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EXECUTIVE SUMMARY

Introduction
This SPEC Kit explores shared print programs, the ecology of print retention in distributed networks, expressed benefits of participation, relationships between existing consortia and shared print program coordination, and long-term anticipated uses for print. It identifies the qualities that ARL member libraries value about these partnerships, and their rationales for participation and for continued, collaborative action around print retention. It identifies investments in shared print programs and estimates print retention progress made with those resources.

One goal of this study was to understand better the types of institutions that are emerging as repository sites in shared print programs. It sought to understand the extent to which ARL member libraries serve as shared-print-holding institutions relative to other members in the programs and within the ARL membership, as a peer group. The study also sought to understand how shared print partnerships extend beyond the boundaries of existing consortial or resource sharing networks. The answers to these questions might suggest changes in the fundamental nature of print stewardship and raise questions about the organization, governance, and infrastructure needed to support cooperative collection management now and in the future.

Other significant goals of this study included developing a deeper understanding of ARL libraries’ real and perceived roles and responsibilities in print collection management, the types of partners ARL libraries engage with in shared print arrangements, and the longer-term cases for retaining and providing access to print. Answers to all of these questions might inform how long to pursue collaborative print collection management and with whom to collaborate. Further study might be needed to correlate findings with other work in scholarly communities around this same topic and with ethnographic studies of print and digital use.

Finally, another goal of the study was to understand the key characteristics and configurations of shared print programs from an operational perspective. A subsequent publication will address configurations of shared print programs, business, operations, and service models in more detail.

Surveys and Response Rates
Two surveys were issued in May 2014: one to ARL member libraries and another to managers/ coordinators of shared print programs. ARL libraries were asked general questions about all shared print programs in which the institution participates, goals and benefits of participation, rationale for participation, and services provided. This survey did not ask about the details of a single, specific shared print program but rather about a library’s participation in shared print arrangements in general.

The Shared Print Program Managers/Coordinators survey asked questions about a specific shared print program. Managers of 36 shared print programs were invited to participate in the study. The survey asked about specific business and operational models, strategies, goals, membership, collections, archiving progress, access, and other services. The purpose of this survey was to explore the extent of ARL libraries’ participation in shared print projects, the type and scope of projects in which ARL libraries choose to participate, and the concerns and advantages specific to different models.
The two surveys included both attitudinal questions about the perceived roles and responsibilities of ARL libraries in long-term print retention, as well as data-informed questions about actual retention rates and investments. Information about actual investments and perceived value can further shape the development of current and emerging programs.

Sixty-two of the 125 ARL member libraries (50%) responded to the member survey and 23 of the shared print programs (61%) responded to the managers/coordinators survey by the June 9 deadline. Because many more programs are currently in development, data was collected from shared print programs in any stage of planning or maturity. Actual print retention statistics and investments were reported for a subset of shared print programs (10 of 23), which tended to represent programs that have been operational for several years.

Definitions
For the purposes of this study, shared print program is defined as a concerted effort among a group of libraries to collaboratively collect or retain print collections and provide access to them.

A shared print coordinator is any person who coordinates a shared print program, whether or not that is an official job title. Such individuals often organize, advise, or support some form of multi-institutional governance group(s) and provide strategic, policy, analytic, or cross-institutional management support.

An archive holder refers to an institution that assumes long-term responsibilities for print retention on behalf of a broader group; it is generally construed as the location that retains materials and dedicates ongoing staff and space to manage and house the print collection. An archive holder may be a storage facility or a full-service library that retains materials in place. We acknowledge that the term “archive” is not used in its strictest technical sense, but to refer generally to items brought together physically or virtually in an intentionally retained and shared collection.

An institution that contributes items but does not house them is a contributing library, and while important and essential in many programs, these libraries are not counted as archive holders. Some libraries may contribute holdings to a stored collection and also retain some holdings in place; these libraries are counted as archive holders by virtue of their retained collections held in place.

Every shared print collection program is different, representing a variety of stakeholders and coordination methods. In particular, each program has a different perspective on what it means to move materials elsewhere, to cede some level of collection management responsibility to a collective, and to be accountable to the collective for retained holdings as they become scarcer. A common vocabulary to describe the various roles does not yet exist, which was occasionally noted in some responses to survey questions.

When statistics are reported regarding numbers of institutions serving as holders, shared storage facilities or storage facilities that house some shared collections are counted once and identified as “ARL” or “non-ARL” based on the entity that administers the facility. The authors acknowledge that this approach may undercount the number of institutions that contribute holdings in programs where holdings are actively consolidated from multiple institutions into storage facilities (e.g., CIC, CRL, JSTOR, WRLC, UC Shared Print, WEST, Five Colleges, MLAC, FLARE), but it fairly accurately counts the institutions that dedicate staff to the long-term management of such collections. When non-archive holders are reported, they are institutions that explicitly identified in that role or that program coordinators identified in that role.

