What Is Backlog Is Prologue: A Measurement of Archival Processing

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Abstract: A numerical analysis of the processing of manuscript and archival materials was undertaken to develop baseline figures for planning and comparison. The time required for different segments of the processing activity was averaged and analyzed for all accessions within a given time period, with size and type introduced as variables. The analysis proved useful in planning staff responsibilities, processor assignments, budgets, and other management data. The feasibility and efficacy of word processing applied to the creation of finding aids was also tested. This survey serves as a starting point for archives searching for a methodology to measure the work of processing within their institutions, as a step towards the standardization needed for self-evaluation, and, perhaps, as a means of furthering cooperation among institutions.

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The authors are indebted to John Fleckner for the felicitousness of the phrase which they adopted for their title.

AS ARCHIVISTS ENCOUNTER THE MASS OF DOCUMENTATION created during the twentieth century, they increasingly turn to analytical techniques which improve their efficiency and effectiveness.[1] The professional literature is beginning to reflect this interest in analysis, with articles ranging from comparative perspectives[2] to managerial and administrative measurements.[3] Although there have been attempts to analyze specific functions, such as processing,[4] on the whole, the measurement and evaluation of archival procedures is only beginning to receive attention from the profession. Even the authors of processing manuals seldom address the question of measuring the work of processing archival and manuscript collections.[5]

In part, this neglect is a function of the variations between and among their collections. Archivists opposed to measuring processing time or costs often argue that it cannot be done because each collection is unique. The uniqueness of a collection, however, is not a valid argument against analyzing archival activities. Kenneth W. Duckett has stated that despite "the variables which all curators recognize—size, complexity, physical condition, organization, subject matter, etc.—nonetheless there are certain similarities between collections which would allow for at least approximate measurment."[6]

Other archivists, particularly those in library settings, have avoided an analysis of costs because of the possibility of un-

[1]For example, see Helen W. Slotkin and Karen T. Lynch, "An Analysis of Processing Procedures: The Adaptable Approach," *American Archivist* 45 (Spring 1982): 155–163.

[2]Nicholas C. Burckel and J. Frank Cook, "A Profile of College and University Archives in the United States," *American Archivist* 45 (Fall 1982): 410–28.

[3]"Managing Archival Institutions," an insert in *SAA Newsletter* (January 1983).

[4]In 1976 the SAA Committee on Collecting Personal Papers and Manuscripts did a study on the costs of acquiring, processing, and housing collections based on seven cases at six different institutions. Although processing time was measured, the study was severely limited by the small number of cases studied. (We are indebted to Charles Schultz for a copy of the report of this study.) William J. Maher, in "The Importance of Financial Analysis of Archival Programs," *Midwestern Archivist* 3 (1978): 3–23, discusses the need to understand the financial bases of archival practice to justify budgets and to establish guidelines for internal use and for grant requests. The analysis of processing costs and time is discussed from a theoretical perspective. Karen Temple Lynch and Thomas E. Lynch, on the other hand, in their "Rates of Processing Manuscripts and Archives," *Midwestern Archivist* 7 (1982): 25–33, compute processing time using grant proposal estimates which reflect a consensus of how processing time is planned instead of how it is carried out. W.N. Davis, Jr., in his "Budgeting for Archival Processing," *American Archivist* 43 (Spring 1980): 209–11, presents figures based on experiences at the California State Archives. Thomas Wilsted follows Davis' approach in his "Computing the Total Cost of Archival Processing," *MARAC's Dear Archivist: Practical Solutions to Archival Dilemmas* 1 (Summer 1982): 1–3; which considers personnel costs, supplies, and shelving cost in the analysis of processing costs. The most detailed study done on processing costs is by William J. Maher, "Measurement and Analysis of Processing Costs in Academic Archives," *College and Research Libraries* 43 (January 1982): 59–67 (cited hereafter as Maher, "Measurement"). Joel A. Nachlas and Anton R. Pierce in "Determination of Unit Costs for Library Services," *College and Research Libraries* 40 (May 1979): 240–47, use flowcharts and the microcasting technique to identify the cost of specific services.

