

# Unit Costs for Domestic Approval Books

## ***Nancy Slight-Gibney and Bruce H. Tabb***

*April 2004*

### **Introduction**

In early 2002, as part of a library-wide planning effort, an initiative was established at the University of Oregon Library to examine the possibility of receiving domestic approval books shelf-ready. The core of the initiative was to conduct a cost study of our existing process to have a unit cost for comparison with the outsourcing options. A similar study had been conducted five years earlier, with the results determining that the cataloging and processing of domestic approval books could be done more cost effectively in-house.<sup>1</sup> However, much can change over five years and it was not assumed that the costs comparisons of the earlier study would still hold true. This report reviews our process, some of the decisions and assumptions we made, and presents our results.

A working group was established which included the two authors, from the Acquisition and Catalog departments respectively, as well as representation from collection development, physical processing, and the separate law library technical services operation. Our charge was to, "Review vendor-supplied options, conduct a cost study for in-house processing, and identify impacts on library services."

At our first working group meeting we had a broad discussion on what shelf-ready means and what types of materials might be involved. While foreign vendors increasingly are able to supply catalog records, and shelf-ready options are available for firm orders and standing orders as well as approvals, we decided to narrow the focus on domestic U.S. approvals with cataloging supplied by OCLC through their PromptCat service. Even with this limitation, a range of services can be provided, including options on levels of cataloging (Library of Congress only, member supplied records, and/or original cataloging with TechPro) and types of processing (labeling, bar-coding, property stamping, and various types of binding). These were choices we needed to investigate; we might want some services, but not others, from a vendor. The first step was to determine our current in-house costs for the different services. To that end we outlined the following process.

- Notify the Oregon Public Employees Union (OPEU) of our intent to conduct an outsourcing feasibility study per the collective bargaining agreement. One of the task force members was also a union steward, so communication with OPEU was ongoing.
- Review available vendor-supplied options and prices. We needed to look at the price lists to ensure the categories and distinctions made in our study would be comparable to vendors' offerings.
- Design and conduct a study to determine the costs for in-house cataloging (various levels) and physical processing (various levels). We reviewed the methodology used in our 1997 study as well as in studies performed at other institutions to maximize the utility of the results. An early decision was to include all work in the Acquisition and Catalog departments in the study. The working group analyzed the results relevant only to the shelf-ready question, but the data collected could be, and has been, useful for other purposes. The serials data has been reported elsewhere.<sup>2</sup>
- Outline any new processes needed if a vendor performed some cataloging and physical processing.
- Estimate costs for shelf-ready books and identify any potential short and long-term impacts on library service (both positive and negative).
- Report the findings internally to the Library Council and externally, as appropriate.

### **Literature review**

The literature on outsourcing and on the cost of operations within technical services is extensive. The explosion of literature on outsourcing of library technical services functions over the past decade seems tied to three major event: Wright State University's outsourcing of all of its cataloging, Hawaii's elimination of cataloging and selection in all state public libraries, and the outsourcing of the entire law firm library of Baker & MacKenzie. Possibly the most extensive list of literature on outsourcing can be found from the American Library Association's web pages.<sup>3</sup> Other selective, annotated bibliographies exist, for example, in Colver<sup>4</sup> and Bénaud and Bordeianu.<sup>5</sup> While most of this literature either addresses the controversy of outsourcing technical service functions or serves as how-to descriptions, some do raise both philosophical and practical issues.<sup>6</sup>

Two extensive bibliographies on cost studies for technical service functions have been published: Dougherty and Leonard<sup>7</sup> and Tavenner.<sup>8</sup> Most of this literature either provides analytical models or

reports on comparisons between in-house costs and vendor charges. Lancaster<sup>9</sup> alleges that two basic aspects limit studies on technical services costs. First, in many instances, the method an institution uses to derive its data is not evident and thus prevents other institutions from copying it, making comparable studies impossible. Second, these types of studies lack standards on exactly what to measure, how to measure, and how to present findings.

