50	75.91	25.40

Percent of your library's entire holdings in the remote shelving facility. N=57



Percent	N
<5	6
5–9	8
10–19	21
20–29	12
30–39	6
40–49	2
>50	2

Minimum	Maximum	Mean	Median	Std Dev
.29	80.00	18.29	15.00	13.93

Current Holdings N=58	N	Min	Max	Mean	Median	Std Dev
Volumes	58	56,000	4,156,732	821,551	576,817	804,589
Non-print material	44	0	6,723,474	340,544	6,020	1,172,918
Boxes of archival material	41	0	2,677,500	79,733	4,952	416,823
Flat files (maps, architectural drawings, etc.)	38	0	227,882	10,393	0	38,566

Approximate Number of Items Added in 2005 N=56	N	Min	Max	Mean	Median	Std Dev
Volumes	55	0	2,000,000	133,542	40,000	297,137
Non-print material	35	0	3,000,000	107,420	14	509,350
Boxes of archival material	36	0	18,250	2,342	402	3,892
Flat files (maps, architectural drawings, etc.)	29	0	5,000	321	0	1,108

4. How are materials housed in the facility? Check all that apply. N=63

High-density shelving	33	52%
Standard library shelving (non-moveable cantilevered)	24	38%
Compact mobile shelving	16	25%
High security areas for rare materials	12	19%
Specialized storage for non-paper media	12	19%
Other	13	21%

Please describe other storage type(s).

Archive boxes loaded on pallets

Commercial storage shelving and pallets

Filing cabinets

Fixed archival box shelving

Flat Files

Industrial shelving

Map cabinets

Map cases, filing cabinets, archival boxes

Microfilm cabinets and boxes; shelving is 12' high

Microform cabinets

Open areas for storing archival boxes

Secure area for archival material

Some unprocessed materials stored temporarily in boxes on skids

Specialized "tube shelving" for architectural drawings; specialized microfilm and fiche storage on compact mobile shelving

5. What are the staffing levels for the facility? N=58

Individuals	Administration N=32	Librarians N=24	Other Professional N=20	Support Staff N=55	Student Employees N=41	Other Staff N=24
0	9	14	13	4	10	13
1	19	7	7	8	3	7
2	1	2	_	12	5	3
3	1	_	_	11	3	_
4	2	_	_	7	2	_
5	_	1	_	7	2	_
6	_	_	_	2	4	_
>6	_	_	_	5	12	1
Minimum	0	0	0	0	0	0
Maximum	4.00	5.00	1.00	26.00	45.00	8.00
Mean	1.00	.67	.35	4.05	6.73	.84
Median	1.00	0	0	3.00	3.00	0
Std Dev	1.05	1.13	.49	5.00	9.46	1.68

FTE	Administration N=23	Librarians N=17	Other Professional N=16	Support Staff N=50	Student Employees N=37	Other Staff N=19
0	3	7	9	_	6	9
<.25	6	3	_	1	1	_
.25–.49	3	1	_	1	4	_
.5074	_	1	_	_	5	_
.75–.99	_	_	1	2	_	_
1.00-1.99	8	3	6	8	10	8
2.00-2.99	1	2	_	11	5	1
3.00-3.99	2	_	_	10	1	_
>4	_	_	_	17	5	1
Minimum	0	0	0	.05	0	0
Maximum	3.00	2.00	1.00	25.00	10.00	6.00
Mean	.77	.47	.43	3.71	1.95	.85
Median	.40	.10	0	3.00	1.00	1.00
Std Dev	.88	.69	.50	4.66	2.68	1.39

Other staff include temporary staff for project work and security guard.

CATALOG RECORD

6. Please describe how the public catalog record indicates that an item is in a remote storage facility. N=62

Selected Comments from Respondents

[&]quot;'Request Retrieval' in public catalog display; request link appears to enable direct request of item."

[&]quot;All items transferred to the offsite storage facility are designated with 'LSC' as the location (or one of several 'sub-location codes' used to manage retrieval permissions)."

[&]quot;Call number includes 'In storage' designation."

[&]quot;Catalogue indicates Location: Annex (off-site) For delivery use 'request item from TRELLIS'."

[&]quot;Display in catalog: Ivy Stacks Material Location SD428.J45C59 BOOK Ivy Stacks (Request Item)."

[&]quot;Ft. Meade appears at the end of the call number for the item in the OPAC, as well as in the 'request in' instructions for obtaining the item."

- "Holding location display states: LSC/OFFSITE."
- "In the public catalog the 'Library location' for the items in remote facility is indicated as 'GRANDDEPOS'."
- "It appears as a campus library location with the note: in STORAGE: MN LIB ACCESS CTR."
- "It indicates 'Remote Storage' as the location filed."
- "Item record indicates the location (Satellite Shelving Facility)."
- "Items display to the public as 'In Storage."
- "Items stored at the Annex are given the item location: Annex. If the run of volumes is split among multiple locations, the initial search reads Multiple Locations and is broken down by each listing with the individual holdings and each location."
- "Location code indicates item is in ARCC or RDL and if it can be requested for pick up at one of the libraries or if it can only be used on site at one of the libraries or the Archives."
- "Location displays as 'Offsite.'"
- "Location displays as 'storage stacks.'"
- "Location field indicates Storage in the same way it would any other library location. Record links to a form to request delivery of an item to on-campus libraries."
- "Location is 'Storage."
- "Location note on record reads: Off Campus Retrieval (Ask at Desk)."
- "Location of item indicates in remote storage. For example: Call No.TS199 .S43 Location Request from Storage."
- "Location says 'Off-site storage; click here to request' which leads to a form auto-filled with item info."
- "Not yet finalized, but most likely a functional phrasing such as 'retrieve from storage & deliver to me' will be used."
- "Our catalog reflects all three off site shelving locations as locations, just like any of our other six libraries."
- "Storage—please see circulation staff."
- "Storage—Use Request Form."
- "The following public note is displayed from the MARC holdings record for periodicals: 1983 and earlier volumes located off site (WRLC Center). To request, please submit Consortium Loan Request form. Each of our monographs has a temporary holdings location which displays as: Temporarily Shelved at WRLC Center."
- "The following statement is in the holdings area of records for items in storage: Library Storage—Request Online OR ask at Circulation Desk."
- "The public catalog record indicates a title is in the remote site by the phrase 'Library Storage Building' as part of subscription summary and in the complete holdings screen."
- "We use a location code that does not suggest remote storage, since we don't want to dissuade users from

requesting materials. Plus, it's not really remote—only about 6 blocks from the Main Library."

