Appendix F.   ReCAP Cost Estimates

Cost Factors and Cost-Sharing Formula for the ReCAP Shared Collection
Lizanne Payne

Summary of ReCAP Shared Collection

ReCAP partners have defined policies, technology, and operational changes that are deemed critical to meet project goals: a ReCAP Shared Collection with seamless access for patrons of partner libraries. In addition, certain policy and operational options that could be implemented in later phases may have additional costs.

Phase 1 (baseline) system, services, and policies for the ReCAP Shared Collection:
- Selection: Shareable monographs and serials already at or transferred in future to the ReCAP facility will be declared part of the Shared Collection (unless otherwise excluded).
- Duplication: No new duplicates may be added to the Shared Collection, but may be added to a library's Open Collection.
- Disclosure: ReCAP libraries will report Shared Collection holdings to OCLC.
- Condition Review: Volumes will be reviewed for minimum acceptable condition (similar to the review currently being performed) upon initial transfer to ReCAP and upon circulation.
- Access/Delivery: Shared Collection items will be available to all ReCAP partners for delivery to the requesting library. Related workflow and policy changes:
    - Revise pick cycles around requesting library
    - Standardize delivery benchmarks
- Technology: ReCAP partners will implement a Discovery to Delivery system to facilitate access to Shared Collection materials.

Phase 1: Shared Collection Costs

Costs to implement and support the ReCAP Shared Collection will be affected primarily by the required technology (Discovery to Delivery system) but also by necessary operational changes and by certain policy choices.

1.   Costs of Policies and Related Operational Changes

Certain policies and operational changes will affect the costs of implementing and operating the ReCAP Shared Collection. Please see Attachment 1: ReCAP Costs Background for a detailed description of how ReCAP activity costs and storage costs were estimated or attributed for this analysis. Please note that these costs were not developed through a specific cost analysis, but rather are based on certain cost allocation assumptions that are already in use for the ReCAP budget and cost-sharing formula. The specific calculations used data from FY 13, the most recent complete fiscal year, but before making any

major decisions it would be useful to compare totals across multiple years to get an average or estimate of variation.

a. Duplication: No new duplicates

Policy: No new duplicates may be added to the Shared Collection. Duplicate items may be added to the library's Open or Restricted Collection or may be withdrawn, at the library's option. For serials, duplication will be identified only at the title level; that is, for Phase 1 no effort will be made to determine if a particular <u>volume</u> is at ReCAP prior to accession; if the title is already represented in ReCAP, subsequent volumes will be designated for the Open Collection (unless/until a mechanism is developed to compare volumes). Note: the proposed policy does not require removing existing duplicates from the ReCAP facility.

Cost factors

Technology: Efficient deflection of duplicates will require an automated process to detect duplicates before accession. A duplicate deflection function will be developed as part of the ReCAP middleware (called "accession algorithm") and is mentioned in the ReCAP High-Level Architecture 1.0 document (HTC Global, Inc.). The duplicate detection system is already included in the system cost estimate (but is not costed separately).

Accessions processing: The duplicate detection process may be designed to change the duplicating items to the library's Open collection automatically or may provide a report back to the library identifying duplicates and requiring further action. An automatic change to the library's Open collection during ingest would have no effect on accession processing for those items (e.g. they would have been accessioned anyway). If the sending library chooses to receive a report of potential duplicates instead, significant staff time at the library could be required to review and reprocess volumes.

Space: If duplicates are deflected from the Shared Collection but added to the Open Collections as allowed under the new policy, space at ReCAP will be used that could have been saved. Assuming that the duplication rate for future accessions is the same as the current 11% duplication rate within the facility, the additional cost could be estimated as follows (using FY 13 amounts):

Annual accessions (volumes)	Duplication rate	Duplicate/ triplicate accessions (volumes)	Attributed unit cost of accessioning additional volumes	Activity cost of accessioning future duplicate volumes	Attributed unit cost of storing additional volumes	Annual cost of storing future duplicate volumes
434,081	11%	47,749	$ 0.81	$ 38,677	$ 0.11	$ 5,252

b. Disclosure: Report Shared Collection holdings to WorldCat

The proposed Disclosure Policy states that "ReCAP libraries will report Shared Collection holdings to OCLC and will monitor and adopt as appropriate the emerging national standards and guidelines related to shared print collections." This policy is consistent with a goal of the ReCAP Shared Collection project: "to position ReCAP to take on a broader role within a national network of shared-print repositories".

In April 2012, a working group from the shared print community proposed "Print Archives Metadata Guidelines" for reporting "print archives" or "shared print" holdings in OCLC WorldCat. The purpose of these guidelines is to promote worldwide sharing through WorldCat of information about long-term retention agreements for library holdings.

For ReCAP partners to disclose ReCAP Shared Collection materials using the current guidelines would require the following steps:
- Establish 3 new OCLC Symbols (e.g. NYPSP, ZCUSP, PULSP) to be assigned to partner library Shared Collection holdings at ReCAP
- Create and upload Local Holding Records (LHRs) to OCLC containing the basic retention information for Shared Collection holdings (these records can be batch-created)
- Remove the original OCLC symbol from the Shared Collection records in WorldCat (this can be processed in batch by OCLC)
- Process ILL requests for Shared Collection items in ILLIAD, WorldShare ILL, or Borrow Direct using a separate request queue for the SP symbol

Cost factors

Please note that some work to mark local holdings with retention information is necessary regardless of the desire to disclose this information to OCLC. It will be needed to support ReCAP partners' own management of the Shared Collection in local library systems. Most of the costs outlined below are those that would be specific to the goal of reporting and managing Shared Collection holdings in OCLC WorldCat and related systems, separate from any local metadata.