[5]See, for instance, Charlotte S. Price, *A Manual of Policies and Practices for the Small Manuscripts Repository* (Washington, D.C.: Howard University Libraries, 1973); Cornell University Libraries, *Manual of Archival and Manuscript Processing Procedures*. 2d ed., Richard Strassburg, comp. (Ithaca: Cornell University Libraries, 1974); Washington University School of Medicine Library, *Archives Procedural Manual*. 2d ed. (St. Louis: Washington University School of Medicine Library, 1978); University of Washington Libraries. University Archives and Manuscript Division, *Manual for Accessioning, Arrangement and Description of Manuscripts and Archives* (Seattle: University of Washington Library, 1979); Karen T. Lynch and Helen W. Slotkin, *Processing Manual for the Institute Archives and Special Collections M.I.T. Libraries* (Cambridge, Mass.: Massachusetts Institute of Technology, 1981).

[6]Kenneth W. Duckett, *Modern Manuscripts: A Practical Manual for Their Management, Care and Use* (Nashville: American Association for State and Local History, 1975), p. 29.

favorable comparison with library costs. Recent automation studies in libraries have demonstrated that the cost of cataloging a book is around $10 per title; a cubic foot of books cataloged (which could be considered analogous to arrangement and description) would therefore be between $200 and $250.[7]

More recently, work of the National Information Systems Task Force has deflated the myth that the uniqueness of archival groups means that archival systems are unique as well. It is apparent that archival processes are comparable from one institution to another, provided that the numbers are available for comparison.

A 1983 effort at Washington State University Libraries to develop a baseline numerical analysis of the processing of manuscript and archival material may be helpful to other institutions seeking a methodology and a point of comparison. This noble goal notwithstanding, the initial impetus for the analysis project was much more selfish. Simply put, we sought internal management data for the supervision of the processing function: the assignment of processing tasks; the allocation of storage resources for unprocessed materials; and the development of budget requests for staff, supplies, and equipment.

This project was feasible only because in 1975 the repository instituted an accession register and an accompanying accessioning and processing worksheet based on models found in the Society of American Archivists' *Forms Manual* (1973). The worksheet (see Figure 1) has

undergone a number of revisions and changes in the ensuing years. Nevertheless, a substantial database on the actual acquisition, accessioning, processing, and arrangement and description of a large number of accessions by a good number of individuals has been developed through its use.

Recent changes in the processing procedures at Washington State University, prompted by the introduction of word processing technology, seem to have marked a watershed in the preparation of materials for research use. Therefore, an analysis was conducted in such a way as to provide a measure of the impact of this new technology. Reductions in processing time achieved through the use of word processing equipment seem to warrant serious consideration of use of this new technology by other archival repositories.

Repository Processing Procedures

Manuscripts, Archives, and Special Collections at Washington State University is similar to many other archival repositories located within university library systems. It incorporates, in one location, primary source materials requiring exceptional attention and care. At W.S.U. this includes manuscript collections, university archives, and rare books and special collections. Although the unit has a permanent staff of six, only 1.75 full-time equivalents (f.t.e.) are assigned specifically to archives and manuscripts. In addition, approximately 1.5 f.t.e. part-time processors (usually students) work directly with unpublished

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[7]Estimates of library cataloging costs range from $4.58 to $13.21. See Angela G. Mullikin, "The King Research Project: Design for a Library Catalog Cost Model," *Library Resources and Technical Services* 25 (April/June 1981): 183; A.R. Pierce and J.K. Taylor, "A Model for Cost Comparison of Automated Cataloging Systems," *Journal of Library Automation* 11 (March 1978): 13; M.A. Fox and J.S. Chervinko, "The Cost of AACR2 at Morris Library," *Illinois Libraries* 65 (May 1983): 315. The number of books in a cubic foot is also open to interpretation; a range of twenty to twenty-five was chosen for this example. A more familiar estimate, suggested by Melvil Dewey, is that ten books fill one linear foot of shelf. See William J. Hubbard, *Stack Management: A Practical Guide to Shelving and Maintaining Library Collections* (Chicago: ALA, 1981), p.41.