"We will indicate in OPAC display that material is in storage (with location code) and a note on how to retrieve material, etc."

7. Has the library added any bibliographic or cataloging enhancements for materials placed in the remote shelving facility, such as tables of contents or indexes, links to images of the material, etc.? N=62

Yes 10 16% **No** 52 84%

If yes, please describe the enhancement.

Selected Comments from Respondents

"All items have full bibliographic records. We are adding TOC and sample images for atlases as our contribution to the RichCat Project (joint project with Haverford College, Emory, Library of Congress)."

"Detailed finding aids for manuscript collections, some with links to images of material."

"For select sets of items, additional descriptive cataloging and in some cases contents."

"Information has been provided in selected instances for journals with highly complex enumeration of subparts, for example: Biochimica et Biophysica Acta (see http://www.rice.edu/fondren/reference/bba.html)."

"Link to finding aids for archival boxes."

"Request form which auto-fills with item information and includes information on how they will be able to pick up and use item when retrieved."

"Some links to scanned tables of contents."

"Tables of Contents."

"While no special project has been undertaken to enhance records for material in storage, some new acquisitions cataloged and sent directly into storage collection may have links to table of contents or cover images."

"While not in the library catalog, an extensive set of Web pages is being constructed for pre-1976 US Government Documents."

REMOTE SHELVING FACILITY SERVICES

8. Was the user community involved in planning services at the remote shelving facility? N=62

Yes	28	45%
No	34	55%

If yes, please describe their involvement.

Selected Comments from Respondents

Consulted Advisory Group

"1) Advisory group for the project (faculty and students) helped shape plans; 2) Standing University Library Committee approved plans; 3) Solicited feedback through presentations to Student Senate, Faculty Senate, and Graduate Student Association."

"A library faculty advisory body was kept generally aware."

"An advisory committee representing libraries throughout the state provides input on service and policy issues."

"Discussions with existing library advisory committees and with individual faculty; open information sessions."

"Planned services were outlined for Faculty Senate Library Committee and other bodies representing key user constituencies."

"Provost-appointed faculty and librarians committee planned and recommended the facility; multiple hearings and discussions of faculty through academic departments."

"The Academic Senate Library Committee was involved in planning services."

"The Faculty Council of Libraries was consulted during the development of the facility."

Consulted Faculty

"A senior member of the faculty was a member of the collections planning team. In addition, focus groups were held with all academic deans and their department chairs, and with selected faculty."

"Extensive consultation with faculty members to explain this concept and allay their concerns about lack of direct/immediate access to some materials. In some instances, decisions were made to transfer only items where content is available electronically."

"Faculty members were consulted regarding what journals should be sent to storage. Our aim was to send primarily journals that were available online through JSTOR or PCI."

"Faculty were consulted on the selection of materials for storage and faculty representatives serve on the

Board (as voting members) for the storage facility."

Other Comments

"Public forums were held, surveys were sent out."

"Surveys and direct input from faculty and the student body regarding; 1) Access to the collection (direct and/ or page and delivery); 2) Paging frequency; 3) Delivery points."

"The original facility, Academic Activities Annex, was first loaded in 1986. At the time, faculty were consulted about their needs for access. Those needs were satisfied by public service hours, book shipments, and telefacsimile transmission."

"The services were planned based on the needs of our community such as operating hours, providing a reading room, installing large tables for oversized materials, and daily deliveries to the central library."

"The user community involved was the custodial divisions at the Library of Congress whose material was designated for transfer. We had extensive meetings to discuss what to transfer, service requirements, support requirements (photocopying, etc.)"

9. What services does the facility offer to your library's patrons? N=62

Retrieval of items from the facility	62	100%
Delivery of copies of items	36	58%
Assistance identifying items in the facility (verifying		
citations, searching for correct journal volume, etc.)	36	58%
Photographs of items	8	13%
Other	24	39%

Please describe other service(s).

Selected Comments from Respondents

Scanning and Electronic Delivery

"Desktop delivery of articles via ILLiad."

"Delivery of scanned articles via e-mail."

"Desktop PDF delivery."

[&]quot;Faculty were involved in selecting materials for storage based upon an understanding of retrieval times."

[&]quot;The librarians that would be sending materials were involved, not the patrons."

"Electronic delivery of articles and book chapters."

"MINITEX provides electronic delivery to Minnesota ILL requests."

"Scanning and electronic delivery."

"We will scan journal articles for faculty members if they are not already available electronically."

"Electronic delivery of article copies."

Delivery of Item

"Delivery of copies of theses (only)."

"Delivery of items to libraries and off-campus pickup sites."

"Fax, delivery to requested library location."

"Loan deliveries via campus mail to faculty and staff."

"Mailing items to campus offices."

"Unfilled requests are routed to interlibrary loan."

On-Site Services

"Direct access to the collections."

"Study carrels for extended use of materials on site."

"Escorted service if extensive number of volumes needed for quick review."

"Onsite visits, free onsite photocopying, use of study offices and microform readers onsite."

"Research Rooms are available to use materials housed in the remote site."

"Walk-in service."

10. Does your remote shelving facility allow onsite user access? N=62

Yes 38 61%

No 24 39%

If yes, please indicate which services are available for onsite users. Check all that apply. N=38

Photocopiers	32	84%
Reading room	31	82%
Computers	28	74%
Special equipment for viewing non-print media	17	45%
Wireless Internet connection	10	26%
Reference assistance	8	23%
Scanners	6	16%
Other	11	29%

Please describe other service(s).

Selected Comments from Respondents

[&]quot;Circulation of materials."

[&]quot;Direct access to the collections (browsing)."

[&]quot;Reference assistance and microfilm readers/printers available upstairs in the Undergraduate Library."

[&]quot;Research Study Rooms."

[&]quot;Service is by special arrangement at Cato Park. Public service hours are posted for Academic Activities two mornings per week. Staff may make copies or scans with administrative equipment. There are no public copiers or scanners available. Visitors are rare."

[&]quot;Study table for onsite reading (not really a reading room)."

[&]quot;Tours by appointment only."

[&]quot;Turntable for LPs."

[&]quot;Very limited escorted access is available."

[&]quot;Will install scanner this year."