OCLC cataloging: No charge for establishing new symbols. One-time setup costs for OCLC LHR batch loads for new symbols: ~$350 x 3= $1,050. Library systems staff time to generate shared print metadata in local catalogs (needed anyway) and to generate files for LHR loads. Optional: develop a function in the ReCAP Discovery/Delivery system to generate and maintain OCLC LHRs (not currently included in the high-level design). Library cataloging staff time to edit individual records (if needed) under the new OCLC symbol.

Resource-sharing: ILLIAD satellite license for new symbol ($1,200 annually) or Worldshare ILL lend-only subscription for new symbol ($300 annually). Workflow changes, training, and library staff and ReCAP staff time to process different ILL request queues for Shared Collection items.

c. Condition review (validation)

Items being transferred to ReCAP for the Shared Collection must meet agreed standards for Minimum Acceptable Condition (similar to requirements already in place). No explicit condition reporting is required. Items not meeting those standards could be added to the library's Open Collection. No condition review is required for items that are already in ReCAP until they circulate.

Shared Collection items that circulate will be reviewed again upon return from circulation. Volumes not meeting minimum standards would be considered high priorities for replacement, but would not be removed from the Shared Collection since possibly the only copy.

Cost factors

Initial transfer to ReCAP: Workflow changes, training, and library staff time to process review for acceptable condition (but similar to procedures already in place). Workflow procedures will be needed to change the collection type to Open for any items that do not meet condition standards.

Review upon circulation: Workflow changes, training, and library staff and/or ReCAP staff time to review circulated items again and update metadata to flag for replacement. Consideration should be given to doing this review centrally at ReCAP prior to refiling, to simplify training and maximize efficiency. A ReCAP system function could be developed to automatically add the "replace" flag or note upon reading the barcode of the affected volume.

d. Access/Delivery

Shared Collection items will be available to all ReCAP partners for delivery to the requesting library. It will be necessary to change certain ReCAP procedures to accommodate this change.

i. Revise pick cycles around requesting library

With the Shared Collection and Discovery/Delivery system, library users are more likely to request volumes belonging to other ReCAP partners. Each transport (delivery) to a ReCAP library is more likely to contain volumes from other library customer codes. Therefore it may be preferable to revise the pick cycles to pull all items for a given requesting library (no matter which owner or customer code).

Cost factors:
- Technology: Implement changes to the GFA system to produce pick lists grouped by delivery location rather than owner
- Workflow changes, training, and ReCAP staff time: Little or no change to workflows would be necessary if the pick lists were modified.

      ii.   Standardize delivery benchmarks

Currently ReCAP supports separate delivery benchmarks for each partner library (e.g. "2 business days", "next business day by 5:00 pm"). If the pick cycles were separated from owning library customer codes, it would be possible to establish a standard delivery benchmark and schedule pick cycles and transport pickups to meet that benchmark.

Cost factors:
- Transport costs: Each ReCAP partner currently sets the schedule and pays for its pickups and returns to ReCAP. Most likely there would be no cost impact, but conceivably the transport cost might be increased for a given library if its schedule moved into rush hours instead of off-peak hours.

2. Costs of Technology: Discovery to Delivery System

The proposed ReCAP Discovery to Delivery System will support discovery of Shared Collection items, real-time availability tracking, real-time request processing, and collection management (including duplicate detection and management). The proposed system is designed as a cloud-based middleware system and database that is integrated with each ReCAP library's local discovery system and with request and circulation transactions supported by ReCAP partner library systems. See the related report: ReCAP High-Level Architecture 1.0 (HTC Global, Inc.)

Estimated implementation costs

Cost Category	Planning Estimate	Source of Planning Estimate
Discovery/Delivery middleware implementation	$2,000,000	Technology Architect report
Interfaces to partner systems	$ 200,000	Various vendors and related estimates
Technology consultant (two years)	$ 150,000	Derived from Technology Consultant costs
Project management consultant (two years)	$ 150,000	Derived from Planning Consultant costs
Estimated one-time total	$2,500,000	

Estimated annual operating costs

Cost Category	Planning Estimate	Source of Planning Estimate
Discovery/delivery middleware support	$ 70,000	Technology Architect report (rounded)
Interfaces to partner systems support	$ 10,000	5% of implementation cost
Additional Princeton management fee	$ 20,000	Additional 10% of current fee
Estimated annual total	$ 100,000	

Phase 2: **Policies and processes for later consideration**

Certain policies and processes were identified during planning that may be desirable but were postponed for later phases in order to define a more manageable scope and cost for initial implementation.

1.   Compile backfiles of serials at ReCAP with validation for completeness

The proposed Phase 1 policy states that all serial titles at ReCAP will be designated as Shared (unless explicitly excluded) but with no active efforts to develop complete backfiles. Under any future policy to compile backfiles, the process would require the following actions for each individual title or journal family (sequence of title changes):
   - Identify all Shared Collection titles and volumes held at ReCAP (automated process),
   - Choose the deepest backfile as the base run and identify other existing volumes at ReCAP to fill gaps (semi-automated process with staff review)
- Update Shared Collection records to record backfile holdings
- Change unneeded duplicate volumes to Open collection for future disposition (staff or automated process).

Note: this section does not include any actions or costs required to compare duplicate volumes for best physical condition. See the similar section below under "Remove duplicates from ReCAP".

Cost factors

   - Technology: reports to identify ReCAP serial holdings including deepest backfile; function to record completed backfile holdings in Shared Collection title record; function to change duplicate volumes to Open collection; function to display needed volumes for new accessions
   - Workflow, training, staff: Update Shared Collection records to record volumes still needed (gaps); compare future serial volumes to existing Shared Collection volumes to determine whether to transfer to ReCAP

2.   Validate volumes for "reportable condition" problems

In addition to the Minimum Acceptable Condition standards described for Phase 1, other condition problems could be identified that are not significant enough to preclude items from the Shared Collection but are important enough to report (via metadata) and seek better copies.

Cost factors: Staff time to review volumes against a list of reportable condition criteria (to be defined) and update records to report the problems found. If a "reportable condition" policy were instituted, this review could occur on initial transfer to ReCAP and optionally again after circulation of the volume.