Highlights of cost studies in the 1980s include a study on technical service labor costs of three research libraries,<sup>10</sup> a study on retrospective conversion costs,<sup>11</sup> a study on cataloging costs at the University of California, Riverside,<sup>12</sup> and a study on catalog maintenance costs.<sup>13</sup> In the 1990s there are a study on the how LASS software affected authority work at the University of Arizona,<sup>14</sup> a report on a time/cost study of using Library of Congress catalog cards at the University of Boswana,<sup>15</sup> a time/cost study of authority work at Indiana University,<sup>16</sup> a study of the cost to catalog Slavic materials at Ohio State University,<sup>17</sup> a report on the effects of PromptCat service at Michigan State University and Ohio State University,<sup>18</sup> and the previously mentioned benchmark study of costs to purchase, catalog and process monographs at the University of Oregon (Slight-Gibney 1998).<sup>1</sup>

The Iowa State University Library has been involved in a number of cost studies since 1987 to examine the affect of automation on library services and products. A overview of cataloging costs appeared in 1992,<sup>19</sup> followed by a comparison of cataloging costs for monographs and serials, also in 1992.<sup>20</sup> A study on staffing costs and the affect of automation on the acquisition of monographs was published in 1996.<sup>21</sup> In 1999 Morris and Wool discussed the affect of automation in relation to the value of cataloging.<sup>22</sup> In 1999 Morris, Hobert, Osmus, and Wool reported on how cataloging costs and productivity have changed since 1990 and analyzed the contributing factors.<sup>23</sup> Most recently, Fowler and Arcand reported on an extensive time/cost study between 1994/95 and 2000/01 in which data from all technical services staff involved in acquisitions and cataloging were recorded for one week four to six times a year.<sup>24</sup>

### **Design and methodology**

After reviewing the published literature, we determined the cost study should take about three months to complete. Staff self-reported how many minutes each day they spent on a pre-defined list of

tasks. We decided to do two, two-week "block" samples rather than randomly selected days as we had done in 1997. This shortened the overall time needed for the study and made it easier for staff to remember to track their time. A two-week cycle ensured all end processes related to binding were included.

The Acquisition, Catalog, and Law Technical Services departments independently developed the lists of tasks for their units, which were reviewed by the task force. We needed to be certain we could identify and count the time spent on domestic U.S. approvals: books received on university press and trade approval plans. This was a simple matter in the Acquisition Department since the work was already batched by method of acquisition, but once the books went on to cataloging or end processing the method of acquisition was no longer readily apparent. In ensure this material was recorded separately from other monographs at every stage, a colored flag was inserted into each book at the point of receipt.

We decided if someone were on vacation or ill during part of the sampling time frame we would prorate her time. Student employees also recorded their time and tasks and these were included in the totals. Student wages were calculated as what we paid, not what the student received. That is, we only counted the portion of work-study wages that came from the library budget (25%).

### **Calculating overhead**

In our cost estimates we chose to include direct costs plus individual and departmental pro-rated overhead. Direct costs are wages and benefits plus the costs of supplies or services needed to perform the specific tasks, for example pamphlet binders, or spine labels, or OCLC search and export transaction charges. Dylis Morris has presented a thorough discussion of cost centers and the scalability of overhead.<sup>23</sup> Overhead can be calculated at a number of levels: for the individual, for the working group, for the department, or for the library as a whole. We decided just to include overhead up to and including department heads, but not library administration or costs from general supplies (paper and pens), phones, computers, or building operation. Our rationale was that these costs would be pretty much the same regardless of whether or not our approval books came shelf-ready. From the beginning we assumed we would not lay anyone off, so potential savings from phones or computers could not be applied. Examples of our overhead calculations are as follows:

- For an individual, non-task identifiable time is prorated out as overhead. For example, if an Acquisition Department employee spent 30% of her time creating new orders, 30% of her time doing Quickcat (cataloging upon receipt), 20% of her time on receiving, and 20% on “other” (meetings, email, breaks, vacation, sick leave, etc.), then the 20% spent on “other” would be considered individual overhead and prorated out as 7.5% orders, 7.5% Quickcat, and 5% receiving.
- For supervisory and administrative personnel, the time recorded as overhead or “other” is prorated out according to the time the *entire unit* (cost center) spent on all tasks. For example, the Acquisition Department Head’s time recorded as overhead, perhaps as much as 60%, would be prorated out to all the major categories within the acquisitions area: ordering, receiving, Quickcat, invoice payment, etc. In prorating, her overhead time would be parsed according to how the *department* spent its time, not how she spent her non-overhead time.

