

# governmentattic.org

"Rummaging in the government's attic"

Description of document: National Archives and Records Administration

(NARA), Office of Records Services -Washington, D.C., Preservation Survey of Textual Records, December

2005

Requested date: 02-December-2008

Released date: 22-December-2008

Posted date: 13-December-2009

Title of Document Preservation Survey of Textual Records, December 2005

Source of document: FOIA Officer

National Archives and Records Administration

NGC-Room 3110 8601 Adelphi Road College Park, MD 20740

Telephone: (301) 837-FOIA (3642)

FAX: (301) 837-0293

Email: foia@nara.gov?subject=FOIA Request

The governmentattic.org web site ("the site") is noncommercial and free to the public. The site and materials made available on the site, such as this file, are for reference only. The governmentattic.org web site and its principals have made every effort to make this information as complete and as accurate as possible, however, there may be mistakes and omissions, both typographical and in content. The governmentattic.org web site and its principals shall have neither liability nor responsibility to any person or entity with respect to any loss or damage caused, or alleged to have been caused, directly or indirectly, by the information provided on the governmentattic.org web site or in this file



# National Archives and Records Administration

8601 Adelphi Road College Park, Maryland 20740-6001

December 22, 2008

Re: Freedom of Information Act Request NGC09-023

This is in response to your Freedom of Information Act (FOIA) request of December 2, 2008, for the following:

- NW Textual Preservation Survey
- NR Textual Preservation Survey

Your request was received in this office on December 2, 2008, and assigned tracking number NGC09-023.

We located a total of 38 pages responsive to your request, constituting a Textual Preservation Survey of the NARA Office of Records Services—Washington, D.C. (NW). To the best of our knowledge, only this survey exists. All pages are being released in full.

If you are not satisfied with our action on this request, you have the right to file an administrative appeal. Address your appeal to the Deputy Archivist (ND), National Archives and Records Administration, College Park, Maryland 20740. Your appeal should be received within 35 calendar days of the date of this letter and it should explain why you think this response does not meet the requirements of the FOIA. Both the letter and the envelope should be clearly marked "Freedom of Information Act Appeal." All correspondence should reference the tracking number NGC09-023.

Please let us know if we may be of further assistance.

Sincerely,

JAY OLIN

Deputy FOIA Officer

Office of General Counsel

**Enclosures** 

# NATIONAL ARCHIVES and RECORDS ADMINISTRATION OFFICE OF RECORDS SERVICES –WASHINGTON, D.C.

# PRESERVATION SURVEY OF TEXTUAL RECORDS

Document Conservation Laboratory, NWTD

Preservation Programs, NWT

December 2005

## TABLE OF CONTENTS

EXECUTIVE SUMMARY	***************************************
TEXTUAL PRESERVATION IN NW – HISTORICAL BACKGROUND	
SURVEY METHODOLOGY AND CONSERVATION ASSESSMENT	
ARCHIVAL ASSESSMENT OF RECORDS	
DATA ANALYSIS AND RESULTS OF ARCHIVAL ASSESSMENTS	
NW ARCHIVAL ISSUES CHART	
HOLDINGS CHARACTERIZED	
FORMATS OF TEXTUAL RECORDS	
FORMATS OF NONTEXTUAL RECORDS FOUND WITH TEXTUAL HOLDINGS	
CONDITION OF TEXTUAL RECORDS	
HOUSINGS FOR TEXTUAL RECORDS	
PRESERVATION FINDINGS FROM THE SURVEY	
PRESERVATION ACTIONS CHART	18
PRESERVATION NEEDS	19
HOLDINGS MAINTENANCE CHART	
DEVELOPING PRESERVATION PRIORITIES	20
LEVEL OF USE	
SPECIAL VALUE	
SPACE IMPLICATIONS OF PRESERVATION ACTIONS	
CONCLUSIONS	23
ACKNOWLEDGEMENTS	25
ACKNOWLEDGEMENTS	27
APPENDICES	27
APPENDIX A: ARCHIVES I CUBIC FOOT SAMPLE SELECTION CHART	28
APPENDIX B: ARCHIVES II CUBIC FOOT SAMPLE SELECTION CHART	29
APPENDIX C: CONSERVATION DATA SURVEY FORM	30
APPENDIX D: ARCHIVAL DATA SURVEY FORM	31
APPENDIX E: SPACE IMPLICATIONS OF REHOUSING RECORDS	32
APPENDIX F: INSTRUCTION MANUALS FOR ARCHIVISTS & CONSERVATORS	

#### **EXECUTIVE SUMMARY**

A systematic preservation survey of textual holdings in the Office of Records Services-Washington, DC (NW) of the National Archives and Records Administration was carried out at the National Archives Building (Archives I) and the National Archives at College Park (Archives II) at the end of 2004 by NARA conservation and archival staff. Data analysis was performed during 2005. This report documents the survey process and results and provides a context for those results.

The overall goals for the survey were to:

- Characterize the nature and extent of the textual preservation needs of NW holdings
- Provide basic information about the condition of NW textual records
- Link condition, use, and value of records as a means of prioritizing preservation needs
- Provide a basis for estimating the budgetary resources required to address textual preservation needs
- Gain data to permit a future evaluation of existing protocols and procedures for initial processing, holdings maintenance, and other preservation functions

The survey was designed to be statistically valid and structured to achieve 95% confidence with accuracy within 0.1-2.5% for each derived estimate. Approximately 1,800 sample sets, a combined total for Archives I and Archives II, were evaluated to represent the total NW textual holdings of 2,075,000 cu. ft. Conservation staff assessed the condition, format, and housing of the records. Thereafter, archivists most knowledgeable about the records surveyed, provided the corresponding data on use, value and preservation-related archival issues.

A recommendation that preservation action is needed was applied only when there was imminent threat to the record and the information it contained, and when information could not be accessed due to condition. For the purpose of the survey, preservation need was defined very conservatively and focused on whether records could be safely served to researchers in their existing state and housing. Thus, the emphasis was very much on the critical "must or need to do." For example, poor quality, chemically unstable Federal Records Center boxes did not trigger a recommendation for holdings maintenance, though in a stricter or more idealized interpretation of preservation need they would have. On the other hand, a box that does not adequately support the records did trigger a recommendation for holdings maintenance.

The Office of Records Services-Washington DC faces a formidable backlog of textual preservation work. The results of the survey indicate that 67% or 1,390,000 cu. ft. of the NW textual holdings require some type of preservation work.

The greatest preservation need identified by the survey is for holdings maintenance. A total of 57% (1,188,000 cu. ft.) of NW textual records require holdings maintenance.

<sup>&</sup>lt;sup>1</sup> NW textual holdings reported in NARA's Performance Measurement and Reporting system (PMRS) for December 2004.

While the percentages of records requiring reformatting, conservation treatment, and custom housing are smaller, the numbers of cubic feet requiring these preservation actions are nonetheless very significant. These results are as follows:

- 13% (265,000 cu. ft.) of the textual records require preservation reformatting (e.g., microfilming)
- 4.4% (91,000 cu. ft.) of the textual records require conservation treatment
- 3.8% (78,000 cu. ft.) of the textual records would benefit from custom housing.

Records continue to deteriorate as time passes, and records made of unstable materials deteriorate more quickly. The preservation needs of records change over time, based on their condition and use. Environment plays a critical role in the effort to stabilize the chemical deterioration of records.

For many records, the physical damage suffered will not change significantly if the records are not used, and if they are stored in good housing and storage environment. However, changing research patterns and the seasons of heavy or intense use that some records receive have a direct impact on the wear on the records. Records in good or stable condition that receive heavy use will always be vulnerable to damage caused by handling. When fragile, damaged, or poorly housed records are used, they are at imminent risk for further damage and loss of information. The task of preserving textual holdings is ongoing and can be met with a variety of strategies that identify and respond to the records at greatest risk.