Scale and Scope of Shared Print Collections: Archiving Progress
Shared print arrangements have certainly achieved large scale in terms of quantity of print resources retained and distribution of responsibilities. Shared print programs are observed now across the spectrum of libraries in higher education. Most shared print programs that responded to this survey are focused on cooperative collection management, not collection development. Most are focused on journals and monographs, though some other physical formats, like microforms, were reported.

Approximately 6.1 million print volumes are subject to some form of explicit shared retention agreement. The aggregate shared print resource for journals is estimated at 27,180 titles (including duplicates),
representing hundreds of thousands of volumes. The aggregate shared print resource for monographs is difficult to estimate but ranges somewhere between 5 to 8 million volumes.\(^2\) According to a recent unpublished report by OCLC Research at ALA Annual 2014 Las Vegas, the shared resource as expressed in retention commitments in OCLC corresponds with more than 270 million records, possibly representing duplicate holdings.

The scale of shared print has evolved beyond preparation of title lists; indeed, it now requires deeper catalog, discovery, resource sharing, and analytics integration such that participants and non-participants can understand what is in the collective collections. The momentum of shared print efforts has built in the last three years, with six new shared program agreements in 2012 and more reported in planning stages.

**Investments**

The figures presented in this section are intended to describe a broad scope of investment in shared print programs. Funding models vary widely, with important in-kind contributions in some programs, making it potentially difficult to fully account for investments. To the extent programmatic budgets could be identified, they are reported here. In addition, average annual participation fees for individual ARL libraries are reported to provide a picture of investment at the institutional level. These program-level and institutional-level figures may represent the first attempt to quantify overall investment in shared print programs; they may prove useful benchmarks for general planning purposes as new programs emerge and as more libraries consider participating in them. It may be useful to recapture these figures in a few years to better understand the investments in print collection restructuring.

It may also be useful to note that only one shared print program indicated budget-supported plans to acquire new content for prospective shared print purchases. Consequently, the investments in this section represent investments in cooperative collection management for retrospective collections, not prospective collaborative purchasing.

The median budget reported by 14 of the shared print programs is just over $400,000 annually. These shared print coordinators reported overall program budgets ranging from zero to more than a million dollars per year. Many factors, including the number of participating institutions, the size of the collection to be analyzed, the size of collection processed for retention, the location of holdings, and level of service expected lead to wide variability in program budgets. Also, in some cases, the program is integrated in an existing consortium’s functions and shared costs of the program are indistinguishable from overall consortium budgets (e.g., OhioLink or TRLN). In several other cases, program budgets had not yet been determined.

To better understand the level of investment from an institutional perspective, ARL libraries were asked to report annual fees for shared print programs for three years to identify a three-year average annual expenditure. Over the past three years, 32 of the responding libraries spent on average approximately $14,280 per year in direct member fees for shared print programs. Some twenty-one libraries reported paying no direct fees for participation in shared print. Twenty-three libraries pay fees to one or more shared print collaborations.

It may be useful to contrast this with annual fees for participation in digital preservation and other trusted services. ARL members were also asked to report annual member fees for five services—Portico, CLOCKSS, LOCKSS, HathiTrust, and Digital Preservation Network—to identify a three-year average annual expenditure per service. Over the past three years, the 38 responding libraries spent on average $8,700 to $53,980 annually per service on direct member fees to participate. While such services are not alike and provide different capabilities, they are part of a landscape of shared services focused on shared retention and future access to content, often attending to similar content and on a similar scale as shared print programs (e.g., journal backfiles). Like shared print programs, such services are also often governed above or across existing library consortia.

**Ecology of Stewardship and ARL Libraries as Archive Holders**

When considered as a peer community, ARL libraries are well engaged in shared print programs and
most participate in archive holding roles. Most of the 62 responding member libraries are archive holders. More engagement in shared print programs by ARL libraries can be expected in the next five years; an overwhelming majority of the library respondents indicated their institution plans to play a greater role in shared print programs (35 of 49 respondents, or 71%); the rest expect to continue to participate in the same role (17, or 35%). None expect to reduce or discontinue participation in the future. Approximately 15% of the libraries that participate in shared print programs participate in multiple programs (e.g., WEST and UC Shared Print, ASERL Scholars Trust and MedPrint).

Only seven to nine libraries that currently participate in shared print programs do not participate as archive holders. As indicated by these respondents, non-participation as a holder reflects either the early planning stages of the program (retention commitments are planned but have not yet been made), non-invitation to a particular program at startup when archive holders were identified, or an explicit decision to not make retention or purchasing commitments in or to the group. Most fall into the first two categories.