Location Number: Accession Number:

ACQUISITIONS	PROCESSING	DATE	NAME

Temporary title: Notes/remarks:

Donor:
Address: Processor:
City, ZIP:
Phone: Started processing
          Quantity rec'd: Register drafted
          Quantity weeded: Location number assigned
          (see note)
          Quantity reboxed: Cataloging form (over)
☐ Correspondence .   Shelved
☐ Diaries
☐ Ephemera, pamphlets, etc.   Processing completed
☐ Ledgers
☐ Minutes   Quantity weeded:
☐ News clippings
☐ Photographs   Number of containers:
☐ Reports
☐ Memoranda   Linear feet of shelf space:
☐ Scrapbooks
☐ Speeches, writings   Approximate number of items:
☐ Business records   Catalog cards
☐ Financial records
☐ Personal papers   WSHRB Survey
☐ Other   NW Archivists report
Inclusive dates: NUCMC report

☐ More to come. When: News release

Received   Register typed
Accessioned   Register proofed
Acknowledged   Register copied
Donor card
Initial inventory   Sent to donor
Separation list
Correspondence   PNWAG Project file

PNWAG Project file   Publication (#   )

                                              Worksheet filed
☐ Gift/permissions agreement
☐ Restrictions

Manuscripts, Archives & Special Collections
Washington State University Libraries
PROCESSING WORKSHEET

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Figure 1: Processing Worksheet (reduced)

material. In recent years, outside funding has added .5 f.t.e. processors to the staff to work on specific projects. The manuscripts and archival material, as of the end of 1982, occupied approximately 6,760 cubic feet, of which 1,875 cubic feet is unprocessed. In recent years approximately 445 cubic feet per year has been accessioned while only about 177 cubic feet per year has been processed. Consequently, for the past few years, the backlog has been growing at about 260 cubic feet per year.

The processing procedures at Washington State University Libraries, only recently and partially committed to paper, are, nevertheless, firmly established. Some aspects of the procedure, although not unique, are not common throughout the archival and manuscripts processing world. One person usually does all the processing from the initial inventory through the proofing of the final copy of the register. By and large, processors are university students (generally graduate students in history or a related discipline) who work approximately twenty hours or less per week. Processing is supervised by a three-fourths time professional archivist (Assistant Archivist), who in turn reports to the Manuscripts–Archives Librarian.

Processing follows prescribed archival procedures. It begins with the student processor conducting an initial inventory to familiarize himself with the collection. Consultation with the Assistant Archivist and the Manuscripts–Archives Librarian is held to determine the scope and direction of the processor's activity. In general, both archival and manuscript materials are processed to the folder level. This is followed by the reordering of the material (when necessary); the identification of series; and the labelling of new, acid-free folders. It is at this stage that minimal conservation efforts (removal of staples, paper clips, etc.) are

undertaken. The processor then drafts the provenance statement, the biography or organizational history, the arrangement and description section, and the container list. Before the introduction of word processing technology, this was generally done in longhand and was then typed. At that point, the rough draft of the register was reviewed by the Assistant Archivist and corrections were made. The draft was retyped by the processor if the corrections were extensive; it was then reviewed by the Manuscripts–Archives Librarian, corrected again, and sent to a typist for the creation of the final copy. The final copy was proofed by the student processor and the Assistant Archivist before being photocopied. Two copies were filed in the library, and one copy was sent to the original donor.

Register production has been greatly streamlined by the introduction of the computer and word processing technology. Now the student processor enters the register into the computer; the Assistant Archivist makes corrections directly on the CRT (video terminal); a rough draft hard copy is produced for final review by the Assistant Archivist and the Manuscripts–Archives Librarian; and, with the corrections made, the final copy is produced by the computer on a high-quality laser printer. This has reduced the register production time significantly. It was the introduction of the new technology and the subsequent reduction in total time expended in processing that prompted the staff of Manuscripts, Archives, and Special Collections to undertake the statistical evaluation of the processing procedures.

Data Collection and Analysis

The method of data collection and analysis was initially intended to provide not a precise measurement of cost but rather an estimate of time required to process material. William J. Maher

describes two methods of analysis in his study of processing costs, retrospective and direct analysis.[8] The methodology used in this study is closest to Maher's retrospective analysis, but is not as detailed, for the percentage of all staff time spent on processing activities is not taken into account. The more detailed direct measurement analysis would provide a more accurate measurement of cost, but that was not the objective of this study. It is hoped that the methodology used here could be adapted to any institution with little difficulty and would provide an estimate of processing time which could be used internally and as a basis for comparison between similar institutions.