Over the years NARA has developed a successful preservation strategy that integrates the primary tools that can prolong the useful life of records—environmental controls, holdings maintenance, conservation treatment, duplication, and staff oversight and intervention during records handling. New research and tools will continue to enhance our preservation capabilities. Preventive preservation strategies minimize irreversible loss of information and damage to the records, and save NARA money over time. As damage occurs, costs to stabilize condition increase and often the damage is irreversible. For example, paper that has become embrittled cannot be made flexible again; mitigating strategies for preserving brittle records, such as reformatting or sleeving, are costly.

Despite persistent attention to preservation, it is clear from the survey findings that a substantial body of textual records requires preservation actions. If this backlog is not addressed, it will continue to grow—both as new accessions are received and as records that receive heavy research use show evidence of damage from handling.

## NW TEXTUAL PRESERVATION PLANNING - HISTORICAL BACKGROUND

Prior to this survey, the most notable systematic survey of the preservation needs of textual holdings was undertaken in the early 1980s and issued in January 1985. The National Archives and Records Service (NARS) Twenty Year Preservation Plan (US Department of Commerce, National Bureau of Standards, NBSIR 85-2999) was developed under an interagency agreement with the National Bureau of Standards, which developed the statistically valid survey, analyzed the results, and developed conceptual models of preservation options. The actual survey of records was carried out by National Archives conservation staff. This data was used to characterize the format, condition, and preservation needs of the textual holdings.

The <u>Twenty Year Preservation Plan</u> identified preservation strategies and the resources required to carry them out. The document emphasized several key preservation priorities, including the need for an improved environment, appropriate housing of records, duplication of unstable records, holdings maintenance of incoming records, and conservation treatment of intrinsically valuable records. The Plan provided a conceptual framework for preservation activity and was used effectively to set priorities, establish work procedures, and raise awareness of preservation resource needs. The <u>Twenty Year Preservation Plan</u> articulated a number of key concepts that have since become fully integrated into preservation management at the National Archives and Records Administration (NARA), including

- the importance of providing a suitable storage environment for all records,
- employing the level of use of records as a trigger for preservation attention, and
- focusing on the preservation needs of existing as well as incoming materials in order to avoid expanding the preservation backlog.

The <u>Twenty Year Preservation Plan</u> was one of several tools and initiatives that ultimately resulted in the building of the National Archives at College Park (Archives II) and the renovation of the National Archives Building (Archives I). Both building projects had at their center the enhanced and long-term preservation of the permanently valuable records of the Federal government.

In the early 1990s, NW conducted another preservation survey of textual holdings. The Department of Transportation provided guidance on developing survey methodology that was statistically valid. Reference service slips were utilized to identify the survey universe of records that were used by researchers. The examination of records was carried out by NARA conservation staff.



Damaged Bound Records

In addition to updating overall information on the condition and format of NW textual holdings, two key observations emerged. One related to an awareness of the various ways in which custodial units maintained records on research use, which made it difficult to identify a consistent use-based survey universe across NW holdings. The other observation related to the large number of damaged bound records that were identified and the high cost of individual conservation treatment. The latter finding led to implementing the preservation strategy of providing custom boxes for bound volumes as a means of stabilizing them and making them more safely accessible by staff and researchers.

In the late 1990s, the concept of risk assessment emerged as a mechanism for custodial archivists to identify records requiring preservation attention. The emphasis was placed on records that were used by researchers as opposed to the entire holdings. This approach continued the concept of applying use as an important criterion in setting preservation priorities and expending scarce resources. Risk assessment forms and instructions were prepared by conservation staff. These risk assessment forms were used by archivists to document the nature and extent of the problems they identified, as well as to propose the appropriate preservation response, including such actions as holdings maintenance, microfilming or other duplication, and conservation treatment.

Risk assessment information provided by custodial units was compiled into a database of at-risk textual records beginning in 1999, and updated annually thereafter. In 2004, the risk assessment forms were simplified. Throughout this period, the data has been used by conservation liaisons, custodial archivists, and others to set preservation priorities and develop annual work plans. Risk assessment forms are also filled out during initial processing, both as a means of alerting custodial archivists to preservation problems associated with new accessions as well as for use as a tool in managing the preservation backlog. Risk assessment information serves as the basis for tracking preservation needs and accomplishments in the Performance Management and Reporting System (PMRS).

In 2004 the Assistant Archivist for Records Services- Washington, DC requested that a new overall updated assessment of preservation be performed.

#### SURVEY METHODOLOGY AND CONSERVATION ASSESSMENT

The current survey was designed to answer basic questions about the format, condition, and housing of the textual holdings, which permitted staff to evaluate whether records can be safely served to a researcher in their current condition. Will loss of information result should records be served as observed? Is a preservation action needed to assure the long term preservation of records?

Through the generous assistance of the Army Test and Evaluation Command (ATEC), Department of the Army, a statistician provided directions and calculations to achieve an accurate and random sample of the total NW textual holdings. The survey was designed to be statistically valid and structured to achieve 95% confidence with accuracy within 0.1-2.5% for each derived estimate. Approximately 1,800 sample sets, a combined total for Archives I and Archives II, were evaluated to represent the total NW textual holdings of 2,075,000 cu. ft.<sup>2</sup> Conservation staff assessed the condition, format, and housing of the records. Thereafter, archivists most knowledgeable about the records surveyed provided the corresponding data on use, value and preservation-related archival issues.

<sup>&</sup>lt;sup>2</sup> NW textual holdings reported in NARA's Performance Measurement and Reporting system (PMRS) for December 2004.

Samples of 1 cubic foot of records (1/3 shelf) were selected based on the total cubic footage for each stack. The required number of sample sets was determined based on the size of each stack. The required number of samples was divided by the total cubic footage of the stack to determine the base interval of measurement used for locating samples in each stack.

A random number (less than the base interval of measurement) was used to obtain the first sample set for each stack, ensuring each stack would start with a different first selection to prevent stack shelving bias. Further sample sets were identified by counting the base interval determined. The base interval identified the next compartments to be surveyed. A random number chart was then used to select the sample shelf. Another random number chart was used to select which third of the shelf would be examined. Location information on row, compartment, shelf, and box position for the sample site was then recorded in a Microsoft ACCESS database designed for the survey. Record group (RG), accession number (when known), box number, and relevant comments were also entered into the database.

The Master Location Register (MLR) was used to provide the entry number of the series and the MLR identification number for each sample set. Both of these numbers were used by surveyors to identify the records in selected sample sets, and may be useful in the future to permit return to the specific records surveyed for further review and analysis. See Appendices A (Archives I Cubic Foot Sample Selection Chart) and B (Archives II Cubic Foot Sample Selection Chart) for sample selection design.

A pilot preservation survey of two diverse records groups, RG 48 and RG 56, conducted in the spring of 2004, clarified the importance of a standard approach to analyzing the breadth of NW holdings. One goal of the actual survey was to be as consistent as possible in evaluating the records. Detailed instructions coupled with training enabled both conservation and archival staff to assess and communicate information about the records in a uniform manner. See Appendix F (Instruction Manuals for Archivists and Conservators)



**Evaluating Records** 

Teams consisting of two conservators each evaluated records pre-entered into a database on assigned laptop computers. Conservators physically examined records at locations within the stacks and completed inquiries about format and condition of the records and their housings. Assessments of preservation need were made for the sample set. See Appendix C (Conservation Data Survey Form).

Once all the survey sets had been examined by conservation staff, information was downloaded to a NARA networked computer. Hardcopy forms were printed out where inconsistent or incomplete data appeared and conservation staff returned to the stacks to rectify discrepancies.

#### ARCHIVAL ASSESSMENT OF RECORDS

After conservation staff completed their quality control reviews of the survey data, the survey forms were printed, and distributed to the appropriate NW custodial unit. To ensure that conservation and archival staff members evaluated exactly the same sets of records, each survey form included archival information (RG, entry and/or accession number, and Master Location Register number) as well as specific stack and shelf locations. See Appendix D (Archival Data Survey Form).