### **Components of costs**

With the issues of what we would consider direct costs and how we would calculate overhead resolved we still had a number of questions to answer on how we would quantify various components of in-house costs and how we would calculate the savings.

#### 1. Acquisitions

Acquisitions tasks were recorded according to the type of task, which included pre-order processes and order record creation, record and order maintenance (claiming and updating), receiving, Quickcat, payment and accounting, and administrative. Within each category of activity, the number of pieces handled and the time spent were further broken out by the method of acquisition: approval, firm order, subscription, etc.

#### 2. Cataloging

Cataloging tasks were recorded according to the type of cataloging, which included new cataloging, retrospective conversion, authority work, catalog support (withdrawals, transfers, reclassification), and administrative. Within each category of activity the number of titles cataloged and the time spent were further broken out by the level or complexity of the work that need to be done: Quickcat, traditional copy cataloging, original cataloging, etc. The time spent and the number of domestic

UO approval books cataloged were recorded on completely separate sheets. The flag inserted at the point of receipt identified these books.

### 3. End processing

End processing tasks were recorded according to the major category of activity, which included physical processing, bindery preparation, in-house binding, and preservation/book repair. Within each major category of activity the number of pieces handled and the time spent were further broken out by physical format (book, DVD, microfiche, etc.), and the specific type of in-house process that was needed (cover-up, pam binder, adding a special bookplate, etc.) The time spent and the number of approval books processed were recorded on completely separate sheets. The flag inserted at the point of receipt identified these books.

4. Contract setup, load-table setup, and testing. This would be expensive high-level staff time. Plus, there would be additional ongoing profile maintenance.

From previous experience we were able to establish only a very rough estimate of how much this takes. We decided not to include this in our unit cost estimates.

5. Time to load the file of bibliographic and invoice data each week.

We were currently receiving a file of brief acquisition records with invoice information from one of our vendors. We assumed the amount of time this would take would not significantly change even if the nature of the content of the file changed.

6. Quality control steps.

We determined that if we outsourced, we would need to develop a new quality control step that would substitute for some of what is included in the in-house cataloging and physical processing. We estimated that checking a 5% sample of the books and records on an ongoing basis would be sufficient to ensure that quality standards were met. The labor costs for this were estimated and added into the costs for the outsourcing option.

7. Correcting mistakes, merging records, re-labeling.

We used our experience with receiving brief acquisitions records to determine that 1.5% of the records would need location revision. This is because using an LC classification table is not completely reliable in determining our locally desired branch library or shelving location. In our current process it is a

simple matter to change a location before the book is cataloged. A shelf-ready book would require more effort to change since it would require re-labeling. Using our current experience with cataloging on receipt, we determined that another 1.5% of the records would need some sort of after-the-fact correction to the bibliographic information. While these are very small percentages, the cost of this work must be included in both the in-house and outsourced calculations.

#### 8. Authority work.

We previously determined that 90.5% of the books received on domestic approval were being cataloged upon receipt in the Acquisition Department. Authority work was a batch process and could essentially be handled the same way with a shelf-ready option. We decided to use the same figure (\$.84) for the unit cost of authority work for both the in-house and outsourced cataloging.

#### 9. Savings in OCLC connect time and search, export, cataloging charges; partly balanced out by a loss of enhance credits for our upgrades and original cataloging.

The savings was estimated as \$1.00 per title for searching and exporting plus \$.04 per title connect time (based on 25% of the cost of one port). We were providing original cataloging or upgrades to records for 9.5% of the books received on domestic approval plans. We calculated we would lose an average of \$.25 per title in credit from OCLC for this work.

#### 10. Savings on supplies for binding and labeling and in the commercial binding budget.

Soft cover books make up 21% of the total approval receipts. Our process is to look at each book and identify the most appropriate of three levels of treatment or to determine if the book can successfully be left unbound. Some of this can be codified in a contract, but it was felt that it was unreasonable to expect a vendor to make a lot of very fine distinctions. We decided it would be better to err on the side of having something reinforced rather than not, and estimated that half the books we currently choose to “treat as bound” would end up with an “Easy-Cover” or similar treatment.