11. What collection management services are provided at the facility? Check all that apply. N=34

Conservation treatment for deposited items	11	32%
Scanning and digitization of print or other analog works	9	27%
Records management/destruction	9	27%
Preservation reformatting	5	15%
Other	17	50%

Please describe other service(s).

Selected Comments from Respondents

"Weeding; review of book donations."

[&]quot;Weeding of physical volumes which are now available online, e.g., journal back files."

[&]quot;Basic level preservation wrapping and cleaning of all materials."

[&]quot;Conservation treatment is limited to wrapping materials requiring minor reinforcement, or (alternately) special collection monographs whose bindings we wish to avoid marking."

[&]quot;Shrink wrapping to preserve unbound or fragile materials."

[&]quot;Some cleaning and housing, but not in-depth work."

[&]quot;Vacuuming, cleaning of the materials, freezing treatment."

[&]quot;Vacuuming and minor cleaning."

[&]quot;Materials are cleaned selectively before entering the storage area."

[&]quot;Processing of large manuscript and archival collections carried out onsite."

[&]quot;Processing of special collections and archival materials."

[&]quot;Item record creation."

[&]quot;Microfilming of theses."

MATERIAL REQUEST PROCESSING

12. How may users request retrieval or copies of materials from the facility? Check all that apply. N=62

	N	Physical Item	Copy of Item
Through a link from the public catalog record to an online request form	53	52	28
From a non-catalog Web form	40	34	24
In person	38	38	24
By e-mail	33	32	15
By telephone	30	30	12
Other	17	15	14
Total Number of Responses	62	61	41

Please explain other method.

ILL (6 responses)

Fax (3)

Mail

Manual form available at desk

Staff mediated request form

13. How often do staff at the facility process patrons' requests? N=61

Weekdays N=61	N	Physical Item	Copy of Item
Once a day	21	16	13
Twice a day	23	21	12
On-demand	13	12	10
Other time period	11	11	4

Please describe other time period.

Physical Item

"3 times a day." (4 responses)

"Batches of online requests are printed out, retrieved, and processed throughout the day." (2 responses)

[&]quot;4 times a day."

"3 times a week."

"Approximately every 2 hours, M-Th 6x/day; F 5x/day."

"2 times a day plus on-demand."

"Walk-in requests are handled on-demand during open hours; delivery service is processed twice a day."

Copy of Item

"Copies are produced for ILL only, processed twice a day."

"2 times a day plus on-demand."

"3 times a day, ILL requests only."

"3 times a week."

Weekends N=60	N	Physical Item	Copy of Item
No request processing	44	42	32
Once a day	6	6	3
Twice a day	1	1	_
On-demand	4	4	1
Other time period	7	7	3

Please describe other time period.

Physical Item

"Approximately every 2 hours, Sat-Sun 4x/day."

"No routine processing; in special cases, items can be retrieved and delivered to main library."

"Saturday once a day."

"Saturday service only."

"Saturday one physical delivery."

"Sunday only."

"Three times a day during the quarter."

Copy of Item

"No routine processing; in special cases, items can be retrieved and delivered to main library."

"Saturday service only."

"Sunday only."

14. What is the average turnaround time for most requests from the time of request to the time the material is available to the requestor? N=59

Number of Hours N=33	Physical Item	Copy of Item
2	1	1
4	3	3
8	1	_
12	4	_
<24	7	4
24	14	9
48	3	2
Mean	21.21	21.79
Median	24.00	24.00

Number of Days N=24	Physical Item	Copy of Item
.5	1	1
1	12	8
2	4	4
3	3	2
4	1	_
Mean	1.60	1.50
Median	1.00	1.00

Other N=8	Physical Item	Copy of Item	
	7	2	

Please describe other time period.

"Items requested weekday mornings will be available in the afternoon. Items requested weekday afternoons will be available the next morning. Items requested after noon on Friday or over the weekend will be available Monday morning unless there is an urgent request, then someone will go to the facility on Saturday."

[&]quot;Same day service for items requested by noon, next day for items requested after noon."

[&]quot;5–10 minutes for walk-in requests; 1–2 days for document delivery service."

[&]quot;Same day service most of the time; next day service some of the time."

- "2-5 minutes for requests placed in person and retrieved on demand."
- "No weekend service."
- "On site service (minutes)."
- "Two weeks [for copies]."

Selected Comments from Respondents

- "Four hours if request is placed before 1 p.m. during the weekdays."
- "Average turnaround time for delivery of physical item depends on the campus and location of requestor's pickup site."
- "Business days only—no retrievals or copying done over the weekend."
- "Dependent on when request is received. If received by a designated time in the morning it will be delivered in the afternoon; if received by a designated time in the afternoon, it will be delivered the next morning. However, items ordered on Friday afternoon will not be delivered until Monday."
- "Depends on item type: for archives/rare books, normally 1–2 hours; for library materials delivered to another location, normally 1–2 days."
- "If a request comes in before 10 a.m., item will be available by noon. If request comes in at 10:15 a.m., we might have by noon, but promise by 2 p.m."
- "Items requested Friday or on the weekend are retrieved Monday."
- "Material requested before 8 or 9 a.m. can be pulled the same day."
- "Materials are retrieved daily Monday-Friday."
- "Materials delivered to most pick-up locations 2x daily. Those mailed to offices may take 2–3 days. Rush service is also available (2 hours)."
- "More than 50% of retrievals are delivered within 6 hours (on weekdays)."
- "Note that this number relates to work days, and excludes both weekends and university holidays."
- "One business day turnaround is guaranteed. We expect most requests will be available within 2 hours."
- "Pick-ups are done Monday, Wednesday, and Friday. The time varies according to which of these pick-ups is utilized."
- "Requests received before noon are available by 5:00 p.m. same day; requests received after noon are received by 5:00 p.m. the next day; no retrieval on weekends."
- "Requests submitted by 4 p.m. are filled the next business day."
- "Retrieval is done at 2:00 p.m. Mondays through Fridays. All requests submitted by 2:00 p.m. weekdays are available by 4:00 p.m. the same day. Many users receive their items in a matter of hours after submitting their request."

15. Where are materials delivered? Check all that apply. N=62

Physical Item N=62

Library service point of users' choice	44	71%
Central library service point	38	61%
Faculty office	11	18%
Other location	18	29%

Please describe other location.

Selected Comments from Respondents

"All libraries that participate in MINITEX ILL receive delivery daily from the Access Center."

[&]quot;Staff attempt to verify location at another NCSU library if catalog record is unclear or if item is not found."