Archivists familiar with specific record groups evaluated records from the following perspectives:

- use
- special value
- · whether finding aids were available
- · whether microfilming was recommended
- · whether archival processing was needed, and
- whether the records represented a potential theft risk

To ensure consistency in the way that archivists interpreted and responded to these questions, instructions were provided that included definitions and examples. See Appendix F (Instruction Manuals for Archivists and Conservators).

The archival questions that were included in the survey have a direct bearing on long-term preservation. For example, records that receive high use are most likely to exhibit condition problems as a result of handling. Similarly, records that are not adequately processed and that do not have sufficient finding aids will likely suffer physical or mechanical damage, since staff and researchers have to work through many files rather than focusing directly on records of specific interest via finding aids. Records of special value often warrant focused preservation attention, while records that pose a potential theft risk are typically candidates for secure storage and/or microfilming.

#### DATA ANALYSIS AND RESULTS OF ARCHIVAL ASSESSMENTS

All survey data were analyzed by an archives specialist skilled in database development and use. By weighting the raw results against the survey stack sample size, he computed the percentages of the sample population of NW textual holdings corresponding to each survey query. From these weighted percentages the number of cubic feet of records in the entire NW holdings was calculated for each

query. The results yielded the number of records subject to observed threats and candidates for future preservation and archival actions. The information gathered on use and special value was integrated with the data on preservation actions and a number of other data elements to assist in determining the number of records at high, medium, and low risk. Given the large universe of over two million cubic feet of records in NW textual holdings, even small percentages reported represent large quantities of records.



Data Analysis

High use records requiring preservation action are considered to be at high risk for loss of information. The high risk records with special value could be viewed as the highest priority. Those records having some use may be considered at medium risk for loss of information, and those with no or low use would be the lowest priority for preservation action in order to prevent loss of information.

The archival assessment of the sample sets provided the following data:

- 36.4% (755,000 cu. ft.) of the records receive high use
- 12.9% (267,000 cu. ft.) of the records have special value
- 66.3% (1,375,000 cu. ft.) of the records do not have box or item level finding aids. Finding aids provide researchers with information to locate records directly, thereby reducing the searching, handling, and risk to records. This is particularly important for high use, fragile and special value records, or those in larger Federal Records Center (FRC) boxes.
- 11.2% (231,300 cu. ft.) of the records are candidates for microfilming based on custodial assessment of research use (as opposed to conservator's assessments based on condition)
- 97.1% (2,015,000 cu. ft.) of the records are adequately arranged
- 6.3% (131,000 cu. ft.) of the records are at a significant risk of theft

#### FIGURE 1: NW ARCHIVAL ISSUES CHART

	Records Lacking Arrangement			Records Lacking Finding Aid		Tri-fold Sets and Brittle		in FRC	FR	cords in C Boxes vith no ding Aids	FRO L:	cords in C Boxes acking ngement
	%	Cubic feet	%	Cubic feet	%	Cubic feet	%	Cubic feet	%	Cubic feet	%	Cubic feet
All NW Textual Records	2.86%	59,000	66.27%	1,375,000	2.76%	57,000	22.72%	471,000	a	393,000	b	34,000
High Use Records	0.85%	18,000	15.14%	314,000	1.43%	30,000	3.96%	82,000				
High Use & Special Value	0.39%	8,000	3.13%	65,000	1.04%	22,000	0.51%	11,000				
Some Use Records	0.97%	20,000	25.17%	514,000	0.86%	18,000	8.98%	186,000				
Some Use & Special Value	0.48%	10,000	2.36%	49,000	0.04%	1,000	1.12%	23,000				
Low/No Use Records	1.04%	22,000	25.57%	547,000	0.47%	10,000	9.78%	203,000				
Low/No Use & Special Value	0.23%	5,000	0.90%	19,000	0%	0.0	0.62%	13,000				
Special Value	1.11%	23,000	6.39%	133,000	1.07%	22,000	2.26%	47,000				

Figure 1 summarizes the results of the archival assessments.

<sup>&</sup>lt;sup>a</sup>83.45% of the records in FRC boxes have no finding aids.

<sup>&</sup>lt;sup>b</sup>7.27% of the records in the FRC boxes lack archival arrangement. For the high use records that have special value, 1,644 c.f. (0.35% of the FRC boxes) lack archival arrangement.

#### HOLDINGS CHARACTERIZED

The survey characterized the various types of record formats that make up the NW textual holdings. See Figure 2: Formats of Textual Records. The textual holdings are comprised predominantly of loose sheets of paper. The survey identified 10% of the samples as bound volumes with another 10% of the sample sets having both bound and loose records.

FIGURE 2: FORMATS OF TEXTUAL RECORDS

Format	% of Surveyed Records	Cubic Feet of Records
Loose	76%	1,572,000
Bound	10%	210,000
Loose and Bound	10%	214,000
Cards	3%	65,000
Oversized Documents	<1%	3,000
Other	<1%	11,000
TOTAL	100%	~2,075,000

The total NW textual holdings was based on 2,075,000 cu, ft, as reported in December 2004 PMRS.

Non-textual records and artifacts are interspersed within the textual holdings. The preservation needs of these materials can vary from those of the textual records. Of the non-textual records listed in Figure 3, 1% or 19,000 cu. ft. are in need of attention. In most instances, photographs found in the context of textual records need to be housed in polyester sleeves so they can be handled by researchers without damage to the photographic image. Artifacts often require custom housings to provide necessary support and protection.

#### FIGURE 3: FORMATS OF NONTEXTUAL RECORDS FOUND WITH TEXTUAL HOLDINGS

Format	% of Surveyed Records	Cubic Feet of Records
Photographs	6%	127,000
Artifacts	<1%	13,000
Microfilm	<1%	11,000
Mixed	<1%	10,000
Films	<1%	7,000
AV	<1%	3,000
Electronic Records	<1%	371

#### CONDITION OF TEXTUAL RECORDS

The conservation surveyors reviewed the condition of the records they sampled. Based on the condition, the surveyors determined on the preservation needs. Appendix C (Conservation Survey Form and Results) shows the form used and the total results for each category. The results are outlined below, based on the format of the records.

#### Volumes

- 9% or 20,000 cu. ft. of volumes have detached boards
- 6% or 15,000 cu. ft. have detached spines
- 4%, or 10,000 cu. ft. have broken sewing or other methods of attachment that are failing.

All of these conditions represent records at risk for loss of information.

#### Loose Records

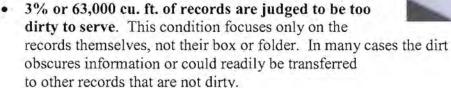
• 76% or 1,572,000 cu. ft. of records are loose records. The most common condition problem found among loose records is tri-folded sets of records. These records make up 6% of the survey sample, or 134,000 cu. ft. Because the records have been folded, breaks commonly occur along each of the two fold lines where the fold has weakened the paper. Generally, paper along the fold lines is darker and more brittle than the rest of the sheet. In groups of tri-folded records, outer layers are in a more degraded condition than the interior sheets. Tri-folded records are frequently in envelopes or packets and tied with cotton tape.



**Detached Boards** 

Tri-folded set

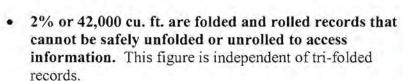
• 4% or 76,000 cu. ft. of the loose records are considered brittle. Evidence of brittle paper includes edge tears, breaks, chips, and discoloration, which indicate that additional breaking or tearing will likely occur with use. An additional 3% or 61,000 cu. ft. of records represent brittle newspapers.





Brittle Paper

• 2% or 40,000 cu. ft. of records are significantly torn. This figure does not take into account small edge tears, but does include records in which a tear extends into text or image resulting in structural instability and impeding safe access. Small edge tears (less than 2 inches) that could be stabilized by placing the documents in polyester sleeves as a part of holdings maintenance are not included in this category.