#### 11. Not returning duplicates and the cost of keeping books we would normally return.

We looked at the average number and percentage of duplicates and rejected titles. We had to factor in the cost of paying for books we would otherwise send back. We also had to add in the cataloging, processing, and binding costs for these books since we would pay this even if we did not keep the books. Savings would come from not having to process the return or pay for shipping it back.

Additional significant labor savings would come from subject specialists not having to review the approval shipments each week.

12. Concerns we could not quantify.

- Loss of ability to customize as much for each branch.

For the outsourcing to work we would need to rely on the load table and LC classification to determine which branch will receive which book. Distinctions made locally would need to be kept to a minimum. We factored in a cost for location changes, but there currently were additional customizations made for each branch library. For example, different definitions of oversize between the main library and the art library might prove problematic in writing the contract but presumably could be worked out. Different practices among the branches regarding reference designations might require compromise.

- Possibly a loss in timeliness or the flexibility to rush.

We did not determine that either of these concerns would prove to be true. Most libraries reported faster publication-to-shelf time after outsourcing. We did not try to estimate a dollar value of the quicker turn around time.

- Money diverted from the materials budget to pay for cataloging and processing might cause a loss of the ability to buy unique, non-approval, materials and hence result in more generic collections.

The task force did not address the question of how to pay for the outsourced costs. The assumption from the beginning was the money would not come from salary savings, although this would not preclude staff reassignments.

## **Results**

### *Total cost comparisons for shelf-ready approval books*

\$6.76 per volume for in-house cataloging and end processing

\$8.64 per volume for outsourced (except original cataloging and upgrades)

\$8.98 per volume for outsourced (including original cataloging through Techpro)



Table 1: Summary Comparison of In-house and Outsourced Cost

	All work done in-house except a small percentage of binding	Outsource all except original cataloging and record upgrades and fixes	Outsource all, including original cataloging
Cataloging, including authority work	\$3.55	\$3.61	\$3.95
Physical processing and binding	\$1.71	\$2.43	\$2.43
Subject specialist review and returns OR no review and no returns	\$1.05 (review & return)	\$2.15 (no review, no returns)	\$2.15 (no review, no returns)
All other costs (loading file, receiving, payment)	\$.45	\$.45	\$.45

(See Appendix A for details of in-house costs and Appendix B for details of estimates of outsourced costs. Note: the law library technical services costs were **not** included in these calculations.)

## **Discussion**

### Economies of scale vs. labor costs at the University of Oregon (UO)

In considering why the results appear the way they do the major factors to look at are where a vendor is able to achieve economies of scale and where lower labor costs at UO are significant. The vendor/OCLC combination for cataloging is an area where economies of scale come into play. The vendor sends a weekly manifest to OCLC and OCLC can produce a file of records for many libraries at the same time. This is an area where libraries often see a cost savings. However, the UO is still able to do this work more cost-effectively in-house, although only by a very small margin, and only by not including administrative overhead and facilities costs. The fact that we are in the same ballpark is largely because our procedures were completely reengineered a number of years ago, including the development of Quickcat; and we continue to implement changes that increase efficiency.

Physical processing and binding still require handling the books one-by-one. Little savings can be achieved through the economies of scale unless the library is a very small operation to begin with. The UO has a distinct advantage over a vendor in this area because of the ability to hire students, many of them with work-study awards, to perform most of this work. Our labor costs are very low in this area.

Some libraries see savings by switching their approval plans to no returns, independent of a shelf-ready option. Although our return rate of 4.6% is not particularly high, we would still pay an average of \$1.10 per book more to switch to no returns because of having to pay for the books we otherwise would not keep.

#### Opportunity costs

If the library were to receive shelf ready approval books the out of pocket costs would be \$50,000 - \$60,000 per year in addition to what we already pay for books and services. In exchange, we could save up to 1.25 FTE in labor that could be redirected to other tasks. In the Acquisition Department we would save .5 FTE. By eliminating approval review, each subject specialist would save approximately 20 minutes per week for a total of .15 FTE. In the Catalog Department we would save approximately .15 FTE in cataloger's time, if the full outsourcing option were implemented, and roughly .45 FTE in processing staff and students. Of course, this still begs the question of where the money to pay the vendor would come from. If it were out of the materials budget then there would be an impact on the collections.