[&]quot;The physical item takes one day for campus, two days for statewide delivery."

[&]quot;We can in some cases offer same day delivery to the main campus libraries depending on when the request was placed."

[&]quot;We expect a 24 hour (max) scanned digital copy turnaround on articles from journals requested."

[&]quot;We fill requests within 24 hours. Facility and service is too new for average turnaround times. Hope to have this collectable soon."

[&]quot;We've had to decrease delivery service due to budget cuts for transportation services, so while requests are processed daily, deliveries are only made three days per week (M-W-F)."

[&]quot;Any departmental office."

[&]quot;Any user's desktop."

[&]quot;Archives Reading Room: archives/rare books only."

[&]quot;Branch libraries."

[&]quot;Default is to owning library."

[&]quot;Delivered first to central point. Monographs are sent to any branch or library on or off campus."

[&]quot;Delivery to OhioLink libraries, delivery to interlibrary loan libraries."

[&]quot;Directly to off-campus patron."

[&]quot;For law materials, to Law Circulation and/or directly to faculty offices."

Copy of Item N=45

Original scanned and placed on Web/FTP server for user download	24	53%
Photocopies delivered to library service point of users' choice	20	44%
Original scanned and e-mailed as PDF to user	14	31%
Photocopies delivered to central library service point	13	29%
Photocopies faxed directly to user	10	22%
Other location	11	24%

Please describe other location.

Selected Comments from Respondents

"ARIEL is used to deliver requested items directly to other libraries in the TRLN consortium."

[&]quot;Fragile and oversized materials are reviewed for transportation considerations at RRCC. Books requested to fill ILL requests are delivered to ILL staff."

[&]quot;Library 'owning' the item, especially for archives and other 'restricted access' materials."

[&]quot;Library Storage Building itself, for walk-in patrons."

[&]quot;Off-campus distance education sites and university research stations."

[&]quot;Other universities."

[&]quot;Science and Engineering library."

[&]quot;Storage facility reading room."

[&]quot;We deliver to campus library service 'hubs' to support further delivery to faculty offices."

[&]quot;Copies delivered to departmental offices."

[&]quot;Copy mailed directly to user."

[&]quot;ILL service."

[&]quot;Originals are returned from the facility to a central library location. Library staff will photocopy or scan articles for faculty and staff for a fee. Photocopies will be mailed to patron's office if requested. Scans are sent via e-mail if requested."

[&]quot;Original scanned and sent via Ariel."

[&]quot;Photocopy requests come through ILL system and are delivered to ILL staff."

[&]quot;Sent to on-campus addresses for faculty, staff, and graduate students only."

16. Who makes deliveries of the physical item or photocopy to a library or other campus location? N=60

Library staff	35	58%
Remote shelving facility staff	24	40%
Campus mail service	13	22%
Contract courier service	8	13%
USPS	1	2%
Other	15	25%

Please explain other delivery service.

Selected Comments from Respondents

[&]quot;Books and larger numbers of photocopies are delivered by campus mail service; articles are carried back from storage by staff."

[&]quot;Combination of library staff-operated delivery service and facility staff-provided special runs."

[&]quot;Courier delivers to three central locations; materials are then redistributed by library staff."

[&]quot;Delivery service to all three of the TUG institutions is run by one institution's (UW's) Campus Mail/Central Stores delivery service."

[&]quot;Full-time courier located at facility for weekdays; part-time courier and staff based at main campus for weekends."

[&]quot;Library messenger service."

[&]quot;Library Shipping & Receiving."

[&]quot;MINITEX Delivery System provides statewide delivery using various delivery options: couriers, staff, UPS, US mail, etc."

[&]quot;Often a combination of campus mail service to a central point and library mail service to another location."

[&]quot;Other universities' courier services."

[&]quot;Student employees."

[&]quot;The Collections Access, Loan, and Management Division has several full-time CDL drivers and owns an air conditioned truck that is used in the twice-daily run between Capitol Hill and Ft. Meade."

[&]quot;UPS to off-campus sites."

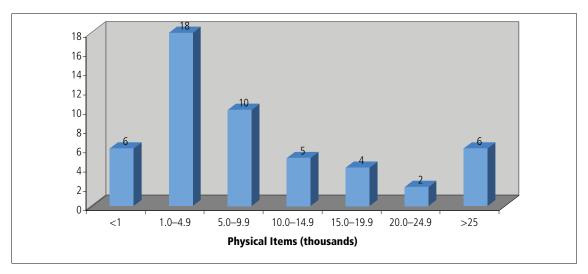
[&]quot;We have hired two library clerks who run between the various buildings to pick up and deliver the items to

the central library service point as well as return materials to the remote storage facility. These two individuals will do other library duties during their down time."

17. How many requests from your library's patrons were filled by the remote shelving facility in 2005? N=57

Do not record this data N=5

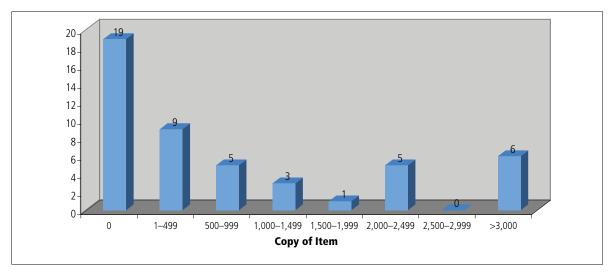
For physical item delivery N=51



N
6
18
10
5
4
2
6

Minimum	Maximum	Mean	Median	Std Dev
5	68,386	11,157.0	5,350.0	14,662.0

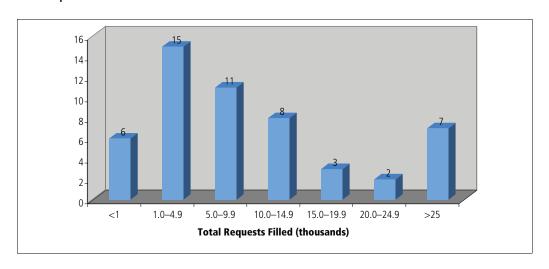
For copy of item (print or electronic) N=48



N
28
5
3
1
5
0
6

Minimum	Maximum	Mean	Median	Std Dev
0	4,556	926.8	142.5	1,344.0

Total requests filled N=49



Items	Ν
<1,000	6
1,000-4,999	15
5,000-9,999	11
10,000–14,999	8
15,000–19,999	3
20,000–24,999	2
>25,000	7

Minimum	Maximum	Mean	Median	Std Dev
5	68,456	12,339.4	6,400.0	14,807.1

SERVICE EVALUATION

18. Have remote shelving facility services ever been evaluated? N=59

Yes 23 39% **No** 36 61%

If yes, which methods have been used to evaluate the effectiveness of these services? Check all that apply. N=23

Informal feedback	16	70%
Surveys	7	30%
Focus groups	2	9%
Other	9	39%

Please explain other evaluation method.