Significantly Torn



Rolled

• Unstable copies are recorded at less than 1%, or 19,000 cu. ft. Records were deemed unstable when quality of the image or support was in imminent jeopardy. These include documents produced by processes such as Thermofax™ and Verifax™ or copied onto inherently unstable papers. Thermofax™, Verifax™, or other poor quality copies that were clearly legible were not recorded as unstable. There are additional quantities of unstable copies that are still in a condition that the information is legible. Environment plays a critical role in slowing the deterioration of these copies.

 Pressure-sensitive or other variants of applied adhesive tapes were only noted in cases where information is obscured or access restricted because sheets are adhered together. This accounts for less than 1% or 14,000 cu. ft. of records. Again, environmental conditions play a significant role in speeding or slowing the deterioration of the tapes.



Pressure Sensitive Tapes

Mold or insect damage represents less than 1% or 4,000 cu. ft. of records. These
conditions were noted if there are mold or insect accretions that could be mechanically
reduced or vacuumed. Staining and foxing were not included in this category. No active
mold or insects were found in the holdings.

#### HOUSINGS FOR TEXTUAL RECORDS

Records are housed in folders and boxes to facilitate access and arrangement and to protect the records during transit and use. Housings also physically support records, protect them from dirt, and slow environmental changes. The results of the survey revealed a significant need for improvement in how the records are housed.

#### Boxes

- 70% of all boxes do not meet current NARA specifications, though most of these boxes still provide adequate physical support. In some cases, marked signs of acid-migration and oxidation stains are visible on records, such as tri-folded documents, that are in direct contact with poor quality box materials. Boxes with finger-holes on the front edge can result in damage to records when fingers are inserted to retrieve the box. These boxes are also of poor chemical quality. Boxes designed with "tuck-in lids" can also damage records as lids may inadvertently compress, bend, or tear records as they are closed.
- 46% of all boxes provide records with inadequate physical protection. This figure includes boxes that are broken and boxes that are the wrong size. A number of boxes are currently held together with pressure sensitive tapes or string, or are creased, dented, or otherwise physically compromised. Records within these boxes are at risk when attempts are made to remove or replace records during handling. Boxes designed to house light weight garments or textiles have been used in the past to house heavy oversized records. In most cases, these boxes do not adequately support their contents and may collapse under the weight of the records as they are retrieved.



Box Held Together With Tape

- 23% of boxes are Federal Records Center (FRC) cu. ft. storage boxes that likely were used by the agency that created the records. Most FRC boxes surveyed did not meet NARA specifications for permanent enclosures, but provide adequate support and protection to allow records to be safely served. Most of the FRC containers close by tucking the top flaps of the box under one another. This method of closure is difficult to perform and often results in distortion to the box. When the box flaps are not closed, flaps catch on the shelf above, making the box difficult to remove and/or damaging the box. Boxes that are not fully closed make records more vulnerable to damage in the event of a water leak. Also, FRC boxes are very heavy and difficult to remove and replace on the top two shelves.
- 12% of all boxes are under-filled. Under-filled boxes without spacer boards allow records to slump, resulting in document distortion. Because paper retains a memory of this configuration, conservation treatment is required to relax and return the documents to their original state. Under-filled boxes also misrepresent linear feet measurements for reporting purposes and inefficiently occupy shelf space.
- 8% of the boxes are legal size document boxes that contain letter size folders. These unmatched sets allow folders to shift during transport, with potential damage to records.
- 7% of all boxes are overfilled. Boxes that are overfilled jeopardize the safe retrieval and
  re-filing of records. Tightly packed records also cause boxes to bulge and distort, which
  results in additional stress on the boxes.

#### **Folders**

- 86% of all folders do not meet specifications for permanent quality. Chemical instability of the acidic housing materials can create an unfavorable environment within the box and may contribute to the oxidation stains evident on a number of records. Some new permanent quality boxes contain old, poor quality folders, which are the primary support for the records and in direct contact with them. Not until the boxes are opened is the poor state of folders revealed.
- 58% of all folders do not provide adequate physical protection for the records they

house. Also included in the folder category are other types of enclosures that do not provide support. Envelopes function as folders in some cases, but because records need to slide in and out, potentially incurring damage, these were considered inadequate. Because of the chemical instability of the card stock or excessive handling, the integrity of many folders has been compromised. In many instances, folder tabs are breaking because of the acidic and brittle nature of the folder material, resulting in loss of folder identification. Records attached to folders via prong type fasteners also present preservation problems since such files are often as thick as three inches, placing severe strain on records being accessed or copied.



Brittle Document Folders

- 24% of all boxes reviewed do not have enough folders to adequately house the records. In many instances, records were placed in boxes without any folders at all. Sometimes a single folder contained more records than could be adequately accommodated, and subdividing it into additional folders is needed. Folders also may be needed to replace current folders that are damaged, are no longer capable of supporting the records, or have label information at risk of imminent loss. This category did not include tri-folded sets, card sets, Navy deck logs, or pamphlets.
- 3% of all folders are too small for their contents, which results in edge damage and records not being fully supported. This category includes letter size folders housing legal and oversize documents and legal size folders containing oversize materials. Records folded once to accommodate the smaller size of the folder were considered acceptable.

#### PRESERVATION FINDINGS FROM THE SURVEY

Information captured by conservation staff regarding the current preservation needs of the records (holdings maintenance, conservation treatment, custom housing, and microfilming) was merged with information provided by archivists on the use and value of the records. This information is linked in the Preservation Actions Chart (Figure 4).

A recommendation that preservation action is needed was applied only when there was imminent threat to the record and the information it contained, and when information could not be accessed due to condition. For the purpose of the survey, preservation need was defined very conservatively and focused on whether records could be safely served to researchers in their existing state and housing. Thus, the emphasis was very much on the critical "must or need to do." For example, poor quality, chemically unstable Federal Records Center boxes did not trigger a recommendation for holdings maintenance, though in a stricter or more idealized interpretation of preservation need they would have. On the other hand, a box that does not adequately support the records did trigger a recommendation for holdings maintenance.

The Office of Records Services-Washington DC faces a formidable backlog of textual preservation work. The results of the survey indicate that 67% or 1,390,000 cu. ft. of the NW textual holdings require some type of preservation work. 33% of the textual records do not require preservation action at this time.

The greatest preservation need identified by the survey is for holdings maintenance. A total of 57% (1,188,000 cu. ft.) of NW textual records require holdings maintenance.

While the percentages of records requiring reformatting, conservation treatment, and custom housing are smaller, the numbers of cubic feet requiring these preservation actions are nonetheless very significant. These results are as follows:

- 13% (265,000 cu. ft.) of the textual records require preservation reformatting (e.g., microfilming)
- 4.4% (91,000 cu. ft.) of the textual records require conservation treatment
- 3.8% (78,000 cu. ft.) of the textual records would benefit from custom housing

# FIGURE 4: PRESERVATION ACTIONS CHART

	Records Requiring Holdings Maintenance		Records Requiring Conservation Treatment		Records Requiring Custom Housing		Records Requiring Microfilming		Records Requiring No Preservation Action	
	%	Cubic feet	%	Cubic feet	%	Cubic feet	%	Cubic feet	%	Cubic feet
*All NW Textual Records	57.26	1,188,000	4.38	91,000	3.78	78,000	**12.77	265,000	32.99	685,000
High Use Records	19.76	410,000	1.92	40,000	0.92	19,000	7.43	107,000	12.72	264,000
High Use & Special Value	3.35	70,000	0.92	19,000	0.23	5,000	2.57	53,000	3.43	71,000
Some Use Records	19.8	411,000	1.47	30,000	1.80	37,000	3.39	70,000	10.26	213,000
Some Use & Special Value	2.12	44,000	0.11	2,000	0.15	3,000	2.63	55,000	0.74	15,000
Low/No Use Records	17.7	367,000	.99	21,000	1.06	22,000	0.34	7,000	10.01	208,000
Low/No Use & Special Value	0.84	18,000	0.01	259	0.01	122	0.28	6,000	0 .88	18,000
Special Value	6.32	131,000	1.04	22,000	0.39	8,000	5.48	114,000	5.05	105,000

<sup>\*</sup>Total NW Textual Holdings were 2,075,000 cubic feet as reported in the December 2004 Performance Measurement Reporting System.