Before beginning to compile the data which had accumulated in eight years of worksheets, the segments of the processing procedure to be analyzed were identified. It was hoped that the data would reveal the average amount of time elapsed from the accessioning of a collection to the time of completion of processing. Also to be discovered was the average amount of time a collection sat on the shelf before we began processing (that is, the average amount of time from accessioning to the beginning of processing). Finally, it was important to learn the average amount of time it took to process one cubic foot of material. With these specific requirements in mind, definitions were required for such terms as "accession date," "completion of processing," and a "cubic foot" of material.

The accession date was important because this was the figure from which we initiated all our measurements. We defined the time of accession as the time when a collection was assigned an acces-

sion number, which was not necessarily the same date as when the material was received. This reflects the material that was received prior to 1975 (the date formal accessioning commenced) but was not accessioned until it was brought out for processing.

Completion of processing was defined as the date when the worksheet was filed —the very last step in our processing procedure. At that time, each collection was shelved, the finding aid (if any) had been completed and was available for researchers, and the catalog entry was prepared.

The quantity of material in cubic feet was taken to be the amount of material shelved, that is, after weeding and processing were completed. The amount of material shelved was used instead of the initial unprocessed amount because very little preliminary weeding at accessioning was undertaken during the period studied. In the future, however, it would be more useful to measure the amount of material before and after processing to see if the amount weeded is a significant variable in the processing time. It would also help to establish the amount of space saved through weeding at the time of accessioning and during processing.

The type of material was determined by its final classification; this may or may not have been the same as when it was accessioned. A collection accessioned as university records, for example, could be identified during processing as the private papers of an individual professor and treated as a manuscripts collection. For purposes of this study, each group was classified as one of three types: university archives, manuscript material, or photographs and oral

[8]Maher, "Measurement," p. 60–61. In concluding his article he noted: "Archivists who have maintained statistics on processing activities for several years are in an excellent position to begin retrospective studies immediately," p. 67.

history collections. If the collection did not require a finding aid, this was also noted when gathering data.

One other variable was introduced into the calculations: the size of the collection. Previous statistical analysis had demonstrated that over half of the accessions received amounted to one foot or less. This gave us an excellent opportunity to test the hypothesis that larger collections are processed at a faster rate than smaller ones. Hence, the distinction between collections less than and greater than one cubic foot seemed useful for our study.

Several other factors had to be taken into consideration when analyzing the processing worksheet. Because the majority of the accessions were of twentieth-century material, date was not seen to be a significant variable. Collections have usually been processed to the folder level. Consequently, the level of processing was considered to be a constant for purposes of this study. The units of measurement were: the number of accessions, amount of material (measured in cubic feet), and time (in months). A month was the most accurate measurement of time that could be extracted from the worksheets. For purposes of this study, a month consists of 4.2 twenty-hour weeks, or the equivalent of one half-time f.t.e. A rough estimate of hours can be easily made using this unit of measurement. Processors now log the number of hours they spend processing; therefore, more exact figures will be available in the future.

Once the data to be collected had been identified, a form was prepared to ensure consistent record entries. The process of compiling data consisted of going through the notebooks of accessioning and processing worksheets and recording the data. Not all data could be recorded for all accessions. This problem was the result of the evolutionary development of the worksheet (more

complete and precise information was provided in the later worksheets) and improperly completed worksheets. Complications sometimes arose when accessions were combined, as it was difficult to distinguish which amount was processed from which accession. In a few cases, arbitrary decisions were made to resolve these problems; in other cases the problem accession was not included in the data gathering.

After all the data were compiled, the numbers were totaled and the ratios computed. To compute the average time from accession to completion of processing, the total number of months for all accessions processed to completion was divided by the total number of accessions. The same ratio was then computed for collections of one foot or less and for those greater than one foot, for the three different types of collections, and for those collections with no registers.

In computing the average time from accessioning to the beginning of processing and the average processing time per foot, a smaller aggregate size had to be used, because earlier worksheets contained no information about dates of processing. The aggregate used in analyzing the entire processing activity was 328 (that is, 328 accessions totaling 1,341 cubic feet), whereas the sample for the two analyses of the parts of the process was 143 (which totaled 316 cubic feet).

