Remote Shelving Services
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SURVEY RESULTS

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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 technology-based 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’œil 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 wrap-
ping. 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 im-
provements 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.