<sup>\*\*</sup>The total number of all NW Textual Records that require microfilming was arrived at by adding the microfilm recommendation of conservators (1.87%) to those of archivists (11.15%) and subtracting those records (0.25%) recommended by both groups. Thus, the sums of cubic feet and percentages for microfilmed records noted as High, Some, Low/No Use are slightly less than the total figures in the first row. Other figures in the Records Requiring Microfilming column represent the archival recommendations only.

#### PRESERVATION NEEDS

20% or 410,000 cubic feet of the textual holdings represent high use records that require holdings maintenance. The Holdings Maintenance Chart (Figure 5) links level of use and special value with the need of records for minimal, moderate, or extensive holdings maintenance.

FIGURE 5: HOLDINGS MAINTENANCE (HM) CHART

	All Records Requiring HM		Records Requiring HM Minimal		Records Requiring HM Moderate		Records Requiring HM Extensive	
	%	Cubic feet	%	Cubic feet	%	Cubic feet	%	Cubic feet
*All NW Textual records	57.26	1,188,000	19.70	409,000	17.06	354,000	20.51	426,000
High Use Records	19.76	410,000	6.85	142,000	6.19	128,000	6.71	139,000
High Use & Special Value	3.35	70,000	0.84	18,000	1.07	22,000	1.44	30,000
Some Use Records	19.80	411,000	6.49	135,000	5.72	119,000	7.59	157,000
Some Use & Special Value	2.12	44,000	0.24	5,000	0.55	12,000	1.33	28,000
Low/No Use Records	17.7	367,000	6.35	132,000	5.14	107,000	6.21	129,000
Low/No Use & Special Value	0.84	18,000	0.29	6,000	0.16	3,000	0.39	8,000
Special Value	6.32	131,000	1.38	29,000	1.78	37,000	3.16	66,000

<sup>\*</sup>Total NW Textual Holdings were 2,075,000 cubic feet. (per December 2004 Performance Measurement and Reporting System)

Minimal	Taping torn box lids; properly orienting records; replacing boxes; adding spacer board; scattered preservation photocopying (1:1 box replacement, for example); placing small numbers of photographs in polyester sleeves.
Moderate	Re-boxing in document boxes from FRCs; selectively replacing harmful containers and enclosures where needed; partial replacement of folders. Placing torn documents into polyester sleeves.
Extensive	Complete systematic holdings maintenance; replacement of housings at the series of collection level; may include systematic preservation photocopying; replacing boxes and folders in their entirety; removal and replacement of damaging fasteners; transfer of information from boxes and folders; unfolding flexible tri-folds (at the item level, for example).

The time required to carry out different preservation actions varies greatly. For example, minimal and moderate holdings maintenance activities are essentially carried out at the batch level, and it is primarily during extensive holdings maintenance that records receive selective individual-level preservation attention. This can be compared with conservation treatment, which is carried out at the item level. Time required to perform treatment can vary widely, depending on whether records are receiving basic stabilization, for example to permit safe microfilming, or if full conservation is being carried out that can take many hours per item. Microfilming requires individual, item-by-item handling of each record, though the time spent per record is brief. Thus, resource requirements to carry out different preservation actions vary widely depending on the specific action, whether records are handled at the item level vs. batch, and the degree and complexity of the intervention.

#### DEVELOPING PRESERVATION PRIORITIES

The level of use and special value of the records are critical components in determining priorities for preservation work. In order to maximize effectiveness in preserving the holdings, careful prioritization is key to effective and responsible assignment of limited resources for staff, materials, and storage space.

#### Level of Use

Archivists directly involved with the specific records surveyed provided data on use. The overall survey results were sorted into the various preservation action categories by level of use, as one means of establishing priorities for action.

Prior to the survey, archival staff defined use as follows:

- **High** use is defined as records pulled for research or reproduction services at least 3 times per year.
- **Some** use is defined as 1 or 2 uses annually.
- No use records are not pulled for research or reproduction services during the course of a single year.

The above terms and definitions were used for the purpose of the survey and were applied as accurately as possible by archival staff. However, with such large bodies of records, the concept of use is difficult to assess and apply. Use is normally considered at the series level, and in large series that receive high use this may mean that a particular box is actually seldom handled. On the other hand, in a small series, the same box or boxes may be handled repeatedly over the course of a year. A related problem is the fact that level of use is a very subjective concept since there are currently no automated means of tracking actual research use. Records categorized as no use during the particular year of the survey may in fact receive some use over the course of several years. Thus, for the purpose of interpreting the survey data, the category of no use should be considered low/no use.

Usage of records is an important trigger for preservation intervention, since it is at the point of use and handling by researchers and staff that records are most vulnerable to mechanical damage. Brittle papers can fracture, crack, or tear during handling; weak tri-folded documents can break along fold lines if forced open; and volumes with loose or detached boards are unable



Records Used in Archives II Research Room

to safely support text blocks during research use. Inherently poor quality papers (such as acidic mechanical wood pulp paper) and unstable copies (such as Thermofax<sup>TM</sup> and Verifax<sup>TM</sup>) can also suffer mechanical damage through handling, but also can continue to deteriorate chemically even if not handled. Such records are candidates for microfilming or preservation photocopying. Records that are not properly housed are difficult and awkward for researchers and staff to handle, thereby resulting in additional damage to records.

Efforts are underway to develop a Holdings Management System, which will permit the accurate tracking of records use. Toward this end, in the fall of 2005, the Office of Records Services-Washington, DC (NW), the Office of Regional Records Services (NR), and the Office of Presidential Libraries (NL) agreed to the following definition of Levels of Record Use, which will permit consistent comparisons of both use data and preservation assessments across NARA:

Level of use takes into account the various types of record use, including research, reference, correspondence, loan, reproduction, and exhibit use. The level of record use may vary over time, depending on such factors as changing research interests and trends and anniversaries of significant historical events.

- High use records are generally used at least 3 times per year by researchers, staff or others
- Moderate use records are generally used 1 or 2 times per year by researchers, staff or others
- Low use –records are generally used less than once per year by researchers, staff or others

#### Special Value

Archivists also identified records that have special value. Such records (e.g., international treaties and public laws) often require preservation attention because of their inherent significance to the American people. Special value records may require conservation treatment, custom housing, and/or microfilming to meet ongoing program needs, such as exhibition, loan, and publication. Linking use categories and special value provides a mechanism for determining high priority preservation needs.

#### SPACE IMPLICATIONS OF PRESERVATION ACTIONS

Preservation actions to improve the storage housings of records vary in their impact on space requirements. Some activities are space neutral, such as one-to-one replacement of document boxes that are damaged or made of unstable materials. Occasionally, poorly filled boxes can be re-housed to require less stack space. Other re-housing actions can increase stack space required to store records by 7% to 200%. (See Appendix E: Space Implications of Re-housing Records) For large records series, these latter re-housing actions can significantly increase the stack space needed to store records properly. In considering the long-term implications for preservation actions on storage space needs, the largest impacts are from tri-folded records and records currently in Federal Records Center boxes. The tri-folded records are a static group of records from previous centuries and will not grow with time. On the other hand, the number of accessioned records stored in FRC boxes is large, approaches one quarter of the holdings at present, and is growing every year. Despite predictions that paper records will disappear, a great deal of paper continues to be accessioned. Projecting future space needs for records received in FRC boxes should take into account the space expansion that results on transferring their contents to document boxes.