The average time per accession for the entire process from accessioning to completion averaged 16.23 months for all accessions (see Table 1). Except for the accessions with no finding aid, the average time—considering the variable of size and type—varied from 17.81 months for manuscript collections to 12.93 months for photograph and oral history collections.

The average amount of time a collection had been on the shelf before pro-

Table 1

Average Time from Accessioning to Completion

Type of accession	Months	Aggregate Size
TOTAL	16.23	328
< = 1 cubic foot	15.21	188
> 1 cubic foot	17.61	140
Archives	14.59	85
Manuscripts	17.81	193
Photos & Oral Histories	12.93	50
No Register	3.00	102

Table 2

Average Time to the Beginning of Processing

Type of accession	Months	Aggregate Size
TOTAL	17.05	143
< = 1 cubic foot	16.06	101
> 1 cubic foot	19.44	42
Archives	12.74	32
Manuscripts	19.81	84
Photos & Oral Histories	13.61	27
No Register	7.24	24

Table 3

Average Processing Time Per Cubic Foot

Type of accession	Months	Approx. # of Hours
TOTAL	.30	25.2
< = 1 foot	.54	45.4
> 1 foot	.29	24.4
Archives	.20	16.8
Manuscripts	.43	36.1
Photos & Oral Histories	.56	47.0
No Register	.37	31.1

cessing was started was one year (see Table 2). The time for accessions for which no register was written was considerably less, 7.25 months. The difference in time among the other variables was slightly more than seven months. Manuscript material remained on the shelves the longest amount of time, averaging 19.81 months. University archives material stayed on the shelf the least amount of time before processing was begun, 12.74 months.

The processing time for all accessions averaged 1.25 weeks, or 25.2 hours, per cubic foot (see Table 3). The processing time ranged from 2.25 weeks, or 47 hours, per cubic foot for photograph and oral history material to .8 week, or 16 hours, for university archives.

The principal goal of this analysis was to measure the length of time between the arrival of different kinds of archival materials in the repository and the time that they were made available to researchers. This ranged from about 18 months for manuscript material to about 13 months for photograph and

oral history collections. It was assumed that manuscript materials would be processed at a slower rate than archival materials. This was proven to be the case by approximately 20 hours per cubic foot. We had thought that manuscripts would be processed sooner than university records, because our major responsibility lies in the manuscripts arena. This did not prove to be the case. On the average, manuscript collections sat unprocessed approximately seven months longer than university records. It was assumed that small manuscript collections not requiring an inventory or register would be processed sooner and faster; the statistics appear to support both assumptions (except that the ratio on a per-foot basis for small collections is higher than university archives by a factor of almost two). Large collections (over one cubic foot) were thought to be processed more quickly on a per-foot basis; this proved to be true and indicates that larger collections may arrive in better order with better initial description than do smaller collections.

The role of these numbers in planning storage facilities, staff responsibilities, processor assignments, and budgets will be significant. The figures can be used to evaluate the training and work of processors. In addition, donors can now be told that a manuscript collection will usually be processed and ready for research use in approximately one and one-half years. Previously a wait of two or three years was considered the norm. This measure of backlog only varies by about five months for different kinds of material and by about three months between large and small accession.

In planning processing activities, where the rule is usually first in, first out, it is useful to know that, on the average, the unprocessed material now six years old is balanced by new accessions which, for one reason or another, are processed promptly. Directing our attention specifically to the processing itself, a useful measurement is the amount of time required, on the average, to process one cubic foot of material. Based on the material surveyed, we can conclude that each half-time. student employee should require slightly more than one week to process one cubic foot of material. The usefulness of this figure for planning is apparent: a twenty-foot accession will require approximately 25 weeks of the processor's time. Archival records will be calculated at a rate approaching 16 weeks, while manuscripts would more probably require about 36 weeks. This has direct implications for developing budget requests.

If the repository has a backlog of approximately 200 cubic feet and a budget for processors of approximately $10,000, it can plan on employing about 3.75 half-time students at $3.50 an hour for 9 months. These 3.75 processors, at half time, should be able to process about 113 feet of the backlog. These are, of course, very rough figures; but they

should be precise enough to plan both budgets and assignments.