Selected Comments from Respondents

"Any and every instance of a service 'failure' (user did not receive the desired item at the desired time) is reviewed to identify cause and determine possible action (examples have included catalog record enhancement and repeated training for circulation staff)."

[&]quot;Balanced Scorecard metric; internal flowchart study."

SERVICE CHANGES

19. Please describe any remote shelving facility service that has been added in the past 5 years. What was the primary reason for adding this service(s)? N=35

Service Added	Reason for Adding
1) Office delivery (departmental) is offered; delivery is made via "Gator" utility vehicle or single-user Segway; 2) Rush delivery can be made after normal daily courier service to library locations (using vehicles above).	To meet users' needs.
1. Saturday service. 2. Direct delivery to library service points by facility staff.	1. Request volume warranted it. 2. Reducing delivery time from facility to service point.
A second Annex. Climate controlled, it houses archives/ special collections, maps and other media, and regular books in compact shelving.	First annex not climate controlled. Also, needed more space.
a) Library to library delivery: serve as a pickup point for books from other 19 Cornell libraries; b) Library to office delivery: sending books to a designated library for distribution to faculty office; c) PDF delivery of microform materials	To make access of materials easier and faster for users.
All services new in past five years.	
Desktop delivery.	Availability of technology.

[&]quot;CQI—Continual Quality Improvement initiative was undertaken to evaluate service to users in 2004–2005."

[&]quot;Evaluated turnaround time before and after changing from using a courier service to a library-supported service."

[&]quot;Evaluating all aspects of service through routine statistic analysis; currently evaluating feasibility to expand service beyond university."

[&]quot;Library staff has evaluated the facility's environmental conditions via electronic data collectors."

[&]quot;No direct evaluation, but included as part of LibQUAL+TM and other surveys of library facilities and services; also Faculty Library Committee comments on services from remote storage."

[&]quot;Turnaround time, percent filled analyses."

[&]quot;Unsolicited messages."

To shorten the turnaround time on requests.
To reduce fill time rates.
Convenience for users.
Better and expand our service.
Improved customer service.
To provide desktop delivery of materials in a more timely manner.
Service enhancement.
Increasing volume of materials to be transported, as well as desire to maintain quick turnaround time on delivery of materials (volumes and articles).
To vacate as much of the library while we undergo a renovation and addition.
Improve efficiency and speed of delivery.
Better patron service tied to increased volume of materials being deposited at the facility.
These two services were expanded and implemented due to increase in the collections located in the facility.
Comfort of doing long-term research projects.
Technology improved.
To improve turnaround time for delivery of copies, provide users with enhanced desktop delivery.
Efficient; Cost effective; Timely; Excellent public service.
User needs anticipation.
More timely service to our patrons.

The LDRF has been open just seven months and so we have not yet evaluated services or added new services.	
The Library Service Center is two years old. Previously, the library relied upon a legacy storage area without adequate environmental or security controls and where retrieval service was spotty.	The portion of the central library dedicated to shelving was at, or exceeding, full capacity (all areas of the building which could feasibly be converted to shelving had been). The campus has no plans to dedicate exceedingly rare on-campus space to library needs, leading to a growth plan which relies exclusively on offsite housing and preservation of library collections.
The whole facility is a new service.	Space problems on main campus, in both main library and branches
Walk-in hours (10am—2pm, Monday—Friday).	Surveys and direct input from the faculty and students.
We have added a third daily retrieval of requested items.	To meet higher demand and patron expectations.
We just started scanning journal articles for faculty in January 2006.	
We recently implemented faster delivery of requests. Previously it was two business days; now a dedicated courier delivers in 6–30 hours (as of December 2005). Next month we will be implementing electronic article delivery.	Complaints by faculty members about the turnaround time.
Weekend retrieval, scanning.	Move of main collection offsite.

20. Please describe any remote shelving facility service that has been discontinued in the past 5 years. What was the primary reason for discontinuing this service(s)? N=9

Service Discontinued	Reason Discontinued
Completion of recording of holdings information in library catalogue.	Loss of staff member.
Currently our intake is 'on hold' as we have filled our initial purchase of shelving. (We have bought only 1/3 of the shelving needed.)	
Deliveries reduced to M—W—F.	Cost reduction.
Photocopy of journal articles.	Five years ago we staffed the remote storage facility with 2 1/2 FTE staff. With budget reductions and greater demands in other public services areas, staff were redeployed from the facility.
Photocopying for intra- and interlibrary loan.	
Some public service hours in the original Academic Activities Annex have been eliminated.	Lack of use. Redeployment of staff to higher use facility.
Sunday courier delivery suspended.	Patrons did not pick up items on Sundays. Requests very low.
The legacy storage facility has been discontinued within the last year, with all collections transferred and reprocessed (including conservation work within central library) into the new high-density storage facility.	Improvement of both collection conservation and service to library users.
Weekend Retrieval Service: Reduced from Saturday and Sunday during fall/winter to just Sunday, and reduced from one day to no retrieval on weekends in summer.	

FUTURE OF REMOTE SHELVING FACILITIES AND SERVICES

21. Are there any current plans to develop additional library remote shelving facilities? N=80

Yes 39 49% **No** 41 51%

If yes, please describe.

22. Do you anticipate that planning will begin for new or additional library remote shelving space in the next 5 years? N=77

Yes 49 64% **No** 28 36%

If yes, please describe.

