



August 6, 2018

TO: David S. Ferriero
Archivist of the United States

FROM: James Springs 
Inspector General

SUBJECT: *Audit of Research Services' Analog Processing*

This memorandum transmits the results of our final report entitled, *Audit of Research Services' Analog Processing* (OIG Audit Report No. 18-AUD-11). We have incorporated the formal comments provided by your office.

The report contains seven recommendations, which are intended to strengthen Research Services' control environment. Your office concurred with all of the recommendations. Based on your July 30, 2018 response to the final draft report, we consider all the recommendations resolved and open. Once your office has fully implemented the recommendations, please submit evidence of completion of agreed upon corrective actions so that recommendations may be closed.

As with all OIG products, we determine what information is publically posted on our website from the attached report. Consistent with our responsibility under the *Inspector General Act, as amended*, we may provide copies of our report to congressional committees with oversight responsibility over the National Archives and Records Administration.

We appreciate the cooperation and assistance NARA extended to us during the audit. Please call me with any questions, or your staff may contact Jewel Butler, Assistant Inspector General for Audits, at (301) 837-3000.



Audit of Research Services' Analog Processing

August 6, 2018

OIG Audit Report No. 18-AUD-11

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Executive Summary

Audit of Research Services' Analog Processing

OIG Audit Report No. 18-AUD-11

August 6, 2018

Why Did We Conduct This Audit?

The Office of Inspector General (OIG) previously performed audits concerning the National Archives and Records Administration's (NARA) Processing Program where the OIG believed the audit findings showed Processing to be a material weakness. The audit objective was to determine whether weaknesses identified in the Audit of Processing of Textual Records (OIG Audit Report No. 13-14, dated September 18, 2013) still exist and internal controls are adequate to meet the mission of processing textual records. Also, we evaluated the impact of digitization on analog processing. Specifically, we assessed Research Services' analog processing program, and will conduct a future audit of the analog processing program in the Office of Legislative Archives, Presidential Libraries, and Museum Services.

What Did We Recommend?

We made seven recommendations to strengthen Research Services' control environment, streamline archival functions, better align agency functions and units, and ensure consistency with agency policy.

What Did We Find?

While Research Services has made progress in implementing controls to improve its analog processing program, additional controls are needed to enhance Research Services' processing efforts to meet strategic goals. Specifically, we found processing rates must be improved to meet strategic goals; duplication of efforts in processing; inconsistencies in quality control activities and documentation; lack of adherence to internal control reporting requirements; and lack of data verification within the Performance Management and Reporting System (PMRS). These conditions were caused by an employee learning curve on the new Research Services Processing Manual, startup time for new process implementation, lack of awareness of certain agency reporting requirements, and according to NARA, resource constraints. As a result, Research Services may be challenged in addressing its processing backlog and meeting strategic goals.

We also found all means of efficiencies between processing and digitization have not been identified as Research Services has not considered digitization in its basic processing assessments. This condition occurred as NARA did not consider digitization as a standard of basic processing. As a result, Research Services loses the opportunity to further digitization efforts and improve tracking and prioritization of series for digitization. Further, NARA's Imaging Digitization Lab is not organizationally aligned with the Research Services archival units for whom the lab performs digitization work. The Imaging Digitization Lab was not realigned under Research Services archival units as management may not have sufficiently evaluated the organization's structure during a May 2014 reorganization effort of other digitization labs. Realigning the Imaging Digitization Lab under Research Services would better structure textual digitization processes within the archival unit, eliminate organizational barriers, and create efficiencies. We also found adding digitization to the processing workflow would increase processing times by nearly ten times the current rate. Further, we determined while NARA digitization partners can further digitization goals, the digitization partnerships can also deter processing goals without effective communications and planning between Research Services and the Office of Innovation.

Background

According to Title 44 United States Code (U.S.C) § 2109, the Archivist of the United States provides for the preservation, arrangement, repair and rehabilitation, duplication and reproduction (including microcopy publications), description, and exhibition of records or other documentary material transferred to him as may be needful or appropriate, including the preparation and publication of inventories, indexes, catalogs, and other finding aids or guides to facilitate their use. The National Archives and Records Administration's (NARA) 2014-2018 Strategic Plan included processing initiatives under the agency's first strategic goal – Make Access Happen. In order to achieve the goal, NARA stated it would accelerate processing of analog and digital records to quickly make its records available to the public. To continue the initiative, NARA included a processing goal in its 2018-2022 Strategic Plan, specifically stating NARA will process 82 percent of holdings by Fiscal Year (FY) 2021 to enable discovery and access by the public.¹ Progress in processing its holdings is captured in NARA's Performance Management and Reporting System (PMRS) metric, which measures the extent to which NARA has made its holdings reasonably available to researchers.