The Western Regional Storage Trust (WEST) program uses an estimate of $4.00 per volume as the attributed unit cost for volume-level accessions with validation. This cost estimate covers physical handling and metadata updates and was derived from a cost study conducted at the University of California Shared Print Program in 2008. For ReCAP cost estimating, it would be reasonable to attribute $2.00 of that cost to the condition review portion, separate from the accessions cost.

Using that attributed unit cost, the estimated annual cost to review and report "reportable conditions" would be:

Annual accessions (volumes)	Attributed unit cost of condition review	Estimated annual cost of reportable condition review
434,081	$ 2.00	$ 868,162

3.   Provide retrievals and delivery 7 days/week

Delivery every day may facilitate acceptance of the Shared Collection among library users.

Cost factors:
- Performing retrievals and delivery on Saturdays and Sundays would require additional shifts at ReCAP for more pick cycles and refiling (overnight and/or weekends),
- Two additional transport pick-ups for each partner library each week,
- Staffing for libraries to receive and process weekend deliveries.

4. Remove existing duplicates from ReCAP

Removing existing duplicate volumes from ReCAP would require the following actions:
- Identify duplicate (or triplicate) volumes already shelved at ReCAP
- Optional: Compare volumes for best physical condition
- Dispose of removed volumes and update records

. Cost factors:
- Technology: During the initial process to create the Shared Collection, the system would designate one copy for the Shared Collection and the other(s) for the Open Collection (based on an algorithm). This process could produce a file/report for use in any future deduplicating.
- Workflow, training, staff time without condition comparison: retrieve the corresponding Open Collection volume(s), discard, update records.
- Workflow, training, staff time with condition comparison: retrieve all volumes, compare, refile the chosen volume, discard the not-chosen volumes, update records
- Space: Holding area for volumes pending discard. With condition review, twice as much holding space is needed to stage volumes while under review, plus work space to compare volumes.
- Discard costs: Costs to transport, ship, or recycle discarded volumes.

Some costs of removing existing duplicates can be estimated using current attributed unit costs. However, please note that it is likely that unit costs would go down for a high volume of concentrated activity, i.e. in a production environment. A more detailed analysis should be performed before making a major decision about removing existing duplicates.

The following assumptions were used to calculate these estimates:
- Duplicate removal without condition comparison is composed of
  - 1 Retrieval per removed volume @ $3.38
  - 1 Withdrawal per removed volume (to update the record) = 1 Accession @ $.81
- Duplicate removal with condition comparison is composed of these additional cost factors:
  - 1 additional Retrieval to include the Shared Collection volume @ $3.38
  - 1 Condition Review per reviewed volume @ $2.00
  - 1 Refile per retained Shared Collection volume @ $3.38

Using these assumptions, the estimated one-time cost to remove existing duplicates in ReCAP (11% of current space) would be:

Category	Titles	Est Total Volumes	Vols to Remove	Without condition review			With condition review			Total w/ Condition Review
				Retrieve dup vols	Withdrawal dup vols	Total before Condition Review	Retrieve Shared vol	Review all vols	Refile chosen vol	
				$ 3.38	$ 0.81		$ 3.38	$ 2.00	$ 3.38	
Duplicates	471,593	943,186	471,593	$ 1,593,984	$ 381,990	$ 1,975,975	$ 1,593,984	$ 1,886,372	$ 1,593,984	$ 7,050,315
Triplicates	48,880	146,640	97,760	$ 330,429	$ 79,186	$ 409,614	$ 165,214	$ 293,280	$ 330,429	$ 1,198,538
Total duplication	520,473	1,089,826		$ 1,924,417	$ 461,177	$ 2,385,589	$ 1,759,202	$ 2,179,654	$ 1,924,417	$ 8,248,862

Please note: this estimate covers only the activities and transaction costs to remove duplicates. It does not include any estimate to recover the space freed by those duplicates. There would be significant additional costs to consolidate the remaining trays and shelves to recover the space. Thus the estimate of over $2 million (without condition comparison) or over $8 million (with condition comparison) is BEFORE space recovery which requires costs that are almost impossible to estimate.

Proposed cost-sharing formula

The following planning assumptions were used to develop a revised cost-sharing formula to support the annual operating costs of the ReCAP Discovery System and Shared Collection.

• Use the existing ReCAP cost-sharing formula as a base for the ReCAP Shared Collection formula; i.e. retain the existing cost factors, do not revise definitions and allocations.
• Show the Discovery System operating costs explicitly. Do not include the one-time system implementation costs in this formula.

The original ReCAP cost-sharing formula uses the following structure:
• Costs are divided into two primary expense categories: "Accessions, retrievals, refiles" (ARR) and Storage
• ARR costs are based on Activity Units, actual transactions attributable to individual partners, converted to a percent of all transactions
• Storage costs are based on Allocated Shelves, the percentage of ReCAP shelves occupied by or reserved for each partner's holdings
• ReCAP budget line items (e.g. Labor, Utilities, Repairs) are allocated across ARR and Storage in various agreed proportions (such as Clerical Labor divided as 80% ARR and 20% Storage).
• The "calculated split of expenses" (cost-sharing formula) divides the ReCAP budget line items among the ReCAP partners according to their individual ARR and Storage percentages.
Several options were considered for modifying the current cost-sharing formula to accommodate the new Shared Collection and Discovery/Delivery system, including "no change" and "equal shares". After some discussion, the following approach is considered the most viable.

Proposed Shared Collection formula

ReCAP partners support the following principles to be accomplished by the new formula:
• Encourage contributions to the Shared Collection to facilitate preservation and resource-sharing
• Discourage contributions to the Open Collections (shareable but not part of the Shared Collection) to minimize the impact on ReCAP shelving capacity, while supporting use of ReCAP space for Restricted materials (usually special collections).
• Recognize the new borrowing patterns that may emerge using the Discovery/Delivery system
• Minimize the impact of the formula change on individual ReCAP partners whose fees may increase.
• Adapt to changing usage and priorities over time through regular review of the cost-sharing formula.