Have a facility

Currer	nt Plans	In the N	lext 5 Years
Yes	We currently have three remote shelving facilities. We are working with the university and architects to design a new facility that will combine all three collections into one location.	Yes	See Current Plans.
Yes	We are planning to move materials out of Harper Storage as well as from other campus libraries (primarily our Law Library) into an on-site ASR shelving facility. This facility, presently being planned and designed, will open in Summer 2009 as an addition to our main flagship library.	Yes	As mentioned above, we are planning for a new on-site ASR facility. A report issued by a Provost appointed Ad Hoc Faculty Committee on Space for the Collections successfully stated the need for an on-site ASR facility (vs. an off-site high-density shelving facility).
Yes	Current facility will expand as need demands, with new module to be added in 2008.	Yes	Planning for additional expansion of current facility is ongoing.
Yes	It is estimated that the facility will be full within the next 3–5 years.	Yes	Discussions have been started about the need for more space. No formal planning in place.
Yes	As the current facility is reaching capacity, we are beginning to look at alternative solutions for the long term. Current strategies include weeding the current facility; implementing more stringent guidelines for depositing materials; exploring shared facilities with other regional institutions. We have not completely ruled out the possibility of building or purchasing and additional facility, but this is the least likely solution.	Yes	Planning is underway now. See Current Plans.
Yes	Preliminary planning is underway for a compact storage facility with climate control to be built closer to the central campus library.	Yes	Funding is very uncertain, but will not possibly be secured in the absence of a plan.

Additional modules will be built over coming years for a total storage capacity of around 7 million volumes. Next module will be built in 2007.	Yes	Second module scheduled for 2007.
The library's space needs have not been met by the first collections vault. We need to add another 6-aisle vault to the facility to meet the immediate collection space needs on campus.	Yes	We hope to find the partners and campus support necessary to break ground as soon as possible.
Very preliminary plans for expansion.	Yes	Planning for expansion could begin within 5 years.
Negotiations are underway for sharing an addition being built at the Library Service Center to be shared with TRLN members Duke, NCSU, and NCCU.	Yes	Construction of the LCS new module is imminent and should be completed in 18 to 24 months.
Investigating options.	Yes	The current facility is nearly full, so we are investigating options.
Planning monies were received to build an additional module to hold 1M volumes. Capital monies were NOT funded.	Yes	Expect state capital monies in FY 2008–09.
Adjacent space to current facility is available and we are considering sharing it with our branch campuses.	Yes	We've already held meetings to discuss acquiring and using the adjacent space.
A high-density facility has been placed on the university's capital construction schedule.	Yes	The existing facilities are near capacity. Precluding construction of a new facility, renovation of additional storage space will become necessary.
Preliminary investigation of off-site remote storage facility.	Yes	Plans at very preliminary stage now.
An extension of the current facility.	Yes	
An Archival Storage/Remote facility.	Yes	As mentioned above, an Archival Storage/ Remote facility.
Second module of Library Storage Facility.	Yes	Will begin this spring.
Preliminary planning for expansion or new facility for 4–5 years out.	Yes	
A second facility has been proposed to the state legislature, but approval was delayed. May hire a consultant to do a formal assessment and plan.	Yes	See Current Plans.
	years for a total storage capacity of around 7 million volumes. Next module will be built in 2007. The library's space needs have not been met by the first collections vault. We need to add another 6-aisle vault to the facility to meet the immediate collection space needs on campus. Very preliminary plans for expansion. Negotiations are underway for sharing an addition being built at the Library Service Center to be shared with TRLN members Duke, NCSU, and NCCU. Investigating options. Planning monies were received to build an additional module to hold 1M volumes. Capital monies were NOT funded. Adjacent space to current facility is available and we are considering sharing it with our branch campuses. A high-density facility has been placed on the university's capital construction schedule. Preliminary investigation of off-site remote storage facility. An extension of the current facility. An Archival Storage/Remote facility. Second module of Library Storage Facility. Preliminary planning for expansion or new facility for 4–5 years out. A second facility has been proposed to the state legislature, but approval was delayed. May hire a	years for a total storage capacity of around 7 million volumes. Next module will be built in 2007. The library's space needs have not been met by the first collections vault. We need to add another 6-aisle vault to the facility to meet the immediate collection space needs on campus. Very preliminary plans for expansion. Yes Negotiations are underway for sharing an addition being built at the Library Service Center to be shared with TRLN members Duke, NCSU, and NCCU. Investigating options. Yes Planning monies were received to build an additional module to hold 1M volumes. Capital monies were NOT funded. Adjacent space to current facility is available and we are considering sharing it with our branch campuses. A high-density facility has been placed on the university's capital construction schedule. Preliminary investigation of off-site remote storage facility. An extension of the current facility. Yes Second module of Library Storage Facility. Yes Preliminary planning for expansion or new facility for 4–5 years out. A second facility has been proposed to the state legislature, but approval was delayed. May hire a

Yes	As the current facility is reaching capacity, we are beginning to look at alternative solutions for the long term. Current strategies include weeding the current facility; implementing more stringent guidelines for depositing materials; exploring shared facilities with other regional institutions. We have not completely ruled out the possibility of building or purchasing and additional facility, but this is the least likely solution.	Yes	Planning is now underway. See Current Plans.
Yes	Discussions beginning to consider addition of special collections and adding more space for general collection.	Yes	
Yes	The Ft. Meade campus is a 100-acre site. For the library's collections, the plan is to build an additional modules up to a total of 13 at approximately 2 year intervals. These modules are attached to each other and will house books and bound periodicals, special format collections (e.g., maps, manuscripts, microform, sheet music).	Yes	The library will soon begin to construct Modules 3, 4, and four cold vaults at the Ft. Meade site. Completion is anticipated to be in early calendar 2009. In addition to Ft. Meade, construction work continues at the National Audio-Visual Conservation Center at Culpeper.
Yes	We plan to add another module to the current facility, perhaps as early as 2007.	No	Planning is already underway for the new storage bay.
Yes	The facility was designed to allow for a 5,750 square foot addition with an estimated capacity of 250,000 volumes. No date for construction has been established.	No	Since the existing facility is nearly half full, and it is expected that materials will continue to be transferred, administrative decisions will need to be made.
Yes	We have plans to construct our own permanent storage facility when funding becomes available.	No	Planning has already begun. See Current Plans.
Yes	Use of compact shelving in designated libraries.	No	There are discussions of transferring the materials in remote storage to compact shelving in the central library, and also in other branch libraries.
Yes	New building, including: - conservation center: rare books and special collections library - "library as a place:" rooms for conferences, seminars, expositions, individual or group work, and research centers	No	