On March 8, 2016, NARA's Chief Operating Officer (COO) issued NARA's *Analog Records Processing Policy*, which includes a single definition of processing for all analog records, descriptions of two levels of processing, and threshold conditions for processing completion. NARA processes records to provide physical and intellectual control over its permanent holdings, and to effectively manage records as valuable assets, protect them, make them more accessible, ensure that federal laws and policies are followed, and to preserve them for future use. Records are processed at the point where a researcher can discover their existence. NARA has a two-tiered definition for Processing: Basic and Augmented. Records are considered processed at the basic level when necessary actions are completed for a series to meet basically acceptable standards of physical and intellectual control. Basic processing addresses three fundamental goals: (1) provide physical control of the holdings; (2) enable discovery and access to the holdings; and (3) assure safe use of holdings. NARA lists nine standards for a series to meet to be considered processed at the basic level.² Augmented processing is any processing work performed above the basic level.

Processing is conducted by Research Services staff in the Textual Processing Branch (RDTP), at Archives I and Archives II, and in 12 field offices across the country. In FY17, Research Services issued its Processing Manual to provide:

¹ At the end of FY17, NARA had collectively processed 78 percent of its traditional (analog) records.

² Those standards are: (1) Disposition Status; (2) Holdings Maintenance; (3) Labeling; (4) Arrangement; (5) Access Restriction; (6) Physical Control; (7) Preservation Needs Assessment; (8) Intellectual Control; and (9) Finding Aids.

- A framework for assessing the processing needs of records required to meet NARA's definition and standards for basic processing.
- A uniform method for planning and documenting processing actions across custodial units responsible for analog records within Research Services.
- Guidelines for evaluating when augmented processing actions are appropriate for Research Services holdings.
- A methodology intended to effectively and efficiently carry out processing, and to reduce processing backlogs.

The Processing Manual applies to all units conducting processing work within Research Services.³ NARA's Executive for Research Services has directed Research Services staff to focus on basic processing, and almost all processing work planned for FY18 was basic processing. In FY17, Research Services spent an estimated \$3.3 million on processing work.

NARA's Office of Inspector General (OIG) most recently audited NARA's Processing Program in Audit Report No. 13-14, *Audit of Processing of Textual Records*.⁴ The audit reported NARA's processing backlog to be approximately 40% of its textual holdings and acknowledged while NARA made significant strides in reducing the processing backlog over the last four years, additional effort was still needed to reduce the material weakness and strengthen NARA's processing program. Specifically, the report found the need for NARA to adjust its strategic direction of processing needs, a lack of and inaccurate performance measures, and either lacking or outdated policies and procedures. The report made 14 recommendations, seven of which were still open at the start of the current audit in September 2017.

The prior OIG reports focused on processing in both Research Services and the Office of Legislative Archives, Presidential Libraries, and Museum Services. After conducting initial fieldwork in both offices for this audit, the OIG decided to perform separate audits of the processing programs in each office. This report focuses on processing within Research Services, and a follow-on audit will focus on processing within the Office of Legislative Archives, Presidential Libraries, and Museum Services.

³ Research Services staff is responsible for establishing and maintaining intellectual and physical control of records, and guiding digitization projects in alignment with NARA's Digitization Strategy.

⁴ This audit was a follow-up report to OIG Audit Report No. 07-06.

Objectives, Scope, Methodology

The objective of the audit was to determine whether weaknesses identified in the Audit of Processing of Textual Records (OIG Audit Report No. 13-14, dated September 18, 2013) still exist, and internal controls are adequate to meet the mission of processing textual records.⁵ Also, we evaluated the impact of digitization on processing. To accomplish our audit objective, we identified and reviewed the following documentary evidence:

- NARA’s 2014-2018 and 2018-2022 Strategic Plans;
- NARA’s *Analog Records Processing Policy*;
- Government Accountability Office (GAO)’s *Standards for Internal Control in the Federal Government*;
- Title 44 U.S.C § 2109, *Preservation, arrangement, duplication, exhibition of records*;
- NARA Directive 101, *Organization and Delegation of Authority*;
- NARA Directive 111, *NARA Directives*;
- NARA Directive 161, *NARA’s Internal Control Program*, and related appendices;
- NARA Interim Directive 164-1, *Internal Controls for the Performance Management and Reporting System (PMRS) Data*; and
- NARA’s Strategy for Digitizing Archival Materials for Public Access, 2015-2024.