#### Impact on library services and collections

Some libraries report books on the shelves weeks faster under the outsourced option. By eliminating the shelving of books for subject specialist review we could get the books on the shelf a week to ten days faster. During times of the year when we have fewer student assistants, summer and winter breaks, there are backlogs in end processing. Receiving shelf-ready books could eliminate the resulting delay. However, there is no indication how much time it takes the vendor make the books shelf-ready. This could delay shipment to the library at least one week. It is also possible that vendors experience occasional backlogs. Given our current workflow, it is probable, but not guaranteed, the shelf-ready option would get books on the shelf one to two weeks faster.

It is possible that without the weekly review by subject specialists and the return of unwanted books the approval profile would become stale. An effort would need to be made to ensure the selection profile was reviewed with some frequency, in addition to the quality control steps mentioned earlier to ensure the cataloging and physical processing requirements were met. In branch libraries, where space is a serious problem, there was concern about the impact of keeping books of marginal utility.

## **Conclusion**

Outsourcing cataloging and physical processing for the University of Oregon domestic U.S. approval books was not justified based on the comparative analysis of costs. However, the opportunity costs, or the benefits of outsourcing, should not be ignored. As our library, like so many others, face real and continuing staffing challenges, the ability to pay a vendor to perform some tasks to shift existing staff to perform duties that cannot be outsourced, becomes an increasingly attractive alternative.

Most libraries pay for the costs of shelf-ready books from their materials budgets. This is not without controversy and certainly has long-term implications for the diversity of collections. In a shelf-ready environment, the imperative for regular review of approval profiles is critical, and not only must the selection profile be reviewed but also the detailed instructions for cataloging and processing. This high-level work is absorbed by existing staff, which presents both challenges and opportunities for growth.

Libraries make the choice to outsource to solve problems, not necessarily to do what is most efficient or cost effective. The focus of most of the decisions is on the benefits of the change. Outsourcing some of the back-room work can free up staff for direct patron services. Often, the political reality is that money can more easily be paid to a vendor from the materials budget than shifted out of the materials budget to pay for staff, even if the more cost effective alternative would be to pay your own local staff to do the work. Another situation arises when a library has a sudden increase in monograph funds without a concomitant increase in personnel. The library may not have a choice except to pay the vendor to do the work if the funds must be spent on "books" and not labor. In this case, the vendor's labor charges are folded into the price of the book. There have been several cases where the decision to outsource was made to solve the problem of under-performing or unresponsive work units. Eliminating the entire unit was a quicker fix than re-engineering the work. If cost savings is used as the primary rationale for outsourcing, the library should base that decision on supportive data. The choice to outsource should not be made lightly, as it is a difficult process to re-establish your in-house capacity, and it should be an informed decision based on a thorough analysis of both costs and benefits.

## **Works cited**

- 1) Slight-Gibney, Nancy. 1998. How far have we come? Benchmarking time and costs for monograph purchasing. *Library Collections, Acquisitions, & Technical Services* 23, no.1: 47-59.
- 2) Grecni, Mary and N. Slight-Gibney (forthcoming) Starting with an Empty Map: Benchmarking time and Costs for Serials Operations. Paper presented at the 2003 NASIG Conference and to be reported in the *Serials Librarian*.
- 3) American Library Association. <http://www.ala.org/ala/ors/reports/outsourcingbibliography.htm> (viewed April 2004).
- 4) Colver, M. 1997. "Selected annotated bibliography", in Wilson, K.A. and Cover, M. (Eds) *Outsourcing Library Technical Services Operations: Practices in Academic, Public and Special Libraries*. American Library Association, Chicago, IL, p. 193-220.
- 5) Bénaud, C.L. and Bordeianu, S.M. 1999. Outsourcing in academic libraries: a selective bibliography. *Reference Services Review* 27, no. 1: 78-89.
- 6) Sweetland, James H. 2001. Outsourcing library technical services – what we think we know, and what we don't. *The Bottom Line* 14, no. 3: 164-175.
- 7) Dougherty, Richard, and Lawrence Leonard. 1970. *Management and costs of technical processes: A bibliographic review, 1876- 1969*. Metuchen, N.J.: Scarecrow Press.
- 8) Tavenner, Deborah A. 1988. Cataloging cost studies. *Library Hi Tech Bibliography* 3: 23-29.
- 9) Lancaster, F. W. 1977 *The measurement and evaluation of library services*. Washington, D.C.: Information Resources Pr.
- 10) Getz, Malcolm and Doug Phelps. 1984. Labor costs in the technical operation of three research libraries. *Journal of Academic Librarianship* 10: 209-19.
- 11) Valentine, Phyllis A., and David Roark McDonald. 1986. Retrospective conversion: A question of time, standards, and purpose. *Information Technology and Libraries* 5: 112-30.
- 12) Leung, Shirley. 1987. Study of the cataloging costs at the University of California, Riverside. *Technical Services Quarterly* 5, no. 11: 44-46.
- 13) Oldfield, William R. 1987. Cataloguing and catalogue maintenance: Functional cost allocation system. *Technical Services Quarterly* 5. no. 2: 55-56.