In terms of publication types, ARL libraries tend to retain journals in shared print programs. Of the 27,180 journal titles committed to retain in shared print programs, 61% are held by ARL libraries while 39% are held by non-ARL libraries (16,570 and 10,610 respectively). The various regional or cross-regional shared print programs each tend to hold approximately 200–300,000 journal volumes (e.g., ASERL Scholars Trust, CIC, UC Shared Print, WEST). MedPrint holds 1,760 titles (or an unreported but roughly estimated 70,000 volumes). The planned development of a shared print monographs archive among HathiTrust members may truly alter the current landscape of shared print collection management and increase the depth and breadth of ARL member libraries’ participation.

Some additional interesting patterns of institutional distribution of responsibilities have emerged in shared print programs. Non-ARL libraries are emerging as an important set of libraries in long-term retention. In current shared print programs, most archive holders are non-ARL libraries. Approximately 251 institutions participate in shared print programs; 26% are ARL institutions and 74% are non-ARL institutions (65 and 186, respectively). About 38% of the institutions serving as archive holders in shared print programs are ARL libraries (62 of 164), while the majority are non-ARL libraries (102, or 62%). This study did not survey non-ARL libraries so the authors can only speculate that an important cohort of non-ARL libraries are highly motivated to distribute print responsibilities and are willing to make long-term commitments to some components of their collections.

In addition, print retention commitments tend to be distributed and non-ARL libraries commit to retain significantly more volumes relative to ARL participants. Of the 6.1 million print volumes held in shared print programs, as reported by shared print managers in supplemental spreadsheets, approximately 80% are held by non-ARL libraries and 20% are held by ARL libraries (4.8 and 1.2 million volumes, respectively), which reflects the rapid rise in and demand for shared print agreements across a spectrum of libraries and willingness of some non-ARL libraries to engage in long-term retention.

Shared print participation crosses the spectrum of higher education institutions, and programs have begun to include public libraries and non-degree granting research libraries. The types of institutions that currently participate in shared print arrangements are primarily academic libraries, ranging from two-year colleges to doctoral degree–granting institutions. Notably, a few non-degree-granting research libraries and non-ARL public libraries also participate in shared print programs. Both publicly and privately funded institutions participate; there is not a significant distinction in participation from public or privately funded institutions, which may suggest that regardless of the source of institutional support, most libraries in higher education find value in their participation in shared print programs.

In conclusion, more and deeper ARL participation in shared print programs can be expected in the future; the landscape of print retention will likely be distributed across a mix of ARL and non-ARL libraries, with important retention roles for non-ARL libraries. And greater emphasis on retention of monographs in distributed relationships can be expected, which may re-alter the already changing landscape of stewardship among libraries.
Goals and Benefits of Shared Print Programs
The primary goals of shared print programs, as expressed by ARL libraries and program coordinators, are 1) to preserve and provide access to the scholarly record, 2) to more effectively and efficiently manage print collections, and 3) to create opportunities for libraries to make informed collection management decisions about duplicates. Most progress has been made toward the first two goals through coordinated retention commitments.

The library respondents were asked about their motivations for joining shared print programs. Most indicated they joined to collaborate with other libraries in a geographic region, to share responsibility for sustaining physical collections, and to preserve items cost effectively. Important secondary factors include freeing up shelf space and collaborating specifically with other ARL libraries. It is important to note that collaboration just with ARL libraries or collaboration with other types of libraries (public, special libraries) were not as highly valued. Responses to later questions indicated that geographic region was somewhat less important, suggesting that other factors are important when identifying partners (discussed later).

Freening up shelf space was an important secondary motivator. Most hoped to free space for other uses (32 of 50 responses, or 64%). Fewer hoped to free up shelf space for other print items (24, or 48%), or to free up space in a storage facility (21, or 42%).

Far fewer joined to acquire more diverse resources (print or digital), to reduce duplicate purchasing, to garner additional support for print collections, or to gain access to more print collections held elsewhere, which may be reflective of a current trend to de-emphasize collaborative collection development in shared print programs in favor of shared management of retrospective collections.

To better understand how ARL libraries articulate the value of these programs to some stakeholders, members were also asked to describe the rationales they provide to higher administration for participation in shared print programs. The expressed responses might be categorized into three themes: 1) shared stewardship, preservation, and access, 2) space efficiencies including the ability to reduce duplication and either prolong existing storage capacity or reduce demand for future storage, and 3) no need to provide a rationale. It is important to note that some respondents emphasize only or primarily the retention and access benefits, while many others also emphasize space efficiencies as an important near-term or future benefit.

“We are an archive builder along with other institutions so that we can ensure long-term access to important collections.”

“Shared print programs ensure broader access to larger legacy print collections than our own holdings, and frees shelf space for onsite collections.”

“[My] main message has been that participation in the Shared Print Programs ensures preservation of the print scholarly record, while distributing commitment over many institutions. It should free us to use our space in different ways without building another storage facility.”