ReCAP partners proposed the following plan to modify the existing ReCAP cost-sharing formula to support these principles:

1) Divide costs for Storage into two subcategories:

• Storage of the partner collections (Open and Restricted) using the current storage allocation, for now

• Storage of the Shared Collection, divided proportionally by share of the Shared Collection

2. Assign a higher cost to the partner collections and a lower cost to the Shared Collection

3. Calculate and charge Retrievals and Refiles based on borrowing library rather than owning library (customer code)

Under this approach, ReCAP partners would continue to pay for their holdings in the Shared Collection (and would continue to own them), but their Shared Collection fees would be subsidized, in effect, by the higher amounts paid for private partner collections. See Attachment 2: Possible New ReCAP Cost-Sharing Formula based on this formula.

Attachment 1
ReCAP Costs Background

The following cost factors and assumptions were used as background for estimating costs of certain ReCAP policy options or service options. Please note that these costs were not developed through a specific cost analysis, but rather are based on certain cost allocation assumptions that are already in use for the ReCAP budget and cost-sharing formula (described below and details attached).

Cost assumptions

Under the approach used for the ReCAP budget and cost-sharing formula, ReCAP facility costs are divided into costs for Activities and for Storage. Budget line item expenditures such as Labor, Utilities, etc are attributed across Storage and Activities (ARR) by an agreed formula. Total ARR and Storage budgets/expenditures can then be calculated by aggregating these attributed costs.

	Based on ReCAP FY 13 budget		
	ARR	Storage	Total
Total Allocated Cost	$1,276,343	$1,146,146	$2,422,489

Further calculations can be performed to estimate attributed expenditures for individual activity units or storage units. See the attachment for detailed calculations that are summarized below.

Activities

As part of the current ReCAP budgeting process, transactions for Accessions, Retrievals, Refiles, and ILL (ARR) are weighted to normalize the activities so they can be analyzed equally. That is, projected transaction quantities are converted to Activity Units such that one "Accessions" Activity Unit is worth the same as one "Retrieval" Activity Unit.

Expenditures for individual activity types (e.g. accessions, retrievals) can then be calculated by dividing ARR expenditures proportionally for each activity type.

Costs by Activity Type Based on ReCAP FY 13 budget			
Activity Type	*FY 13 Activity Units*	*Activity Unit %*	*Share of ARR cost*
Accessions	518,264	27.4%	$349,935
Retrievals	638,695	33.8%	$431,251
Refiles	657,200	34.8%	$443,746
Interlibrary Loans	76,140	4.0%	$51,410
Total	1,890,299	100%	$1,276,343

Attributed Unit Costs for Activity Types Based on ReCAP FY 13 Budget and Actual			
Activity Type	*FY 13 Share of ARR Cost*	*FY 13 Actual Transactions*	*Attributed Unit Cost*
Accessions	$349,935	434,081	$0.81
Retrievals	$431,251	127,739	$ 3.38
Refiles	$443,746	131,440	$ 3.38
Interlibrary Loans	$51,410	15,228	$ 3.38

Reminder note: These activity type costs and attributed unit costs were not based on a detailed cost analysis of the actual work required to process these activities. Rather, these cost estimates are based on the cost allocation formula already agreed by the ReCAP partners as a method for developing and sharing the ReCAP facility costs.

Storage

Storage costs can be described in terms of two different units: shelves and items.

Attributed Annual Unit Costs for Storage (Modules 1-5 only)			
Storage Unit	*Quantity*	*FY 13 Share of Storage Cost*	*Attributed Unit Cost*
Items	10,230,226	$1,146,146	$0.11 per item
Shelves allocated	74,421	$1,146,146	$ 15.40 per shelf

Item counts are a more difficult measure because of the widely varying sizes of stored items (e.g. a volume vs an archive box). The unit cost per item is average across all types.

The attributed costs for Activity Units and for Storage are used in various calculations in the following sections to estimate the cost impact of various policy or service options. Please note that these cost estimates and impacts are very rough measures devised through general cost attribution as described here.

Attachment 2
Illustration of Possible New ReCAP Cost-Sharing Formula

The Research Collections and Preservation Consortium, Inc.
Illustration of Possible New Cost-Sharing Formula using FY 13 Budget

Under this option, costs attributed to Storage would be divided into two categories: 1) Storage of the Partner Collections (Open and Restricted) divided according to the current storage allocation, and 2) Storage of the Shared Collection divided proportionally by share of the Shared Collection. In addition, this formula assigns a higher portion of the costs to the partner collections and a lower cost to the Shared Collection.

Preliminary Illustration

	ARR (1)	Shared Coll Storage (3)	Partner Coll Storage (3)	ARR Amt	Shared Coll Amt	Partner Coll Amt	Total	Example using FY 13 Budget rounded
Labor		25%	75%					
Administrative	50%	13%	38%	112,000	28,000	84,000	100%	224,000
Clerical	80%	5%	15%	624,800	39,050	117,150	100%	781,000
Cleaning	75%	6%	19%	15,000	1,250	3,750	100%	20,000
Repairs & Maintenance	50%	13%	38%	79,500	19,875	59,625	100%	159,000
Utilities	20%	20%	60%	111,600	111,600	334,800	100%	558,000
Roads, Grounds, & Security	75%	6%	19%	88,500	7,375	22,125	100%	118,000
Administrative								
Insurance	20%	20%	60%	15,000	15,000	45,000	100%	75,000
All Other	80%	5%	15%	69,600	4,350	13,050	100%	87,000
PU Management Fee	60%	10%	30%	121,200	20,200	60,600	100%	202,000
Major Maintenance	20%	20%	60%	40,000	40,000	120,000	100%	200,000
Discovery System (2)	75%	25%	0%	75,000	25,000	0	100%	100,000
Total				1,352,200	311,700	860,100		2,524,000