- <sup>14)</sup> Fiegen, Ann M., Sara C Heitshu, and Edward P. Miller. 1990. The effect of the LASS microcomputer software on the cost of authority work in cataloging. *Information Technology and Libraries* 9: 253-57.
- <sup>15)</sup> Jenda, Claudine Arnold. 1992. Time and workflow study of the cataloging process used to evaluate Library of Congress cardsets as a cataloging support service. *Library Resources & Technical Services* 36: 426-40.
- <sup>16)</sup> Byrd, Jacqueline, and Kathryn Sorury. 1993. Cost analysis of NACO participation at Indiana University. *Cataloging & Classification Quarterly* 16, no. 2: 107-21.
- <sup>17)</sup> El-Sherbini, Magda. 1995. Contract cataloging: A pilot project for outsourcing Slavic books. *Cataloging & Classification Quarterly* 20, no.3: 57-73.
- <sup>18)</sup> Granskog, Kay. 199? Michigan State Study.
- <sup>19)</sup> Morris, Dilys E. 1992. Staff time and costs for cataloging. *Library Resources & Technical Services* 36: 79-95.
- <sup>20)</sup> Morris, Dilys E., and Lori Osmus. 1992. Serials cataloging time and costs: Results of an ongoing study at Iowa State University. *The Serials Librarian* 22: 235-48.
- <sup>21)</sup> Morris, Dilys E., and Pamela Rebarcak and Gordon Rowley. 1996. Monographs acquisitions: Staffing costs and the impact of automation. *Library Resources & Technical Services* 40: 301-18.
- <sup>22)</sup> Morris, Dilys E., and Gregory Wool. 1999. Cataloging: Librarianship's best bargain. *Library Journal* 124, no. 11: 44-46.
- <sup>23)</sup> Morris, Dilys E., and Collin B. Hobert and Lori Osmus and Gregory Wool. 1999. Cataloging staff costs revisited. *Library Resources & Technical Services* 44, no. 2: 70-83.
- <sup>24)</sup> Fowler, David C. and Janet Arcand. 2003. Monographs acquisitions time and cost studies: The next generation. *Library Resources & Technical Services* 47, no. 3: 109-24.

**Appendix A : In-house costs, domestic U.S. approval books, UO, July 2002**

STAGE IN WORKFLOW	COST PER VOLUME	COMMENTS
Vendor prepares weekly file of brief bibs and order records	\$.13	Vendor charges, based on current annual flat fee
Books received from vendor and data file FTP from vendor.	\$.15	Acquisition Department labor
Receiving Opening boxes and putting up for review/taking down after review	\$.40	Acquisition Department labor
Subject specialist review	\$.67	Collection Development labor
Cataloging: Acqdept performs QuickCat for 90.5% of the titles	\$.93 averaged	90.5% times \$1.03 per book Acquisition Department labor
OCLC costs: Search/export	\$1.00	Search/export charge
Connect time	\$.04	25% of a port charge = \$540 per year
Original or enhanced cataloging: 9.5% would need original records or upgrades	\$.61 averaged	Catalog Department labor costs: \$6.63 per title labor times 9.5%, but we also receive enhance credits of \$.25 per title, so final formula is $(\$6.63 - \$.25) \times .095 = \$.61$
Quality control steps: Authority work	\$.84	Catalog Department labor