“We are preserving a breadth and scope of the collection while locally managing space pressures.”

Curiously, several respondents indicated they do not communicate with higher administration about shared print either because the shared print program is so well established and known it is not necessary, or because the program is still in a planning phase. It is possible that over time shared print will become part of a library’s ethos that no longer requires explanation.

There may however be an emerging disconnect between some stated benefits and actual behaviors that warrants attention. While many respondents cite space concerns and a goal of reducing duplication as reasons for participating in shared print programs, fewer than half reported that deselection activity has commenced at their library based on retention commitments at other libraries. In fact, seven respondents indicated local resistance to discarding print emerged as a result of participating in shared print programs. Local concerns may be related to shared programs’ relative newness in collection management and may also reflect concerns about 1) access to print retained elsewhere, 2) level of holdings verification performed, and 3) nervousness about the stability of digital access or quality of digital resources.
In terms of access, only about 20% of respondents make retained titles that are held at other campuses visible to users in the local catalog, though programs use a number of ways to attempt to make retained items known to library staff. It is conceivable that librarians and users will become more comfortable with deselection if retention commitments within and across networks become more visible. At some point, it may be necessary to reconcile the benefits described to higher administration and to users, particularly those related to space reclamation and access, with actual behaviors. Greater discovery and integration of resource sharing may support this evolving conversation. Some programs, notably the Maine Shared Collection Strategy, are also looking into print-on-demand and e-book-on-demand services as one approach to better support access.

Stewardship Responsibility: ARL Libraries’ Perspectives

Library respondents were asked a set of pointed questions to better understand longer-term perspectives on print retention, long-term needs for print, and types of partners with which to collaborate. They generally believe that print retention is important and many believe that ARL libraries should be the libraries to assume that role, though other libraries will need to be engaged. While there is strong agreement among the respondents that it will always be important for some library to maintain print, irrespective of digital availability or digital preservation status (47 of 50 respondents agree to strongly agree), fewer, though still a substantial number of respondents, believe it is the responsibility of ARL libraries to sustain and manage comprehensive print collections of record (40 of 50 respondents). When this same question was asked of ARLs not currently participating in shared print programs, 6 of 8 respondents also agreed that some library should retain print, and half (3 of 6) feel that ARLs have an important stewardship responsibility.

A key comment suggested that ARL libraries “do not necessarily need to be the holders themselves of comprehensive print collections...they should exert a decisive leadership role to develop a collective collaboration across the country among libraries of all sizes....” Comments also emphasized the need to collaborate with specialized non-ARLs, national libraries, and CRL. In sum, “ARLs are best placed to take the lead” but many other libraries will need to be involved. Respondents emphasized distribution of responsibilities as a core value and expectation, noting that, while ARLs will play an important or central role, there remains a “need to rely on a network that is not exclusively American or academic,” and to “focus on more being spread across a wide network.”

Indeed, when asked about the future landscape of print collections, most respondents indicated that “twenty years from now, users should expect to find fewer copies of intentionally retained print publications spread across a network of ARL and non-ARL libraries” or “spread across a network of ARL, non-ARL, and large public libraries.” This finding, that print retention and management responsibilities are envisioned as distributed in the future, is consonant with the findings in other areas of the study.

Preferred Partners

ARL member libraries were asked additional questions about the types of partners sought in shared print arrangements, which may be useful for planning. There are some common values held across the responding libraries. In general, these libraries are most interested in 1) participating in shared print programs composed of other academic libraries, not large public libraries; 2) they prefer partners that strive to provide better or more access to shared, retained collections; and 3) they prefer institutions that “manage” users, particularly users that cause damage or loss to the collections. When choosing partners to collaborate with around print collections, the responding libraries most value partners within the same resource sharing consortium, but not necessarily the same state or province. These emerged as primary criteria when choosing partners to work with. Secondary criteria included familiarity with the administrators at partner libraries and some degree of parity in lending and borrowing.

Geographic proximity, collection similarity/dissimilarity, or big disparities in lending and borrowing patterns are less important criteria when choosing partners. The respondents are not particularly concerned about or interested in partnerships that are within the same state or province, though some
have evolved in existing local trust networks. Indeed, many shared print programs have formed that involve regional partners or partners in non-contiguous states and provinces (12 of 22 shared print programs, e.g., COPPUL SPAN, MedPrint), suggesting a gradual evolution of print collection management beyond traditional trust networks (or at least networks that are defined by traditional licensing and resource sharing agreements).

The responding libraries are less sanguine about involving large public libraries despite the evidence from various OCLC reports that comprehensiveness in the aggregate shared print collections (if that is a goal) would require the combined collections of academic and public libraries. At least one shared print program includes public libraries (e.g., Maine Shared Collections Strategy). It may be worthwhile to revisit this expressed response in a few years as additional shared print programs are implemented and retained collections evolve.