(1) Accessions, Retrievals, Refiles. Retrievals/refiles based on requester, not owner. Original owner estimates used in this illustration.
(2) Discovery System expenses attributed 75% to ARR and 25% to Shared Collection Storage.
(3) Storage divided 25% to Shared Collection Storage and 75% to Partner Storage (to cover most expenses via Partner Storage)

Activity Units FY 13 Projected

	Princeton	Columbia *	NYPL **	Total
Accessions	440,000	208,000	350,000	998,000
Retrievals	120,000	371,000	186,000	677,000
Refiles	135,000	385,000	205,000	725,000
Interlibrary Loans	32,500	46,000	12,000	90,500
Total	727,500	1,010,000	753,000	2,490,500
Percent	29.2%	40.6%	30.2%	100.0%

Allocated Shelves

	Princeton	Columbia	NYPL	Total	
Shared Coll Storage Share	27%	41%	32%	100%	from ReCAP shareable holdings analysis Fall 2
Partner Storage Share	21%	42%	37%	100%	from current ReCAP formula

Calculated Split of Expenses

	Princeton	Columbia	NYPL	Total	
Labor					
Administrative	57,916	92,181	73,903	$ 224,000	
Clerical	217,655	318,596	244,749	$ 781,000	
Cleaning	5,507	8,171	6,323	$ 20,000	
Repairs & Maintenance	41,110	65,432	52,458	$ 159,000	
Utilities	133,039	231,630	193,330	$ 558,000	
Roads, Grounds, & Security	32,489	48,207	37,304	$ 118,000	
Administrative	-	-	-	$ -	
Insurance	17,882	31,133	25,985	$ 75,000	
All Other	24,246	35,490	27,264	$ 87,000	
PU Management Fee	53,584	82,886	65,531	$ 202,000	
Major Maintenance	47,684	83,022	69,294	$ 200,000	
Discovery System	28,658	40,666	30,676	$ 100,000	placeholder estimate
Total	659,771	1,037,412	826,817	2,524,000	
Resulting percentage	26%	41%	33%	100%	

Comparison to current formula

	Princeton	Columbia	NYPL	Total	
Current formula totals	613,523	998,991	809,975	2,422,489	Planned FY 13 (before surpluses applied)
New formula totals	659,771	1,037,412	826,817	2,524,000	rounded, Discovery System added
change	46,248	38,421	16,842	101,511	
per cent increase	7%	4%	2%	4%	
				overall	

Appendix G.   Business models in other shared print programs

ReCAP Discovery to Delivery Project
Governance and Polices at Other Shared Print Programs

Lizanne Payne
July 24, 2012

This report is required under planning activity 3.

3. Determine options for policy changes, including new mechanisms for the governance, ownership, and permanence of collections held at ReCAP and if necessary of the ReCAP relationship

a. <u>Outline and compare governance mechanisms and policies at other library consortia with shared print collections.</u>

Overview

A large number of library consortia or other library groups have entered into shared collection agreements over the past several years. For purposes of this document, a "shared collection agreement" refers to a formal agreement among multiple libraries to share responsibility for, management of, and access to a defined set of print materials. These agreements are variously described as "shared collections", "shared print collections", or "print archives". "Shared collection(s)" will be used in this context because that is the terminology used in the ReCAP Discovery to Delivery Proposal.

Libraries and consortia developing a shared collections program typically define an agreement that covers three aspects of the collaboration:

1. Operating policies (how the shared collection functions, including most or all of the following):
    a. Selection of materials to preserve
    b. Retention commitment (period of time)
    c. Archiving location(s)
    d. Ownership
    e. Validation standards (review for completeness and condition)
    f. Holdings disclosure standards
    g. Access/delivery policies.

2. Business model (how – or if – costs are covered)

3. Governance (how decisions are made)

Agreement on all of these terms and conditions is usually embodied in a formal document, ranging from a posted statement of principles, to a Memorandum of Understanding (MOU), to a signed legal agreement.

The following section outlines the most common approaches taken by existing shared collection programs, followed by details of selected programs.

Common Attributes of Current Shared Collection Programs

Selection

"Selection" refers to the process or criteria used to identify materials that will belong to the shared collection.

The majority of current shared collections focus on journals, most likely because of these characteristics:
- Many are available in digital form, sometimes with digital preservation as well (Portico or CLOCKSS), such that use of the print version has declined significantly
- Large amounts of shelf space can be reclaimed with a decision about a single title

The most common method for selecting or identifying journals for the shared collection is by publisher or digital aggregator (e.g. "JSTOR journals" or "Elsevier journals"). Other methods include:
- Individual library-nominated titles (ASERL journal program)
- Shared storage copy becomes shared collection copy (Florida, WRLC)
- Custom collection analysis across members (WEST, COPPUL)

A few programs identify monographs in the form of "last copy" policies. If a given monograph happens to be the last copy of that work held within that group of libraries, the program defines a process for retaining it on behalf of the group. For example, the University of Illinois accepts last-copy monographs on behalf of the CARLI consortium.

A few groups are beginning to consider shared monograph collections in a more proactive way, by attempting to identify large classes of monographs to be held in a shared collection. The HathiTrust is considering program for its members to retain copies of volumes available in digital form through Hathi. The Midwest Collaborative for Library Services (MCLS) is in the early stages of implementing a shared monograph collection based on a data-driven analysis of member holdings.

Retention commitment

The retention commitment is the single most important factor in a shared collection agreement. The retention commitment is what distinguishes a shared collection from a resource-sharing agreement or from a shared storage facility. With a retention commitment, participating libraries agree to keep the designated materials for a specified (or unspecified) period of time for use by other program

participants under defined access policies. The retention commitment allows other participating libraries to consider deselecting their own copies by relying on the retained copies held by others.