Physical processing: All books: sorting trucks, property stamp, detection strip, barcode applied, item record with barcode # scanned in. Plus for hardcovers and treat-as-bounds: labels produced and applied.	\$ 1.13 labor \$ .18 supplies	End Processing labor Supply costs: \$ .15 detection strip \$ .02 barcode \$ .01 label
Binding: 1.3% to commercial bindery	\$ .01 per book labor plus \$ .09 per book bindery	\$ .79 end processing labor times 1.3% \$6.90 bindery charge times 1.3%
Binding: 4.56% need cover-ups	\$ .09 per book labor plus \$ .07 per book supplies	\$1.97 end processing labor times 4.56% \$1.54 per cover-up supply charge times 4.56%
Binding: 2.24% need pam binds	\$ .05 per book labor plus \$ .09 per book supplies	\$2.23 end processing labor times 2.24% \$4.07 per pam binder times 2.24%
Paying the invoice/financial functions	\$ .10	Acquisition Department labor
Duplicates and rejects: Costs for shipping books back Costs for labor to prepare and track returns.	\$ .05 per book \$ .13 per book	Postage costs: \$1.06 per book x 4.6% return rate Acquisition Department labor costs: \$2.88 per book x 4.6%
\$ .13 to vendor for record		

TOTAL COSTS	\$6.76 per volume	\$1.04 to OCLC
		\$.48 for bindery, supplies, and postage
		\$4.44 for tech services labor
		\$.67 for subject specialists' labor



**Appendix B : Outsourced cost estimate for shelf-ready books, UO, July 2002**

STAGE IN WORKFLOW	COST PER VOLUME	COMMENTS
Vendor prepares weekly manifest and sends to OCLC PromptCat	\$ .15 vendor X (\$ .25 vendor Y)	We choose to use the vendor X estimates.
Cataloging: OCLC PromptCat: selects catalog record according to formula, adds order and item information	\$1.91 per volume	Price quote, July 2002
Upgrades: 90.5% of the records would be equivalent QuickCat, but the other 9.5% would need original records or upgrades	\$.95 average for Techpro OR \$.61 average for in-house	Techpro: approx. \$10.00 per title times 9.5% See appendix "A" for breakdown of in-house costs
File with Call #s goes back to vendor	\$0	
Vendor does physical processing: Property stamp, detection strip, barcode applied, item record with barcode # scanned in	\$1.25 vendor X (\$1.10 vendor y)	We supply barcode
Call # labels supplied and applied	\$.65 vendor x (\$ .25-\$ .50 vendor y)	
Binding (currently) 1.3% commercial 4.56% cover-ups	\$.39 vendor x (\$ .37 vendor y)	8.1% of the books times an average cost per treatment of \$4.81

2.24% pam binds We "treat as bound": 13%	\$.14 vendor x	We estimated that half of what we treat as bound would end up with Easy-Covers or similar treatment at \$2.10 each, or 6.5% times \$2.10 = \$.14.
Books received from vendor and data file FTP from OCLC.	\$.15 in-house labor	Assume costs the same as now for reviewing dups, identifying added vols, merging records, etc.
Receiving: Opening boxes	\$.20 per book – in-house labor	Assume costs are half of what they would be if we put up for review.
Subject specialist review	\$.00	Assume review is eliminated if we accept default locations.
Quality control steps:		
Sample 5% and check	\$.05 in-house labor	Based on DBM time of \$.89 per book
Cataloging changes 1.5%	\$.05 in-house labor	Based on average cost of \$3.42 for recataloging
Location changes 1.5%	\$.00 (or \$.01) in-house labor	Based on \$.21 for re-labels, could be zero if we eliminated subject specialist review and accepted default locations.
Authority work	\$.84 in-house labor	Same as for in-house cataloging, but this could possibly be higher because of non-LC series work.

Paying the invoice/financial functions	\$ .10 per book – in-house labor	Assume costs would be the same as now.
Duplicates and rejects: Costs for books not wanted	\$2.15 average per book	4.6% (return rate) x \$46.75 (average price)
TOTAL COSTS		<p>\$2.58 to vendor for record manifest and physical processing</p> <p>\$1.91 to OCLC for cataloging (no upgrades; \$2.25 with Techpro)</p> <p>\$2.00 for tech services labor</p> <p>\$2.15 to vendor for books we would otherwise have returned.</p>
	\$ 8.64 per volume without Techpro	
	\$ 8.98 per volume with Techpro.	