And while the respondents don’t have a strong preference for the form of agreement that is established (a general agreement that provides guidelines for collection management behaviors or a legal agreement to codify expected collection management behaviors), some form of agreement is important. As one respondent noted, “It is important for us to have an MOU with partners that provides clear guidelines on user access to content and clarity regarding persistence/retention time-frames.”

On Consortia and Changing Contexts of Collaboration
The survey asked several questions to begin to understand the extent to which shared print agreements might be changing the boundaries and locus of decision making beyond existing consortial structures. Shifting decision making for print collections management from the local library or traditional licensing or resource-sharing consortium to a differently configured, broader group might suggest a new form of supra-consortial or network-level collection management approach is emerging (or necessary.)

Most shared print agreements do not declare shared ownership but do involve important stipulations about shared decision making about the retained collections. Archive holders to some extent cede collection management responsibilities from the individual library level to the group of partners; in particular, decisions about withdrawal of titles or termination of archive holding roles are governed by the group. This shift of print collection management decision making to a broader group (often not confined to a traditional consortial structure) and the overall scope of the collective collection (and its potential to catalyze change) set the stage for some degree of broader coordination.

Harmonization of access, discovery, and delivery of intentionally retained materials may become more acute as shared print programs mature and libraries begin to reduce duplicates. Deaccessioning has begun. While most programs focused on making retention commitments between 2008 and 2012, more recently, beginning in 2012, program coordinators are reporting withdrawals based on retention. Nineteen of the library respondents (38%) report making deselection decisions based on retention commitments made by other ARL and/or non-ARL libraries.

In terms of resource sharing, most of the respondents (40 of 49, or 82%) belong to more than one lending network, and some participate in a half dozen or more. Seventy-eight percent of respondents (38 of 49) extend benefits of access to shared print materials to other lending networks through existing agreements. Almost all shared print program participants (44 of 49, or 90%) belong to more than one group or consortial resource licensing program for electronic resources.

These overlapping networks may suggest that shared print agreements can interoperate across existing networks and clearly do not restrict participating in them. Moreover, the metadata guidelines for disclosing shared print in OCLC create the possibility for a re-unification of intentionally retained resources in a broader resource-sharing network. The adoption of those guidelines is occurring gradually and could be an area for further development. Forty-seven percent of the shared print programs (9 of 19) report that items retained by participating libraries are identified in local holdings records, using separate shared print OCLC symbols and the MARC 583 field to designate retention commitments. Coordinators also identified additional registries, particularly for programs...
focused on journal backfiles, where holdings are disclosed (e.g., PAPR, DocLine, JRNL). Currently, resources are not consistently or uniformly disclosed in systems that span the particular partnership or multiple partnerships or that reveal the retention status and location to users presenting some important challenges to existing resource sharing networks. More work is needed in these areas to achieve ARL libraries’ expressed interest in better or more access to shared collections.

**Shared Print Monographs and Future Services**

While very important progress has been made in journal retention agreements, monographs appear to be the next area for development. Faced with a chronic shortage in storage space and heavy duplication in some areas of the collections, libraries seek to determine how much diversity can be retained for the future and possible ways to collaborate to ensure retention while also deaccessioning some materials. The Maine Shared Collections Strategy and PALNI/ALI programs are two early frontrunners that can provide invaluable expertise.

Monographs present some significant additional challenges for collaboration. To better understand possible future directions, ARL members were asked to consider aspects of publishing and use that might inform future decisions. In addition, they were asked to consider various library management areas to explore or experiment with in the future to support shared collections of fewer copies of print monographs.

The library respondents identified the following activities as most important to monitor in the future: 1) interlibrary lending capabilities for e-books, 2) uses of print and digital monographs throughout the research lifecycle, 3) use of shared print books as discovery and delivery of them are enhanced, and 4) print monograph deselection rates. It is interesting to note that these are mostly collection management areas within the purview of library management.

Other important areas identified by respondents, though to a lesser extent, included monitoring use of print books as digital surrogates become available, use of print books by different user cohorts, transformation of the long-form argument to other more dynamic forms of publication, tenure achievement with non-book length publications, and tracking unmet demand for print books. It is interesting to note that these areas a somewhat beyond library control.

When asked about library management services that might be experimented with to better understand the infrastructure needed for shared monographs, the top responses included 1) coordinated digitization of shared print monograph collections, 2) scan-on-demand services, 3) metadata cross-walks between shared print and digital copies and unified display, and 4) business models that provide incentives to implement additional access services at retaining libraries and repositories (possibly including some “free” and “for a fee” options). Beyond these, a middle tier of interest, which may suggest longer-term areas for exploration and may be the harder areas to address, include 1) expanded interlibrary lending networks, 2) print on demand, 3) preferred pickup locations across a broad network of libraries and repositories, and 4) direct delivery services by mail to authenticated users in a network of print retaining libraries and repositories. Harmonizing loan periods and rules were of least interest.