The applicability to requests for grants is also clear. A well thought-out grant proposal, containing a precise allocation of the requested resources, will be that much more attractive to grant reviewers. This kind of statistical data demonstrates that the repository has conducted a managerial analysis of its costs and benefits and is able to use the information in planning activities.

Planning space requirements is a similar matter. A backlog of 200 cubic feet, given the above $10,000 per year, will be eliminated in approximately a year and nine months. If the rate of incoming accessions matches the rate of processing, no new space will be required to store the unprocessed backlog of material, provided it is stored separately from the processed material. Greater or lesser rates of acquisitions will change that relationship. Similarly, a processing rate based on the same $10,000 will require the availability of approximately 113 cubic feet of new shelf space for completed materials each year.

Impact of Word-Processing Technology on Processing Time

The other principal concern in this project was to measure the effect of new word processing technology on the speed of availability of manuscripts and archival materials. A separate analysis was conducted of those materials processed between September 1982, when the machinery was introduced, and August 1983. To compare the amount of time required to produce a register when the word processor was used with the amount of time required without the word processor, the time from the beginning of processing to completion was measured for two groups of accessions. Because the photograph and oral history

group of computer-produced inventories did not constitute a reasonable sample size, only manuscript and archive accessions were measured. Collections for which no inventories were required were also excluded because the word processor was not a variable in the time it took to complete them. This first year (September 1982–August 1983) was the beginning of the learning curve for the new technology. It took several months to work out the proper format, procedures, and forms for the word processor. Consequently, the results for the initial registers written on the computer will naturally be slower than they should be in the future (see Table 4).

The analysis of the effect of new technology demonstrates the usefulness of providing baseline statistical data for evaluating changes in procedures. Without having measured the average time required for the process (per accession), we would not have more than an intui-

tive feeling that word processing technology speeded up the availability of primary source materials by about a third or more. Having made these measurements, however, we have demonstrated substantial savings of time.

Conclusions

The statistical survey of accessions and processing time fulfilled the initial goals that we had for the project. We hoped to gather management data, storage requirements, and budget information. These goals were realized. We now have roughly accurate figures with which we can calculate processing rates. With these numbers, we can project space requirements, estimate production potentials, budget staff time, and measure costs more accurately.

If one were attempting to measure specific costs of processing and not just time, a very different set of data would

Table 4

Time from Beginning Processing to Completion

| | Before W/P | | After W/P | | |
	Months	# acc.	Months	# acc.	% decrease in time
Manuscripts	5.90	52	4.31	21	27
Archives	3.84	24	1.80	13	53
ALL	5.25	76	3.35	34	34

need to be collected. A more detailed type of analysis, such as direct measurement of several representative collections, as suggested by Maher,[9] would be more appropriate for ascertaining exact costs. In this study, no attempt was made to differentiate the time spent on a collection by different people at different rates of pay. Although the processor devotes the largest amount of time to a collection, the Assistant Archivist and the Manuscripts–Archives Librarian supervise, answer questions, proofread inventories, and catalog. Cost of materials, storage space, and secretarial (and now computer) time are among the other factors that would be included in a cost analysis.

This project, however, focused solely on ascertaining the time required to complete the necessary stages in making primary sources available for research use. We can turn the time values into costs for budgeting purposes, but they only reflect the total costs. For instance, if we were to simply measure student processor time involved in processing one cubic foot of material, with the student being paid $3.50 per hour, it is a simple matter to multiply hours per cubic foot times the hourly rate. The average processing time, according to our analysis, for a cubic foot of archival material is 16.8 hours. Consequently, this would cost approximately $58.80 per cubic foot. Manuscripts, however, are significantly more expensive to process because they require approximately 36.1 hours and cost $126.35 per cubic foot to process. The costs for the average cubic foot of all material processed (25.2 hours per cubic foot) would be approximately $88.20. These numbers offer little more than ballpark figures. The survey was designed to measure time, not direct costs of processing.

The survey was useful in confirming our suspicions as to the application of the computer and word processing technology. It provided a test case of the feasibility of and efficacy of word processing applied to the creation of inventories and registers. A discussion of the further benefits of the computer as we have applied it to processing at W.S.U. are beyond the scope of this paper.