Balanced against the space impact of re-housing records is the enhanced preservation benefit of storing records in document boxes as opposed to FRC boxes. Document boxes are smaller and weigh less, thus are much easier for staff and researchers to handle, especially in the research rooms. Document boxes also contain records in manageable units that permit safer access and refiling of folders. For these reasons alone, records that receive moderate to high use should be housed in document rather than FRC boxes. Most FRC boxes do not have fully closing lids, which put records at greater risk in the event of a water leak and also expose records to airborne dirt and light. In addition, since the great majority of FRC boxes do not meet NARA specifications for preservation quality containers, replacing them has even greater preservation benefit.

The level of research use, and value are important factors in determining which records have priority for re-housing projects that expand space requirements.

#### **CONCLUSION**

The textual preservation survey provides a snapshot of the condition and preservation needs of NW textual holdings as they existed at the time of the survey data collection. For the purpose of the survey, preservation need was defined very conservatively and focused on whether records could be safely served to researchers in their existing state and housing. Thus, the emphasis was very much on the critical "must or need to do" as opposed to the enhancements that would be desirable if resources (staff, space, and supplies) were limitless.

Based on evaluating a statistically valid sample of 1800 units, the textual preservation survey permits NARA's Office of Records Services-Washington, DC to characterize the condition and preservation needs of its 2,075,000 cubic feet of textual holdings. The survey is extremely important and useful in terms of analyzing patterns, overall needs, priorities and workload. The data has already provided the basis for a Textual Preservation Budget Initiative (FY07). The risk assessment process that NW initiated in 1999 and that has been updated annually will continue to serve as the method of identifying and setting priorities for specific textual records that require preservation attention. In the 2005 call to update the risk assessment lists, archivists were asked to include specific records with preservation needs that were identified during the course of the survey. More than 300,000 cubic feet of records are now listed on the NW textual at risk list.

The preservation needs of records change over time. Unstable materials will continue to deteriorate as time passes. NARA holds records that span the last 200 years; they vary in quality and chemical stability. In the 1980s federal legislation mandated that government paper be alkaline, which does much to ensure a minimum level of chemical stability for the paper. However, there are many records created on very poor quality paper that are now very brittle or in the process of becoming brittle. Environment – temperature, relative humidity and air quality-has a significant influence on how quickly or slowly the records deteriorate as a result of chemical degradation. Cooler temperatures and drier relative humidity slow chemical reactions, and therefore are highly effective at slowing irreversible deterioration of the records.

Changing research patterns and the seasons of heavy or intense use that some records receive have a direct impact on the wear on the records. Even those records that are in good or stable condition that receive heavy use will always be vulnerable to damage caused by handling. Records that are chemically degraded or unstable are even more threatened since they will suffer even more damage as they are used and handled. The task of preserving textual holdings is ongoing and must be met with a variety of creative strategies and resources that identify and respond to the records at greatest risk.

NARA has developed a successful preservation strategy that integrates the primary tools that will prolong the useful life of records—environmental controls, holdings maintenance, conservation treatment, duplication, and staff oversight and intervention during records handling. Utilizing an integrated, prioritized approach to planning and carrying out preservation actions is an efficient and economical model for ensuring the preservation of NW records for use by future generations. Archivists, conservators, and preservation specialists collectively evaluate records from their different perspectives and plan preservation strategies. In this way work on a group of records can flow logically with the least amount of handling or the need to work through the same body of

records multiple times to accomplish different tasks. For example, records being prepared for microfilming can simultaneously receive enhanced arrangement as well as holdings maintenance, while individual items are identified for necessary conservation treatment. The project to microfilm the Records of the Bureau of Refugees, Freedmen, and Abandoned Lands—referred to as the Freedmen's Bureau --(RG 105) is one example that has been handled in such a coordinated way. This approach, which has been adopted by NW for several large projects, results in an excellent end-product that is efficiently achieved with long-term benefits accruing in both enhanced preservation of and access to the records.

Despite persistent attention to preservation, it is clear from the survey findings that a substantial body of textual records requires preservation action. If this backlog is not addressed, it will continue to grow—both as new accessions are received and as records that receive heavy research use show evidence of damage from handling.

#### **ACKNOWLEDGEMENTS**

The NW Textual Preservation Survey was accomplished through the dedication, creativity, and diligence of many individuals.

#### Survey Report, Preservation Analysis & Recommendations

Doris A. Hamburg, Director, Preservation Programs
Mary Lynn Ritzenthaler, Chief Document Conservation Laboratory
Kitty Nicholson, Supervisory Conservator
Kathleen Ludwig, Senior Conservator
Hilary A. Kaplan, Senior Conservator

#### Planning and Project Design

Alan Calmes (NWT)
Doris A. Hamburg (NWT)
James Hastings (NWC)
Hilary A. Kaplan (NWTD)
Kathy Ludwig (NWTD)
Catherine Nicholson (NWTD)
Mary Lynn Ritzenthaler (NWTD)
Sharon Thibodeau (NWA)

#### Records Survey - Conservation Assessment

Hilary A. Kaplan & Kathy Ludwig – co-team leaders (NWTD)

Brenda Bernier (NWTD)

Jana Dambrogio (NWTD)

Doris Hamburg (NWT)

Gail Harriman (NWTD)

Lisa Isbell (NWTD)

Allen Johnson (NWTD)

Margaret Kelly (NWTD)

Susan Lee-Bechtold (NWTD)

Joyce Lin (NWTD)

Douglas McRae (NWTD)

Catherine Nicholson (NWTD)

John Nguyen (NWTD)

Mark Ormsby (NWTD)

Susan Page (NWTD)

Susan Peckham (NWTD)

Barbara Pilgrim (NWTD)

Mary Lynn Ritzenthaler (NWTD)

Lauren Streusand (NWTD)

Yoonjoo Strumfels (NWTD)

Richard Whittington (NWTD)

#### **Statistical Design**

Nancy Dunn, Army Test and Evaluation Command, Department of the Army Gerald S.Garfinkel, Army Test and Evaluation Command, Department of the Army

#### **Survey Data Analysis**

Mark Solomon (NWC)

#### **Stack Mapping**

Lance Fisher (NWTC)
John Kreinheder (NWCM
Michael Pilgrim (NWCM)
Brian Tilley (NWCM)
Wayne Tracy (NWCM)

#### Records Survey - Archival Assessment & Assistance

Rebecca Collier (NWCTM)

Robin Cookson (NWCTM)

Ann Cummings (NWCTC)

Wayne DeCesar (NWCTC)

Jane Fitzgerald (NWCTB)

Susan Francis-Haughton (NWCTM)

Matt Fulgham (NWL)

Eugene Morris (NWCTC)

Tim Nenninger (NWCTM)

Patrick Osborn (NWCTM)

Herb Rawlings-Milton (NWCTF)

Ken Schlessinger(NWCTM)

Jeannine Swift (NWCTM)

Steven Tilley (NWCT)

Kristen Wilhelm (NWL)

Barry Zerby (NWCTM)

#### **Pilot Survey**

Wayne DeCesar (NWCTC) Hilary A. Kaplan (NWTD) Kathy Ludwig (NWTD) Eugene Morris (NWCTC Tim Nell (NWCM) Al Robinson (NWCM)

## **APPENDICES**

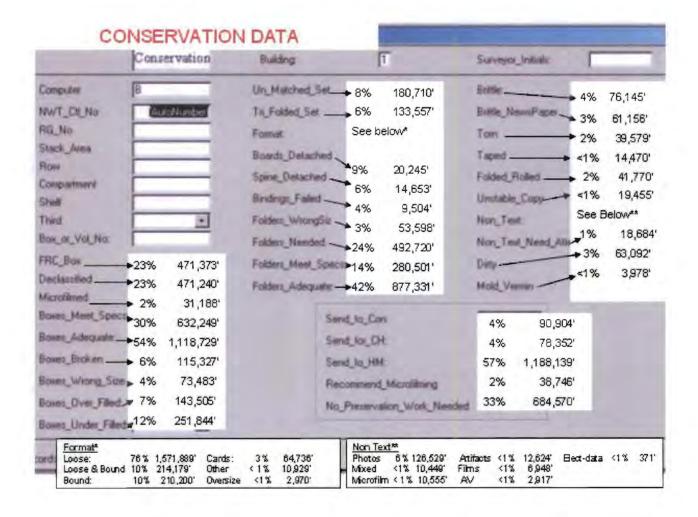
#### APPENDIX A: Archives I CUBIC FOOT SAMPLE SELECTION CHART