**Anticipated Future Uses of Print**

To better understand the reasons for continued print management, ARL libraries were asked about several possible uses for print and the number of years into the future this usage would be important. These questions were asked to begin to answer the question “why retain print?” These questions were only asked about print journals that are digitally available and preserved. Questions were not asked about journals only available in print or about print monographs (the vast majority of ARL library holdings). The rationales for retention may be different but these responses may begin to help formulate a response and strategies. The questions asked are modified versions of questions originally developed by Ithaka S+R in an unpublished study, and were used with permission. It may be useful to contrast the responses in this study, which represent an ARL library perspective, with work currently underway among ARL, Modern Language Association, and American Council of Learned Societies on print collection management, a scholar’s perspective, to begin to develop future
frameworks for shared print collection management, particularly for monographs.

The rationales for retaining print when journals are well digitized and preserved can be generally grouped into 1) technical cases related to digitization/re-digitization (scanning errors, changing scanning standards), 2) research cases that require consultation with the print form, and 3) library stewardship or collection management responsibilities (catastrophic loss of online resources, my community thinks it is important, institutional prestige, and avoiding deaccessioning work).

For print journals that are well digitized and digitally preserved, the most compelling future uses for print according to respondents were those that require consultation with the print form, including consultation for artifactual characteristics, authenticating a version of record, access to illustrative content or supplementary material, and access for digitally disabled users.

Respondents expect those factors to be important for the next twenty years, and in some cases beyond twenty years (i.e., authenticating the version or record, artifactual value, and to some extent access to illustrative content). Uses related to stewardship, library collection management issues, and community politics may be important for the next five to ten years, but the only enduring case in this area is to provide access in the event of catastrophic loss of online resources. Technical reasons related to digitization are expected to be resolved in the next ten years.

In sum, ARL libraries anticipate that certain issues, specifically those related to collection management and digitization, would be resolved in the next decade and are not rationales for print retention; however, they saw a very long-term need for access to print for certain research purposes related to the artifact, authenticity, access to illustrative and supplementary content, and to support digitally disabled users.

**Frameworks and Characteristics of Shared Print Management**

Shared print programs include many kinds of libraries—not merely ARL and non-ARL academic libraries, but also public libraries, school and special libraries, community colleges, and non-degree granting institutions. Existing programs also vary significantly in size, with agreements to retain materials collectively between as few as three libraries to as many as 204. Though most programs center around a specific (though often sizeable) geographic region, the programs also cross national as well as state, provincial, and territorial borders. State-supported and private institutions are almost equally represented (121 state-supported to 110 private). Some programs have a disciplinary focus, such as the PALMPrint initiative to collect law material and the MedPrint Medical Serials Preservation Program. The survey results indicate that collaborative print collections are perceived to offer benefits implicit to the practice of library collection management, rather than to a type of institution or philosophy of collection development.

**Governance, Administration, and MOUs**

Most shared print arrangements are defined by a formal agreement, most often in the form of an MOU. (Samples of these are included in the representative documents section.) Although these agreements vary, they typically spell out the structure for governance and decision making for the project, indicate the terms of service expected, and specify the duration of the agreement. Many programs have multiple MOUs, with different agreements for institutions that act as host repositories and for those who supply books to be held elsewhere, or hold lighter roles in the program.

The agreements covering participation and funding tend to be approved for short- to mid-duration term periods, with 8 of 15 agreements (53%) signed for 10 or fewer years. Retention commitments are generally expected to outlast the terms of these agreements; 13 of 17 (76%) committed to retain for more than 10 years, with 25 years being the most common commitment duration.

Whether items are retained in the library of origin or moved to a secondary location, the library contributing shared content retains ownership over the items in more than half of established agreements. Less commonly, ownership may be transferred to the holding library or to the shared print program itself.

The entity upholding the shared print agreement, whether a consortium or individual library, is likely to actively support the operations of the program in
some capacity. Most commonly, project coordination, financial management, communications and administrative tasks, policy development, and collection analysis fall to the coordinating entity to perform on behalf of, and in conjunction with, members or participants.

**Business Model Elements**

Fees and business structures are generally made explicit in MOUs, though several respondents noted that the actual amounts are determined annually. Funding for shared print programs comes from many sources. Although a few programs received state or grant funding, most programs are funded through membership fees and in-kind contributions of labor, supplies, or infrastructure. Out of 17 shared print programs that reported their funding sources, nine rely on member fees or dues and four have no formal funding or rely on voluntary efforts of participating libraries. Three received or expect to receive grant funding, three receive state funding, and three were funded in whole or in part by an existing consortium.

Each program has a distinct fee structure. When membership fees are charged, rates may be set based on some form of cost-sharing formula. Some programs provide discounts for members that supply services such as labor or space. More traditional shared storage arrangements may factor in level of use.