Some of the earliest shared collection agreements did not specify an explicit time period, implying that the retention agreement extended indefinitely or in perpetuity. CRL's JSTOR Archive is an example. More recent agreements tend to establish a finite time period such as 25 years or even 10 years, at which time the agreement will be reviewed and either extended or canceled.

There is a natural tension between the goals of the retaining libraries and the potentially-borrowing libraries. The borrowing libraries may prefer a longer retention period to cover their potential borrowing needs for the longest time. The retaining libraries may prefer a shorter retention period to minimize the time when their local collection management decisions are constrained. An argument often given for a near-term defined retention period (e.g. 10 or 25 years) is that digital technology may have changed so much in that time that the need for a shared print collection should be reassessed.

Archiving Location(s)

Shared collections may be established in a centralized or distributed pattern, and may involve specialized library storage facilities or traditional campus library locations. For instance, the Orbis Cascade Alliance Distributed Print Repository (DPR) program is (of course) distributed among member library locations, as is the ASERL Collaborative Journal Retention Program. The CIC Shared Print Repository currently is centralized at the Indiana University high-density library storage facility; similarly, the Five Colleges consortium in Massachusetts maintains a centralized shared collection at the Five Colleges facility.

Ownership

All shared collection programs grapple with the issue of ownership: which entity will own the physical volumes designated in the shared collection. There are three potential owners that could be identified:
- The original owning library
- The retaining library (if different)
- The consortium or program (if a separate entity).

Transferring ownership of library materials tends to be complicated. Most universities or research institutions classify library collections as assets and are likely to require explicit procedures for disposing of such assets. These procedures are often especially onerous for publicly-funded institutions.

As a result, most shared collection programs define ownership of the shared materials as remaining with the original owner. In many cases, especially for distributed collections, the original owner is also the retaining library. In some cases (e.g. WEST, Florida FLARE), if the original owner donates volumes to a retaining library, the original owner is asked to gift those volumes to the retaining library.

In a very small number of cases, the shared collection becomes the property of the consortium itself. This is true for the CRL JSTOR Archive and the Five Colleges (Mass.) Library Depository.

Validation standards

In some cases, shared collection programs are establishing validation standards to define the level of review for completeness and condition that will be performed on these materials. Validation standards support preservation goals by setting minimum standards for accepting physical items into the shared collection and standards for reporting gaps and condition problems through metadata.

At present only a small number of shared collection programs such as WEST and CIC SPR have defined explicit validation standards.

Holdings disclosure standards

Shared collection programs typically define how the shared materials will be reflected in catalog records, and which catalogs will contain those records (e.g local OPAC, consortial OPAC or other system, OCLC WorldCAT). Especially in earlier days, this often involved detailed locally-specific guidelines for what information to record in the local ILS or consortial catalog with no attention paid to disseminating shared collection information more widely.

However, in April 2012, the OCLC Print Archives Metadata Guidelines were published by an ad hoc group that had worked to define a common metadata format for wide disclosure of print retention commitments through OCLC WorldCAT. These guidelines define a community standard for using MARC Holdings Records with 583 Action Notes to describe the retention commitment and the results of any validation that was performed. A blog post by OCLC Research provides a good description and a link to the guidelines document (http://hangingtogether.org/?p=1734)

Also, the Center for Research Libraries (CRL) is developing the Print Archives Preservation Registry (PAPR) knowledgebase, which also uses the Print Archives Metadata Guidelines as the standard for input data. PAPR will provide an online searchable registry of archived print holdings and descriptive information about shared collection programs. PAPR is expected to be released for public use in early August 2012.

Access/delivery policies

Some of the most important policies to be defined by shared collection programs are those that govern access and delivery. Shared collections need to define:
- Who will have access to the shared materials
- How will requests be made and fulfilled
- What forms of delivery will be offered

- What restrictions on use will be applied

A small number of shared collections are defining "dark archives" that are intended to preserve the materials indefinitely and make them available only in extreme circumstances. Examples include the dark archive copy of PALCI holdings at Penn State, the University of California and Harvard dark archives for JSTOR titles, and a planned JSTOR dark archive at the University of Minnesota.

Most shared collections, however, have defined "light archives" where the materials regularly are made available to partner libraries on request. Non-retaining partner libraries are better able to reclaim local shelf space if they can be assured that shared materials will be provided to them if needed; "dark archives" do not provide the same assurance of ready access.

One of the questions to be considered is whether requests will be fulfilled on a priority basis for members. The answer sometimes depends on the presence of an existing shared catalog with request feature. Programs among partners that do not share a catalog/request system may need to determine whether traditional ILL request systems will be used, or whether a new mechanism or borrowing agreement will be established. WEST member libraries decided not to provide prioritized or expedited request/delivery to WEST members because the libraries are already supporting several different resource-sharing agreements and they felt that the expected usage of WEST materials would be very low and not worth the effort of supporting a special borrowing agreement.

Shared collection programs often place special use restrictions on these materials, however. Because other libraries are depending on long-term access to the shared materials and may have deselected their own copies, shared collection programs often require "in-library use" of the physical item to minimize the chance of loss or damage.

Business Model

Each shared collection program must decide how to cover the costs of establishing, maintaining, and using the shared collection. Related decisions must be made about whether to collect funds from members to support these costs.

Participants incur costs in the following categories:
- Selection and collection analysis (staff time, systems and/or database)
- Space (indirect costs of facility financing, utilities, maintenance)
- Ingest (handling, validating, shelving volumes)
- Metadata update (changing bibliographic and holdings records per disclosure policies)
- Shipping volumes to retaining libraries
- Deselecting local volumes
- Project management and administration

The vast majority of current shared collection programs – especially those that are distributed collections -- operate on a "share/share alike" basis. In these cases, each participating library absorbs its own costs and no money changes hands. The underlying assumption is that all libraries are investing an equitable amount to the collaborative effort.