STACK	TOTAL CUBIC FEET OCCUPIED	START NUMBER FOR CUBIC FEET	SAMPLE EVERY	NEW SAMPLE EVERY	ESTIMATE OF TOTAL CUBIC FEET SAMPLED	ACTUAL TOTAL CUBIC FEET SAMPLED
7E	25,383	773	900	750	27	22
7W	22,202	370	900	750	24	24
8E	29,889	359	1,300	1,100	23	20
8W	26,753	461	1,300	1,100	20	17
9E	29,243	1,027	1,300	1,100	22	19
9W	28,572	854	1,300	1,100	21	19
10E	33,796	613	1,300	1,100	26	21
10W	31,830	629	1,300	1,100	24	21
11E	29,788	264	1,300	1,100	22	20
11W	31,893	903	1,300	1,100	24	24
12E	21,815	510	900	750	24	23
12W	32,990	27	1,300	1,100	25	20
13E	18,806	379	900	750	20	20
13W	10,358	121	500	425	20	17
14E	19,121	106	900	750	21	23
14W	11,641	397	500	425	22	23
15E	20,632	76	900	750	23	20
15W	22,221	9	900	750	25	22
16E	29,116	1,152	1,300	1,100	22	21
16W	23,174	230	900	750	25	26
17E	29,970	1,292	1,300	1,100	22	22
17W	31,145	464	1,300	1,100	24	24
18E	25,873	406	900	750	28	29
18W	24,122`	523	900	750	26	26
19E	12,988	233	500	425	26	25
19W	15,506	310	500	425	30	27
20E	6,040	60	250	200	24	26
20W	5,874	90	250	200	23	24

#### APPENDIX B: Archives II CUBIC FOOT SAMPLE SELECTION CHART

STACK	TOTAL CUBIC FEET OCCUPIED	SAMPLE EVERY	ESTIMATE OF TOTAL CUBIC FEET SAMPLED	ACTUAL TOTAL CUBIC FEET SAMPLED
B190	52,700	1550	34	33
130	89,900	1550	58	57
131A	6,650	350	19	19
150	69,750	1550	45	45
170	58,900	1550	38	38
190	62,000	1550	40	40
230	97,650	1550	63	63
250	68,200	1550	44	44
270	62,000	1550	40	40
290	60,450	1550	39	41
350	63,550	1550	41	42
370	66,650	1550	43	43
390	71,300	1550	46	46
450	62,000	1550	40	40
470	66,650	1550	43	43
490	55,800	1550	36	36
530	71,300	1550	46	49
550	58,900	1550	38	38
550LD	8,400	350	24	27
570	68,200	1550	44	44
630	8,000	500	16	16
630LD	2,100	150	14	13
630A	7,350	350	21	20
631	108,500	1550	70	76
631LD	27,900	900	31	31
650	54,250	1550	35	35
650LD	11,550	350	33	32

#### APPENDIX C: CONSERVATION DATA SURVEY FORM AND RESULTS



#### APPENDIX D: ARCHIVAL DATA SURVEY FORM AND RESULTS

ARCHIVAL DATA	USAGE	%	Cubic Feet
Team Number: C	NONE	29.80	618,000
NWT_DI_No 14	SOME	33.81	702,000
RG_No 331	HIGH	36.39	755,000
Entry_No UD 1978	SPECIAL VAL	LUE	
Accession_No:	/ YES	12.85	267,000
MLR_ID_No: 35092/	NO	87.15	1,808,000
Stack_Area 290	FINDING AID YES	33.73	700,000
Row   300   /	NO	66.27	1,375,000
Shelf 2	CANDIDATE	FOR MICE	ROFILM
Third [3-] // /	YES	11.15	231,000
Usage Sonie	NO	88.85	1,844,000
, -//	LACKS ARR	ANGEMEN	Т
Special_Value	YES	2.86	59,000
Box/Item Level Finding Aid Exists	NO	97.14	2,015,000
Good Candidate for Microfining	THEFT RISK		
Needs Archival Processing	YES	6.29	131,000
Theft_Risk	NO	93.71	1,944,000

#### APPENDIX E: SPACE IMPLICATIONS OF REHOUSING RECORDS

The figures below provide information on the space implications for re-housing records. This information was provided by Holdings Maintenance staff who have extensive experience with these projects.

- Re-box a properly filled document box: Re-boxing textual records directly from an old box to new results in no change in volume.
- Re-box a document box and replace folders: Re-boxing and replacing folders may result in some expansion, so three document boxes may expand to 3 ¼ boxes. On average, re-boxing and re-foldering a shelf of seven boxes results in an expansion to 7 ½ boxes or a 7% increase in shelf space.
- Transfer a Federal Records Center (FRC) box into document boxes: The contents of a FRC box, when transferred to document boxes, may fit into 3 to 3 1/2 document boxes. A standard shelf holds 3 FRC or 7 document boxes. Re-boxing a shelf of FRC boxes results in 9 to 10 document boxes. A shelf of 3 FRC cartons re-boxed expands to approximately 9 or 10 document boxes, which require 1.3 or 1.4 shelves, a 30% to 40% increase in shelving occupied.
- Re-boxing tri-folded records: When tri-folded records are unfolded dry and placed in folders, one box of records can expand to three boxes, an increase of 200%. Conservators doing dry flattening of records found one box expands to two boxes, an increase of 100%. Unfolding and humidification will yield a significantly lower space increase.
- Custom boxing of bound records: When bound records are custom boxed, three shelves of
  volumes generally expand to four shelves, a shelf space increase up to approximately
  33%, depending on the thickness of the volumes and if all volumes on the shelf are custom
  boxed.

APPENDIX F: INSTRUCTION	N MANUALS FOR ARCHIVIST	S & CONSERVATORS

# NW Textual Preservation Survey – Archival Input Instructions for filling out the survey form

#### Records to be Surveyed

Based on the total cubic feet of NW textual holdings and working with a statistician from the U.S. Army, a geographic sampling formula utilizing random numbers has been devised that is based on stack locations in Archives I and II. Each survey unit is one cubic foot or one third of a shelf. The box or volume number listed in the location field indicates the starting point for the cubic foot survey unit. To achieve 95% confidence in the survey results, approximately 1800 survey units will be evaluated.

#### Conservation Input

Conservation staff will fill out the portion of the survey form that covers the format and condition of the records and the suitability of boxes and other housings. Based on the assessment of each cubic foot sample, summary preservation recommendations will be made in the following categories: conservation treatment, custom housing, holdings maintenance, microfilming, or no preservation attention required.

#### **Archival Input**

As the conservation assessment is completed, batches of survey forms will be photocopied, divided by record group, and given to the appropriate LICON for archival input. Survey forms conveyed to the LICONS will show the RG, entry number, and MLR number as well as the stack location of the survey unit and the completed conservation assessment. Archivists familiar with the record group will be asked to provide responses to the six questions below. Depending on their familiarity with the specific entry, this may involve going to the stack location to examine the survey unit. Some survey units may consist of multiple entries, in which case the responses should cover all of them. The presence of multiple entries or series will be noted in the comments field filled in by conservation staff. Data provided by the LICONS on paper forms will be entered into the database by NWT staff.

### **Survey Questions**

**Usage** Circle n, s, or h. Usage is evaluated at the series level on the basis of one year. On some of the forms given to the LICONS, the word "none" appears as a default response on the form. Please ignore this and circle the appropriate response.