It is often the case that an analysis of statistical data is avoided by the archives staff on two grounds: first, that the proofs are identifiable on a common-sense basis, and second, that the time involved is better devoted to the direct mission of the repository. It is clear that not all the results of this analysis were foreseen. As to the second objection, the entire process of collecting and computing the data did not take more than three and one-half working days and could have progressed much faster if the worksheets had been uniform in nature and properly filled out.

We also learned, through this exercise, the type of information which we must collect in the future if we are to produce meaningful evaluations of our procedures. The processing survey resulted in a complete revision and restructuring of our worksheet. It will be much easier to use in the future, both for the processor and for the person compiling processing statistics (see Figure 2).

Not insignificantly, we now have a baseline figure on processing time with which we can compare previous studies on other institutions. Maher's statistics for the University of Illinois show a processing rate of 5.6 hours per cubic foot while the average number of hours required to process a cubic foot of material in this study was estimated to be 25.2. This variance results from different approaches to estimating processor activities. Maher, for instance,

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[9]Ibid., 60.

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                              Accession Number:
─────────────────────────────────────────────────────────────
   Donor:                     Quantity weeded:

   Address:                   Number of containers:

   Phone:                     Linear feet of shelf space:
─────────────────────────────────────────────────────────────
   Restriction:
─────────────────────────────────────────────────────────────
   Date    By                              Notes/Remarks
   ____   ____    Received
                  Temporary title:
   ____   ____    Initial Evaluation
                  Quantity received:
                  Quantity as reboxed:
                  Inclusive dates:
           ☐      More to come     ☐    Donor agreement signed
           ☐      Acknowledged     ☐    PNWAG Project file card
                  By:

                  Interim storage location:

                  Processor:
                  Location number:
           ☐      Inventory
           ☐      Cataloging form (over)
           ☐      News release

                  Date started:
                  Date finished:
                  Hours:
   ____   ____    Cataloging
                  ☐ Card   ☐ WSHRB Survey   ☐ NUCMC   ☐ MMA

   ____   ____    Inventory drafted  ____   ____  Revisions entered
   ____   ____    Inventory proofed  ____   ____  Final print
   ____   ____    Draft run          ____   ____  Sent to donor

   ____   ____    PNWAG file

   ____   ____    Processing complete/worksheet filed


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Figure 2: Processing Worksheet (reduced)

estimated that processors in Illinois spend 63 to 76 percent of their time in processing tasks.[10] In this study, however, the person-month value was estimated at a maximum value of 20 hours per week although most processors work less than that. In addition, more than 80 percent of their time is devoted to actual processing activities. Therefore, within the limitations of widely varying methodologies as reported in the literature and in personal communications, we concluded that the production time and therefore costs were clearly in line with those of other institutions. For example, in the paper presented to the SAA in 1980, Karen Temple Lynch concluded that "a reasonable processing rate for personal papers would fall in the range of .5 to 2 linear feet per processor per week."[11] In an earlier version of this paper she cited a consultant's report submitted to NEH by David R. Larson in which he concluded: "The formula is that one full-time professional archivist can do all the arrangement and description of nineteenth and twentieth century manuscripts resulting in a complete archival inventory at the rate of 1 linear foot per every 20 hours."[12] This is also within the range set as the standard for the National Archives: one linear foot requires an average of 4.5 days to process.[13] The survey has provided the data which demonstrates that our production level is consistent with that of others in the manuscripts and archival world.

Although this analysis was designed specifically for one institution, it provides a starting point for archivists seeking a methodology and rationale for the measurement of processing. Analyses such as this are necessary steps towards the standardization needed for increasingly vital self-evaluation. As institutions continue to share and compare information, archivists will benefit most from commonly defined processes, techniques, and measures.

[10]Ibid.

[11]Karen Temple Lynch, "Managing Processing: If You Don't Know Where You're Going, How Do You Know When You Get There?" Paper read at the 44th Annual Meeting of the Society of American Archivists, 5 October 1980, Cincinnati, Ohio, p. 6.

[12]Karen Temple Lynch, "The Demise of the Backlog: An Issue in Archives Management," unpublished paper, 25 July 1979, page 14.

[13]Ibid.