A small number of programs have developed business models in which members pay fees to support the shared collection. Both WEST and the CIC Shared Print Repository identified a set of costs that would be shared among all members as a way to support the collective goals. For WEST, shared costs include:
- Payments to Archive Builders to support ingesting and validating materials
- Use of CRL's PAPR system for collection analysis
- Project management and administration

The business model for CIC SPR includes support for ingesting materials and also covers payments to Indiana University for use of its storage facility space.

Governance

Shared collection programs need to define mechanisms for determining who is a member and how decisions are made. Some form of governance supports sustainability over time when the original collaborators may no longer be involved.

Almost all shared collection programs were established within existing library consortia and rely on the existing consortium structures to provide the basic framework for shared collections governance. This is true for the CIC Shared Print Repository, ASERL Collaborative Journal Retention Program, and many others. The WEST program is unusual for being a broad-scale collaborative effort that was defined outside of existing consortial agreements. In effect WEST established a new consortium specifically to administer the shared collection.

Agreement

Even if the shared collection operates within an existing consortium, it is necessary to define the specific terms and conditions of the shared collection through some kind of agreement. The agreement usually identifies some or all of the following terms and conditions:

- Membership: Who are the members or participants and (optional) criteria for adding future participants
- Governance: Organizing body(ies) that will make decisions on behalf of the group
- Basic operating policies: Retention period, ownership, disclosure, access and delivery. Sometimes the main agreement refers to external documents that may contain these details.
- Titles archived: For libraries that agree to retain materials, a list or other means of identifying the titles for which that member is responsible
- Loss or damage: Level of effort expected to replace or compensate for lost or damaged items

- Financial obligations: Description of how any required fees are established. Usually the fees are not included explicitly but may be referenced in an attachment to facilitate future changes.
- Withdrawal and termination: Process for an individual member to withdraw from the agreement, and any process for the overall agreement to be terminated by the group.

For shared collections that involve long-term commitments to specific individual titles and especially in cases where funds are collected from members, the agreement almost always takes the form of a document such as an MOU that must be signed explicitly by representatives of the member institutions. In less structured cases, such as shared storage facilities where the deposited volumes become the shared copy of record, the agreement may take the form of a document adopted by the governing body and posted in a public place such as the group's website (e.g. WRLC Shared Collection).

Current Programs

The following section provides summary details for a selection of current shared collection programs:

- ASERL Cooperative Journal Retention Program
- CRL JSTOR Print Archive Project
- CIC Shared Print Repository
- COPPUL Shared Print Archive Network (SPAN)
- Five College (MA) Library Depository
- Florida Academic Repository (FLARE)
- Midwest Collaborative for Library Services (MCLS) Shared Monographic Print Storage Project
- Orbis Cascade Alliance Distributed Print Repository
- Pennsylvania Academic Library Consortium (PALCI) Print Journal Archive
- Washington Research Library Consortium (WRLC) Shared Collection
- Western Regional Storage Trust (WEST)

Program Name: **ASERL Cooperative Journal Retention Program**

Website: http://www.aserl.org/programs/cooperative-journal-retention/

Link to MOU: http://www.aserl.org/wp-content/uploads/2011/07/ASERL_Journal_Retention_Agreement_FINAL.pdf

Members: 22 out of 40 ASERL libraries

Format Archived: Journals

Selection: Titles nominated by participating libraries.

Archive location: Distributed, libraries and storage facilities

Retention Period: Through December 31, 2035

Ownership: Original owner

Validation: Volume level, "serviceable condition"

Access/Delivery: No request mechanism specified. Delivery by electronic or paper duplication, or in-house use at discretion of the owning library

Business Model: Libraries absorb own expenses

Governance: Steering Committee consisting of one representative of each participating library and a liaison from the ASERL Board of Directors

Program Name: Center for Research Libraries (CRL) JSTOR Print Archive Project

Website: http://www.crl.edu/archiving-preservation/print-archives/crl-administered/jstor

Link to MOU: Not available

Members: Open to all 260 CRL members

Format Archived: Journals

Selection: By publisher or aggregator: JSTOR titles

Archive location: Centralized at CRL facility

Retention Period: Not specified

Ownership: Transfers to CRL

Validation: Issue-level

Access/Delivery: Physical volumes by ILL to the requesting library.

Business Model: Part of CRL membership. Libraries absorb own costs of donation and shipping.

Governance: Existing CRL governance. No separate governance for this program.

Program Name: CIC Shared Print Repository

Website: http://www.cic.net/Home/Projects/Library/Home.aspx

Link to MOU: Not available

Members: 10 of 13 CIC members

Format Archived: Journals

Selection: By publisher: Elsevier and Wiley titles

Archive location: Centralized at Indiana University storage facility

Retention Period: 25 years, to Dec. 31, 2035

Ownership: Original owner

Validation: Volume-level

Access/Delivery: Delivery by electronic or paper duplication, or transfer to the requesting library for in-house use

Business Model: Annual member fees to cover ingest, storage, transport, project administration.

Governance: Governing Board composed of the Library Directors of the participating CIC libraries and the Director of the Center for Library Initiatives (ex officio).

Program Name: **Council on Prairie and Pacific University Libraries (COPPUL) Shared Print Archive Network (SPAN)**

Website: http://coppul.ca/projects/SPAN.html

Link to MOU: http://coppul.ca/projects/SPAN%20AgreementApril2012revWEB.pdf

Members: 19 of 22 COPPUL full members

Format Archived: Journals and optional less-managed process for unique monographs

Selection: Custom collection analysis, risk analysis

Archive location: Distributed, libraries and storage facilities

Retention Period: Varies. Low-Risk, until December 31, 2022 (10 years), Moderate-Risk and Higher-Risk, until December 31, 2036 (25 years).

Ownership: Archive holder (usually the original owner) or gifted to the Archive holder

Validation: Varies by risk category.

Access/Delivery: Not specified.

Business Model: Annual member fees to cover program costs including ingest and validation at member sites.