Yes	We will develop additional space with compact mobile shelving in on the same floor as the current facility. It will house approximately 900,000.	No	
No		Yes	We have space available to add new shelving areas within the existing facility.
No	We are looking at a possible replacement of our current facility when our lease expires in 2012.	Yes	Preliminary planning phases have already started and consultants have recently prepared a written report on a new facility concept.
No	Long term at this point, but there is space to build another module beside the first.	Yes	Planning only.
No		Yes	Planning for additional storage space will begin in 2007/08. Funding for drawings and construction is expected after 2010.
No		Yes	We are planning to add 2 additional modules, one which will be a triangle library which will include UNC and NC State.
No		Yes	We will add on to our current facility in the next couple of years. As soon as financing arrangements are finalized, construction will be scheduled.
No		Yes	If funding becomes available, we hope to build an addition to the NE Ohio facility. Earliest possible opening would be 2010.
No		Yes	We will submit a proposal to install compact shelving on one floor.
No		Yes	No new facilities but we are planning an addition to the existing storage caverns. This high-density storage facility is located in mined space below ground level; planning has begun for adding to the mined space.
No		Yes	Discussions are underway with University Administration to allocate additional existing space on campus for library storage.
No		Yes	We currently have two 9,000 square foot storage modules and we are in the process of requesting funding for a third 9,000 square foot storage module.

No	Yes	The current facility will be full in the next 5 to 8 years, depending on the disposition of certain on-campus collections. Plans for locating a larger facility are now in the works.
No	Yes	As part of the library's Modernization Plan developed in 2001 an Automated Retrieval Cube (ARC) is to be built adjoining the main library.
No	Yes	Additional bay to be built as soon as state funding can be secured.
No	No	Planning for new regular library addition, largely of high-density shelving.

Facility is in planning stage

Curren	t Plans	In the I	Next 5 Years
Yes	Not additional ones, but a first high-density facility is in planning stages, nearing the final stages of approval on campus, and awaiting determination of funding sources. Planning based on consultant's report delivered fall 2005.	Yes	Planning already underway and will continue.
Yes	Are simultaneously investigating consortial and local storage solutions. We aren't certain if a consortial facility can be created quick enough to meet pressing current demands.	Yes	Ontario academic libraries are investigating the concept of a consortial solution.
		Yes	The library has been seeking funding sources for a state-wide consortium Remote Storage Facility for several years. This project is part of our Major Capital funding request and we are also seeking support from the legislature.
Yes	We may partner with another university's offsite storage facility.	Yes	See Current Plans.

Don't have a facility

Current	Plans	In the Ne	ext 5 Years
Yes	Just today (3-8-06) the University Librarian made a presentation to the Board of Trustees outlining the case for a remote storage facility to house seldom-used materials from collections of the 4 libraries operated by our sponsoring institution. Data suggests that, if acquisition patterns remain constant, the facility will be essential by the year 2012.	Yes	Yes, we hope to gain Board approval for such a facility. It would be needed by 2012. We are open to the possibility that an existing structure could be repurposed as the centralized storage facility, but we are also preparing cost estimates for construction of a new facility to be used for this purpose.
Yes	We had submitted a funding request for a remote storage facility and had begun planning for one. We are now re-evaluating our need based on the possibility of a regional storage facility.	No	
Yes	A new addition for the main library is near completion and features an HK robotic storage facility for 1.2 million volumes. The facility is connected to the circulation desk so that it will take about 1 minute to retrieve a requested item.	No	
Yes	Remote shelving facilities are being used to temporarily store and process materials displaced by a major flood that occurred in Oct. 2004. There have been talks about the need for long-term permanent remote shelving.	No	
No		Yes	Plans to develop additional library remote shelving facilities is too strong. We will be establishing a task force to assess collection shelving needs and identify options for housing our collections over the next decade. These options could include identification of subject areas in which we will limit our goals for print preservation, options for collaborative repository with other Indiana libraries, and collaboration with other campus units requiring similar storage.

No	Yes	At some point we will need to evaluate this service and determine the cost benefits of developing off-site storage.
No	yes	The feasibility of remote storage is periodically reviewed.
No	No	This is not in the planning stage but we do need more shelving space. A few years ago we installed compact shelving spaces in the basement of the library (accessible to users) and we are planning saving more space with our electronic collection.
No	No	It would depend on Ontario Government funds.

23. Are there any current plans to develop new services for the library remote shelving facility? N=74

Yes 40 54% **No** 34 46%

If yes, please describe.

Selected Comments from Respondents

Have a facility

Scanning and Electronic Delivery

"1. Provide electronic copies of articles for on campus patrons; 2. Expand Web-based finding aids for government documents."

"Addition of on-location scanning/transmission services."

"As described above, electronic article delivery."

"Digitization or fax on demand for materials at the facility."

"Digitize on demand for users; mass digitization."

"May introduce on-demand scanning of microfilm/fiche and microcards."

"Scan and deliver articles/chapters electronically to all campus patrons."

"We are looking at providing copies of journal articles that have been scanned and deposited at a secure Web

site as an alternative to retrieving the bound volume for our faculty and/or students."

"We are looking at the possibility of scanning articles for delivery to our users on campus."

"Expect to scan and deliver articles and physical items directly from the Annex in the future."

"We would like to be able to deliver electronic copies of articles to users' desktops, but cannot due to Canadian copyright law. Current proposed change to legislation may enable this service to be offered in the future."

Delivery of Items

- "Article delivery service will be added during this calendar year."
- "Delivery to faculty offices in conjunction with faculty delivery program."
- "Document delivery service."
- "Documents/copies/image delivery."
- "Expand article delivery."
- "Interlibrary loan service."
- "Planning is beginning to do document delivery (initially in support of interlibrary loan, but extending services to campus community)."
- "Expand document delivery and retrieval to location of patron's choice."
- "We would like to be able to deliver photocopies of specific articles as well as digital files via e-mail."

On-Site Services

"Additional high-density storage, a Preservation Center with state-of-the art conservation equipment, a computer room for a main distribution center (MDF) for the repository, and work areas for staff are envisioned."

"User consultation room for archives, manuscript, and long journal run consultation."

"Enhancement of conservation and development of rare books collections. Enhancement of conservation and diffusion of research and semi-active collections. Reference services, adapted to all specific needs. Expositions, seminars, conferences. Improve reading room for onsite users."

"High-density processing of collection."

- "Expect to purchase Remote Film Access software and carrier for microfilm scanners when commercially available in summer 2006. This will allow users to advance, rotate, crop, etc., images remotely from film loaded at the shelving facility."
- "Online circulation from Library Storage Building itself; current materials charged via the phone; book drop for returns to the remote site."