Shared print programs generally involve some form of shared investment to support multi-institutional services. Investments typically support program management, collections analysis, and systems infrastructure. Costs for materials handling (shipping, processing, conservation) and cataloging (disclosure) are often absorbed by participating libraries. Support for storage, verification services, and gap filling vary by program and may be shared or absorbed.

The majority of shared print programs (13 of 21, or 62%) have at least a portion of a dedicated staff person’s time appointed to the project; half have one or more FTE dedicated to the project. It is notable that 38% of the programs do not include designated staffing, and instead rely largely on member libraries to provide labor, supplies, and project management.

For collections analysis, the responding libraries tend to rely on information provided by the shared print program or coordinator to select items for retention. Half of the shared print programs reported using an outside tool or service for collection analysis, the most common being Sustainable Collection Services (6 of 16, or 38%) and OCLC Collection Assessment (4, or 25%). Half have developed their own decision-support infrastructure. Multi-institutional collection analysis is typically engaged to facilitate group decisions about what to retain.

Collection analysis is a non-trivial task in collaborative print management. Many library respondents cited collection analysis as a difficult, labor- and time-intensive process, and not coincidentally the majority of shared print programs have turned to third-party vendors for collection analysis services or tools. Only four respondents said they use these services or tools to determine deselection; in fact, although participating in a shared print program may facilitate deduplication and deselection activities for individual institutions, shared print programs themselves appear not to be heavily involved in deselection. Two out of 21 programs arrange or contract third party services for such purposes. Local weeding policies and state and other legislative policies may also affect group-level deaccessioning decisions.

Among ARL libraries themselves, 32% of respondents (16 of 50) have dedicated human resources to shared print in the last year. Libraries see both positives and negatives in allocating staff time to shared print collection management; 14 respondents listed staff time or workload as a concern, while about the same number listed opportunities for collaboration, networking, and staff development as benefits of participating. “We have used sharing print collections as a springboard to discussions of sharing other resources, particularly staff resources, in areas like cataloging/metadata and selection,” noted one library, while another said, “This project has required delay of other collection management activities as our staff time has been committed to shared print commitments.” For local collections analyses, nine ARL respondents noted the difficulty of records management and integrating dissimilar library systems as an important challenge. Eleven libraries (22%) use a tool to aid deselection, and nine (18%) use a third-party deselection service.
Distributed vs. Consolidated

Before retention programs can commit volumes, several principal decisions must be made. One is whether volumes will be held in place of origin in a distributed network of libraries, moved within a distributed network to better accommodate preservation or security, or consolidated into a central repository. Successful programs have been built around all these models.

Few, if any, shared print repositories are housed in facilities designated solely for that purpose; most programs maximize efficiency and minimize costs by using available space in an existing library or storage facility. Because these available spaces vary, agreements may or may not specify preservation-quality environmental conditions and validation practices. Most agreements define the terms of participation, including service levels for contributing, borrowing, and archive-holding libraries. Notably, expectations of contributing libraries are generally limited, primarily focusing on records management. More is expected of the library retaining content on behalf of the collective; these holders are more likely to be tasked with access- and maintenance-related activities, and with making holdings known through OCLC uploads and other holdings information dissemination.

Thirteen of 20 shared print program respondents (65%) said items are housed at the library of origin, with four of those noting that items may also be relocated to a specially designated area. Twelve respondents (60%) indicated items were relocated to a facility that acts as a multi-institutional repository; one program indicated items were sent to whatever library agreed to hold them. A few programs indicated hybrid models that included both on-site-of-origin storage and consolidated storage. Although these decisions are certainly programmatic, it is also likely that within these programs libraries also decide where items will be housed based on available space, staff, and time to process these items. Fewer than half of the reporting programs (9 of 21, or 43%) have plans to expand responsibilities to additional participants or to introduce other publication types such as monographs.

Fourteen of 49 library respondents (29%) said they actively receive and consolidate holdings from multiple institutions, and 28 (57%) reported contributing holdings to fill gaps in collections retained elsewhere. Only nine ARL members indicated they were not an archive holding repository site; four of those nine belong to a single consolidated-space storage program.

However, there were two sources of data and documentation used to identify archive holder roles: ARL libraries’ self-reported roles as archive holders and shared print manager’s reports of institutions serving as holders. While 41 of 49 ARL member library respondents indicated their institution acts as an archive holder, shared print managers providing statistics about locations and volume counts identified fewer ARL libraries as archive holders. It may be the case that libraries belong to additional shared print programs that may not have responded to the managers’ survey, or that libraries perceive their roles in shared print programs differently than are formally identified in program documentation or statistics. Whatever the reason, it is interesting that ARL libraries and shared print managers report their participation differently.