- None records are not pulled for research or reproduction services during the course of a single year.
- Some use is defined as 1 or 2 uses annually.
- <u>High</u> use is defined as records pulled for research or reproduction services at least 3 times per year.

Special Value Check this box if answers to the following questions are yes. Answer yes even if only one or two items in the sample set have special value.

- Are the records vault items, or are they candidates for vault storage or limited access?
- Do the records have exhibit potential?
- Are the records significant due to content, age, format, or association value?

**Finding Aid** Check this box if finding aids exist that will aid in limiting browsing (and thus handling) of the records. Finding aids may be published or unpublished, at the box or folder level, etc., as long as they are sufficiently detailed to direct staff and researchers closely to records.

**Lacks Arrangement** Check this box if the series would benefit from archival arrangement, either to make them easier to use by researchers and/or to prepare them for a microfilm publication.

**Archival Microfilm** Check this box if the entry or series is a candidate for preservation microfilming, from the perspectives of use and research interest.

Please note: Directly below the box containing questions for archival staff, is a check box for "microfilmed". Conservation staff will check this if boxes or volumes in the sample set have a microfilm label. However, if the box is <u>not</u> checked but archival staff knows that the records have been filmed, please check this box. If the records have already been filmed but the film is of poor quality and/or the entire entry was not filmed, please check the archival microfilm box. In sorting the data, boxes checked that both indicate that the records have been filmed and need to be filmed will be a trigger for re-filming.

Theft Risk Does the series contain materials at risk of theft? Check this box if the answers to the following questions are yes. Answer yes even if only one or two items in the sample set are vulnerable to theft.

- Do records contain presidential or other significant signatures?
- Are stamps, coins, and/or currency present?
- Does the series contain artifacts?
- Are there graphic materials present (such as small manuscript maps or drawings, comic books, baseball cards) and similar materials of potential monetary and/or collector interest?
- Are there manuscripts or other documents present of potential interest to collectors?

Items at risk of theft may be candidates for vault storage and/or the marking program.

Please print your name on the bottom of each survey form. Return the forms to Alan Calmes. NWT. room 2800. Archives II.

If you have any questions about the survey, contact Alan (71567) or Mary Lynn Ritzenthaler (72096).

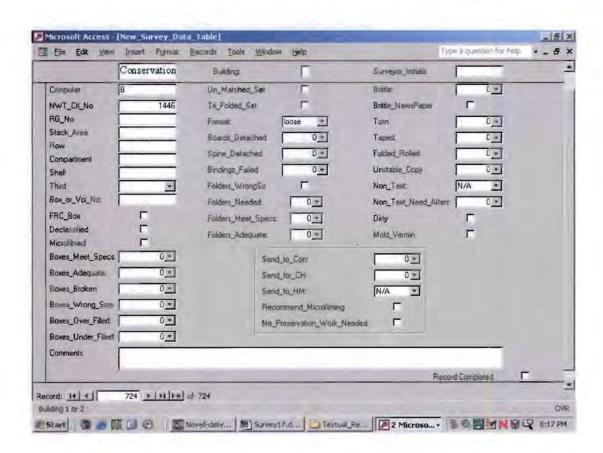
#### **NW TEXTUAL PRESERVATION NEEDS SURVEY 2004**

#### Instructions for Conservation Input

The purpose of this survey is to provide basic information about the condition of NW records and quantify the resources necessary to meet their preservation needs. This is a statistically valid survey of the holdings at both Archives 1 and Archives 2. Developed over the course of the last year with archival, preservation, and statistical input, the survey is structured to achieve 95% accuracy.

Teams of two conservation assessors will review roughly 1,800 sample sets, a combined total for A1 and A2. Archivists most knowledgeable about the materials surveyed will provide use and value data independently. Conservation staff will contribute information about condition, and are not asked to make judgments on materials' value or use. It is important for all surveyors to evaluate materials in the same way, and be consistent in their manner of assessment. All conservation data collected will be entered onto one of 4 Dell laptop computers. Nancy Dunn, statistician with the U.S. Army, will then statistically analyze the data.

In preparation for data gathering, information has been pre-entered for stack, row, compartment, shelf, and sample set for each survey unit. Categories were designed to enable staff to gather data on conditions and needs of our holdings.



Responses to questions are based only on the survey unit, which is one cubic foot.

- One cubic foot is equal to 1/3 of a shelf
- Disparate groups of volumes, index card boxes, custom housing, or non-standard formats may be included in the survey unit
- One records center box or 3 document boxes equal one cubic foot.

Carry out the survey in numerical order, based on the NWT unique control number displayed. Verify the record group (RG) with the selected sample set to ensure that you are in the correct location. Indicate if the RG has multiple entries in the sample set—information of great use to the archivist reviewing the data. Use a ladder to access boxes on upper shelves. Always return the pull out staging area shelf to its retracted position after use.

The survey form specifies which third of a shelf to examine. A pre-cut piece of board may be helpful to measure out 1/3 of a shelf made up of disparate units. Do not include observations of materials on nearby shelves. Examine *only* the survey unit specified. If possible, avoid removing shrink-wrap film from a volume. If the film has already been removed from a nearby volume in the same series (same compartment or one immediately to the left or right), use *it*. This is the only instance of substitution that is acceptable.

Assemble a "Lab Conco" cart to take with you to the stack area. Outfit the bottom of this cart with a corrugated board shelf for dust cloths (to wipe a box exterior if needed), scissors, twill tape, cubic foot place markers, and any other supplies you might find useful in your surveying activities. Use this cart to transport the laptop computer. It may be necessary to charge the laptop computer battery whenever the computer is not in use. The laptop will automatically save all data entered. Computers will be backed-up daily to a memory key (gizmo).

Fifteen minutes is initially allotted per sample set. Some samples may progress much more quickly. Non-traditional formats or heavy bound volumes may need the full 15 minutes allocated. Keep in mind that the focus of your work is the survey; do not rectify poor shelving practices. Jot down observational notes you may wish to discuss about the records or stack areas on a notepad. We will schedule weekly meetings to note our progress and help clarify any issues that arise. If you have an immediate need to resolve a question, please contact your supervisor or team leader for additional guidance.

Survey data entry boxes not completed will default to 0. Some data boxes only need to be checked if they apply, i.e., FRC Box, declassified, microfilmed, tri-folded set. Other than the "comments" section, there is no option to deviate from the choices offered by the survey's drop-down boxes. Use the "comments" section to indicate the presence of laminated, silked, or parchment documents, along with rough quantity (e.g., parchment, 1 item; laminated 50% of FRC box). To expedite sorting survey data, standard terms will be provided for a "key word search." For example, if an item is not

on the shelf, the word "out" can be written in the comments section. Please keep non-standard comments brief. Extensive comments cannot be assimilated into survey analysis.

#### The Survey

#### **Conservation Input:**

The first several fields are already completed. Each laptop (and backup memory key) is labeled C, D, E, or F. Begin your survey by entering both surveyor initials into the upper right corner of the form, e.g., KL/HAK. Proceed directly to the FRC\_Box category midway down the left column.

#### **ARCHIVES 2 LOCATION INSTRUCTIONS**

To locate your sample at Archives 2, directly face the row number in which the sample is housed. Compartment 1 will be to your left, the last compartment will be to your right. Rows 200-400 are the perimeter shelves. The 200 (row A) is against is entrance wall. Row 300 (B) is on the left when entering; row 400 (C) is against the back wall; row 500 (D) is to the right when entering.

All compartments have at least 7 shelves. Some compartments have more shelves. Numbering begins with the highest shelf. 1 is always just below the shelf identifier. When there are 7 shelves, the top shelf is 1. When there are 8 shelves, the top shelf is 0.

#### **ARCHIVES 1 LOCATION INSTRUCTIONS**

Because of extensive ongoing renovations at A1, all surveyors reams will include at least one individual already familiar with A1 stack areas.