Governance: SPAN Management Committee appointed by COPPUL Board of Directors, composed of representatives from four (4) libraries participating in the Network, including representation from various sizes of libraries, more than one province, various areas of expertise (e.g. Library Director, Technical Services, Collections Management, etc.), and of Archive Holders, Builders, and Supporters.

Program Name: Five College Library Depository

Website: https://www.fivecolleges.edu/libraries/depository

Link to MOU: Not available

Members: Amherst College, Hampshire College, Mount Holyoke College, Smith College, and
                    the University of Massachusetts, Amherst

Format Archived: Journals

Selection: Journals deposited by members become shared copies.

Archive location: Centralized at Five Colleges shared library storage facility

Retention Period: Not specified

Ownership: Transfers to the consortium (Five Colleges Inc).

Validation: None.

Access/Delivery: Request via shared catalog. Digital and physical delivery.

Business Model: Cost-sharing through the consortium membership fee.

Governance: Existing consortium governance. No separate governance for this program.

Program Name: **Florida Academic Repository (FLARE)**

Website: http://csul.net/node/774

Link to MOU: http://csul.net/sites/csul.fcla.edu/uploads/SUSSC_Policy_APPROVED_March_2012r.pdf

Members: 11 members of the State University System of Florida

Format Archived: Journals and monographs

Selection: Shared storage copy. Volumes deposited by members become shared copies.

Archive location: Centralized at University of Florida storage facility

Retention Period: "Permanent transfer", "material that is donated to the facility is expected to remain in the facility"

Ownership: Transfers to the University of Florida

Validation: Volume-level review for physical condition

Access/Delivery: Digital delivery preferred. Physical volume for in-library use only.

Business Model: Annual assessments to fund operating costs of the shared collection facility.

Governance: Council of State University Libraries (CSUL)

Program Name: Midwest Collaborative for Library Services (MCLS) Shared Monographic Print Storage Project

Website: http://mcls.org/blog/?p=1697

Link to MOU: Not available. MOU being developed.

Members: 8 academic libraries out of approximately 300 MCLS members (academic and public)

Format Archived: Monographs

Selection: Custom analysis by Sustainable Collections Services (SCS) based on holdings overlap and circulation

Archive location: Distributed, libraries and storage facilities

Retention Period: 15 years.

Ownership: Original owner

Validation: Volume-level review for physical condition.

Access/Delivery: Digital delivery preferred. Physical volume for in-library use only.

Business Model: Libraries absorb own expenses

Governance: Not finalized

Program Name: Orbis Cascade Alliance Distributed Print Repository (DPR)

Website: http://www.orbiscascade.org/index/cdmc-current-work

Link to MOU: http://www.orbiscascade.org/index/cms-filesystem-action?file=collection_development/alliance_repository_mou_final.doc

Members: All 36 members of the Orbis Cascade Alliance

Format Archived: Journals

Selection: By publisher: JSTOR Arts & Sciences I and II and American Chemical Society journals

Archive location: Distributed, libraries and storage facilities

Retention Period: 25 years.

Ownership: Archive holder (usually the original owner) or gifted to the Archive holder

Validation: Volume-level review for physical condition.

Access/Delivery: Digital delivery preferred. Physical volume for in-library use only.

Business Model: Libraries absorb own expenses

Governance: Existing consortium governance. No separate governance for this program.

Program Name: **Pennsylvania Academic Library Consortium (PALCI) Print Journal Archive**

Website: http://www.palci.org/collection-management/ (scroll down)

Link to MOU: Not available.

Members: About 10 of PALCI's 71 members

Format Archived: Journals

Selection: By publisher: journals published by the American Chemical Society (ACS), the
                      American Institute of Physics (AIP), and the American Physical Society (APS).

Archive location: Distributed, libraries and storage facilities. Penn State keeping a dark archive copy,
                      others are light archives.

Retention Period: 10 years, to Dec. 31, 2019.

Ownership: Archive holder (usually the original owner) or gifted to the Archive holder

Validation: Issue-level review for physical condition and completeness.

Access/Delivery: Digital delivery preferred. Physical volume for in-library use only.

Business Model: Libraries absorb own expenses

Governance: Existing consortium governance. No separate governance for this program.

Program Name: Washington Research Library Consortium (WRLC) Shared Collection

Website: http://www.wrlc.org/offsite/

Link to MOU: http://www.wrlc.org/offsite/storpolicies.html

Members: All 9 WRLC members

Format Archived: Journals and monographs

Selection: Shared storage copy. Volumes deposited by members become shared copies.

Archive location: Centralized at WRLC storage facility

Retention Period: Permanent.

Ownership: Original owner.

Validation: Minimal review for physical condition.

Access/Delivery: Digital delivery preferred. Physical volume for in-library use only.

Business Model: Cost-sharing through the consortium membership fee.

Governance: Existing consortium governance. No separate governance for this program.

Program Name: Western Regional Storage Trust (WEST)

Website: http://www.cdlib.org/west/

Link to MOU: http://www.cdlib.org/services/west/docs/WESTProgramStatement.pdf

Members: 103 libraries including 3 sets of consortial memberships

Format Archived: Journals

Selection: Custom collection analysis, risk analysis

Archive location: Distributed, libraries and storage facilities

Retention Period: 25 years, until Dec. 31, 2035

Ownership: Archive holder (usually the original owner) or gifted to the Archive holder

Validation: Varies by risk category. See validation standards at
http://www.cdlib.org/services/west/docs/WESTStandards_Issue_VolumeLevelValidation.docx

Access/Delivery: Digital delivery preferred. Physical volume for in-library use only.

Business Model: Annual member fees to cover program costs including ingest and validation at
                            member sites.

Governance: WEST Executive Committee, composed of representatives from nine (9) WEST
                            members (with representatives for Archive Holders, Archive Builders and Non-
                            Archive Holders), elected by the full WEST membership.