Collective Actions

Whether or not collections are consolidated physically, certain collection management practices are generally made common across the participating institutions or are performed for the collective collection by the shared print program itself. In addition to collection analysis, mentioned earlier, other shared collection management activities include validation, disclosure, discovery, access services, and in some cases e-access services such as print-on-demand, e-book-on-demand, and digitization related to the shared print collection.

Most programs (15 of 21, or 71%) perform volume-level validation of at least some materials before holdings are ingested; ten (48%) validate all materials to the volume level. Far fewer—4 of 21—validate all items to the issue level, and no programs invest in page-level validation for all items (though two programs do perform such extensive validation for at least some items). It is commonly expected that holdings records will be revised before items are ingested, though these updates do not widely include adding a shared-print
specific OCLC symbol (38% do so for some or all items) or disclosing holdings in union catalogs. Some programs have formal definitions for validation services and expectations.

Although most programs do not have plans to include collaborative purchasing or extensive, systematic digitization of print under the scope of the shared print program, some are looking to create more comprehensive programs; notably, the Maine Shared Collection Strategy is looking into print-on-demand and e-book-on-demand services to support access, and other libraries mentioned plans to work with HathiTrust to ensure digitization, if not to perform such digitization themselves.

Retained Items
Journals are currently the predominant format collected for group retention, with 16 of 21 shared print programs holding journals (76%) and sometimes associated indexes and supplements (7, or 33%). However, monograph collections are not uncommon, with 48% (10 of 21 programs) currently retaining monographs and others indicating an intention to move into monographs. Other types of material collected include federal and other government documents, atlases, maps, and other oversize print. Fewer programs (8, or 40%) are committing to retaining any non-print formats; those formats that might be retained include microform, audio and video media, computer files, maps, and photographs, slides, or art.

Many of these programs are explicitly intended to reduce duplication across and within institutions; it is unsurprising, then, that most archives intend to retain a single copy (14 of 18, or 78%) or two copies (3, or 17%). The question did not differentiate between journals and monographs, however, and further exploration of this topic may reveal differences in the policies for each. Shared print programs anticipate negligible but possible loss of items, and fewer than half of the respondents (9, or 47%) had a policy in place to address damage or loss.

The size of shared print collections varies widely, from as few as 60 titles retained to 1.4 million titles (monographic and journals) retained. Variations in the number of libraries participating, the types of materials being held, size of libraries’ individual collections, and the overlap in holdings may affect the number of titles kept in the archive program. Nearly all the responding programs (20 of 21) intend to increase print retention in coming years, with most listing space as the upper bounding factor. Additionally, nine respondents (43%) indicated a plan to invest in collaborative print acquisition, though many of these plans are in very early stages.

Access and Discovery
None of the respondents to the shared print managers’ survey indicated that their program operated as a dark archive, completely restricting access to retained materials. With the often-noted exception of special collections materials, most programs make held items available to members and to non-members of the agreement, though most indicate a preference for providing access through digital surrogates. Journals are often restricted to in-library use. Many programs are bound by pre-existing state and other lending networks, and many follow standard ILL processes to make retained content accessible.

But while access is widely ensured by agreement, making retained items discoverable is more likely to be left to individual participants’ decisions and capabilities. Participating libraries are made aware of retained titles through MARC holdings records (13 of 20 responses, or 65%), through lists distributed by the project management (11, or 55%), or through consolidated ILS (4, or 20%). In addition, meta-registries such as OCLC’s Firstsearch and WorldCat, PAPR, JRNL, and DOCLINE are used to display retention commitments to participants as well as the wider library community. Shared print programs are somewhat less concerned about making the retained collection visible to library users.

Most programs (14 of 20, or 70%) indicated that items retained on behalf of the group at a single institution appear in that institution’s OPAC; slightly less than half (8, or 40%) display holdings of that institution that are held in storage, and fewer still display items contributed by other participants of the shared print program. Shared print programs whose participants otherwise constitute a distinct entity, like state-wide library networks, may be more likely to share standardized library systems and therefore to
make holdings more readily visible across institutions. Where there is no central catalog or institutions’ integrated systems are not uniform, sharing holdings information may be more difficult to execute.

**Endnotes**

1 These figures are very likely to be under-reported or under-estimated. Shared print programs were asked to report either title counts, volume counts, or both; whatever could be reasonably collected. When only titles were reported, monograph title counts were converted to volumes (estimated 1 title=1 volume); no attempt was made to estimate and incorporate volume counts for journal titles, resulting in a likely significant underestimation of volumes held. These figures do not include shared print programs that are in planning or have planned deposits.

2 Three shared print programs reported data for this survey; some notable monograph programs did not. Maine Shared Collections Strategy and Connect NY reported more than 2.2 million monographic titles and PALNI/ALI reported more than 5 million monographic volumes subject to retention commitments.