"Reviewing possibilities to process collections on site and to offer desk top delivery in support of ILL/

Document Delivery."

"Storage rental to non-Cornell customers; deliver materials to non-Cornell service participants; other core services on demand."

"We are considering on-demand paging."

"We hope to offer onsite use in the future; no date yet. Hurricane Katrina caused severe staff shortages. Everything is currently on hold."

"When the new space is completed we are planning to provide copying and scanning services."

"Wireless Internet connection for onsite users."

"The Addition will provide retrieval within minutes of what is in the ASR; in addition, we will likely provide digital delivery of journal articles to students and faculty, particularly those in the sciences and law."

"In the next year a review of the 20-year-old service model will be undertaken to address new needs and capabilities."

Don't have a facility

"The Council of Ontario University Libraries is exploring the possibility of establishing a remote shelving facility for use by its 20 members."

"The remote shelving facility that we are envisioning would include delivery on demand of physical copies, digitization of copies whenever possible, and limited public access by researchers."

ADDITIONAL COMMENTS

24. Please enter any additional information regarding remote shelving facilities and services available to your library that may assist the authors in accurately analyzing the results of this survey. N=23

Selected Comments from Respondents

Have a facility

"A problematic survey for us. Our three facilities are rather distinct. Annex 1 takes the bulk of our materials now, so meets the requested definition of 'primary facility.' The SRLF shared UC facility houses many more volumes, but has not been able to accept very many volumes in a number of years. The second Annex, as described above in new facilities, serves a different purpose altogether than the first annex."

"[We are] going against the grain of most research libraries by providing access onsite via an ASR system to

material which we feel does not need to be browsed by users. Our plans are to put archival storage materials, elephant folios, and serials into the ASR. This will allow us to keep monographs available on the open shelves for browsing."

"Current facility is a complete replacement for a previous shared facility of slightly smaller size used from 2000–2005."

"Two full-time support staff work at the remote shelving facility. Existing librarians, support staff, and student assistants in the Access Services, Bibliographic Control, and Preservation Departments have taken on new duties in processing Library Annex materials."

"One interesting note is that 25% of the items circulated out of the shared storage facility circulate to members of our INN-REACH consortium (there are 4 members of PASCAL, all included in the 23 member consortium)."

"Our storage facility is not remote in that it is located on the central campus in the basement of our Undergraduate Library."

"ReCAP is a consortium formed by Columbia University, the New York Public Library, and Princeton University to own and run this remote shelving facility."

"Services were disrupted from the remote storage facility in 2005 because of the installation of heating and ventilation equipment in the area to service other parts of the building. Use was reduced as a result."

"Standard operating procedures have been reported, but we are flexible when we have unusual or timesensitive requests. We also will bring items back from remote storage for longer time periods, such as a full semester for a class. Staffing is so low because we are making almost no deposits since we're full for all practical purposes, so the reduced staffing is sufficient for retrievals."

"The facility is a shared facility, managed by the U of MN/MINITEX. Sixty percent of the space is reserved for the U of MN libraries and 40% is for the other libraries in the state."

"The Segway vehicle (equipped with two side-saddle bag carriers) is very convenient for retrieving materials within the facility as well as making deliveries to other locations on campus."

"We were retrieving materials from McLafferty Annex the entire time we were moving materials into it (September to November 2005). I only included statistics from November to December since we were also retrieving materials from the closed library floors during September and October (while we were moving the materials) and we didn't differentiate where we were retrieving the materials. The bulk of the move had taken place by November."

Facility is in planning stage

"Planning is at such a preliminary stage that we aren't able to answer many of the questions. Are just now having discussions with other libraries and touring existing storage facilities."

"Planning is underway for a 500,000 high-density storage facility attached to one of the libraries on campus. Construction is expected to begin May 2006."

"Texas A&M is currently in the early planning stages for two remote storage facilities, so we have no specific answers that we can supply at this time to any of the questions you have posed. One facility will be on the perimeter of our campus here in College Station. It will be administered solely by the TAMU Libraries and will be used largely to house some archival materials and the university records management operation. The other facility will be a joint venture in Austin with the University of Texas at Austin and it will house parts of the research collections from each institution. Planning for both of these facilities is just now beginning."

"We are in final stages of planning to open the University at Buffalo Libraries Annex in summer 2006. Most policies and procedures are now in place and we are currently hiring Annex staff, and purchasing furniture and equipment for the Annex. My answers to the above questions reflect anticipated services provided at the Annex."

Don't have a facility

"The library installed an Automated Storage Retrieval System in 2005 in its new Irving K. Barber Learning Centre. The Centre replaces the old Main Library building and incorporates the storage facility, which replaces various inadequate on-campus storage areas, including several that were housed in the old Main Library."

"We are in the process of establishing policies and procedures to discard part of our serial collection that is available electronically and for which preservation is assured."

RESPONDING INSTITUTIONS

University of Alabama University of Louisville University of Alberta McGill University University of Arizona McMaster University Arizona State University University of Manitoba **Auburn University** University of Maryland

Boston College Massachusetts Institute of Technology **Boston University** Michigan State University

Brigham Young University University of Minnesota University of British Columbia Université de Montréal **Brown University** University of Nebraska-Lincoln

University at Buffalo, SUNY University of New Mexico

University of California, Irvine University of North Carolina at Chapel Hill University of California, Los Angeles North Carolina State University University of California, San Diego Northwestern University

University of California, Santa Barbara University of Notre Dame Canada Institute for Scientific and Technical Information Ohio University

Case Western Reserve University Ohio State University

University of Oklahoma University of Chicago University of Colorado at Boulder University of Pennsylvania

Columbia University Pennsylvania State University University of Connecticut **Purdue University**

Cornell University Queen's University Dartmouth College Rice University University of Delaware **Rutgers University**

Duke University University of Southern California Southern Illinois University Carbondale University of Florida

George Washington University Syracuse University Georgia Institute of Technology **Temple University**

University of Guelph University of Texas at Austin

University of Hawaii at Manoa Texas A&M University

University of Houston **Tulane University** University of Illinois at Chicago Vanderbilt University University of Virginia

University of Illinois at Urbana-Champaign Indiana University Bloomington Virginia Tech

University of Iowa University of Washington Iowa State University Washington State University

Washington University in St. Louis

University of Waterloo Kent State University University of Kentucky Wayne State University

Université Laval University of Western Ontario

Library and Archives Canada Yale University Library of Congress York University Louisiana State University

University of Kansas