Further, we reviewed FY17 and FY18 Internal Control Program (ICP) Reports; FY17 Risk Assessments; organizational charts; Research Services Processing Manual; internal time studies; FY18 Annual Work Plans; PMRS metrics; industry white papers; meeting minutes; and various internal analyses, instructions, and training materials. We obtained testimonial evidence from NARA personnel in Research Services and the Office of Innovation. We obtained physical evidence through observation of processing conducted at Archives II and the Philadelphia field office, and the use and observation of the Holdings Management System (HMS).

This performance audit was conducted in accordance with generally accepted government auditing standards between September 2017 and April 2018 at Archives II in College Park, MD and Philadelphia, PA. The generally accepted government auditing standards require we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

This performance audited was conducted by William Brown, Senior Program Auditor.

⁵ This audit considered only Research Services’ processing of analog records. Processing of electronic records was not reviewed.

Audit Results

Finding 1. Research Services' Processing Controls Could Be Enhanced

While Research Services has made progress in implementing controls to improve its analog processing program, additional controls are needed to enhance Research Services' processing efforts to meet strategic goals. Specifically, we found processing rates must be improved to meet strategic goals, duplication of efforts in processing; inconsistencies in quality control activities and documentation; lack of adherence to internal control reporting requirements; and lack of data verification within PMRS. These conditions were caused by an employee learning curve on the new Research Services Processing Manual, startup time for new process implementation, lack of awareness of certain agency reporting requirements, and according to NARA, resource constraints. GAO's *Standards for Internal Control in the Federal Government* states internal control helps an entity run its operations efficiently and effectively, report reliable information about its operations, and comply with applicable laws and regulations. As a result of the conditions found, Research Services may be challenged in addressing its processing backlog and meeting strategic goals.

At the beginning of the audit, Research Services was responsible for three open audit recommendations from OIG Audit Report No. 13-14.⁶ Through the course of field work, the OIG determined corrective action for two of the open audit recommendations had been implemented. Further, control weaknesses identified by the OIG in the prior audit (13-14) had been addressed, and the new processing policy, definition, and Research Services Processing Manual had been implemented to further the processing work of the agency. NARA's overall processing backlog percentage decreased from 40 percent unprocessed holdings at the end of FY12 to 22 percent unprocessed holdings at the end of FY17. While the 18 percentage point decrease in unprocessed records over five years shows progress, a backlog remains and needs to be addressed. NARA developed an agency-wide strategic goal to further its processing efforts, and Research Services units have developed long-range plans to address the backlog.

Impact on Potential New Accessions

The biggest risk facing the Processing Program is a potential substantial influx of records from agencies in the coming years. NARA's 2018-2022 Strategic Plan includes Strategic Goal 3.2, where NARA states by December 31, 2022, it will, to the fullest extent possible, no longer accept transfers of permanent or temporary records in analog formats and will accept records only in electronic format and with appropriate metadata. As NARA explores not accepting paper

⁶ All recommendations from OIG Audit Report No. 07-06 were closed prior to the start of this audit, and Research Services had implemented corrective action for five recommendations from OIG Audit Report No. 13-14.

within the realm of the new strategic plan, other Federal agencies may be more likely to transfer or direct offer the full extent of eligible permanent holdings. NARA has projected the number of potential new analog holdings it could receive through 2031. However, the impact those influx of records on NARA’s ability to process its holdings has not been considered when planning to meet the current strategic goal. NARA has resources devoted to processing the expected accessions⁷ and current backlog now to meet the strategic goal of 82 percent of holdings processed by FY21. However, if the expected accessions increase greatly under the new strategic goal, NARA may be unable to process all new accessions within standard timeframes and the backlog may increase or stagnate.⁸

Processing Rates

In FY17, Research Services conducted a time study to determine processing rates. The study was conducted across all locations performing processing. The study results produced processing rates using two methods: (1) an average rate based on cubic feet processed and hours charged to the processing time code during the first three quarters of FY17; and (2) average rates based on observation of processing times for “easy” and “difficult” series. The OIG’s review of the study found the first method to be more dependable. Review of results of the second method found some locations processed “difficult” series faster than “easy” series. Therefore, the OIG used the average processing times from the first method in its analyses. The OIG examined FY18 work plans to estimate NARA’s success in meeting its annual work plans. The OIG’s analysis showed six Research Services locations (out of 14) will not meet their planned FY18 processing volume if the locations process at the same rate the study found, given the number of hours projected to be spent on processing during the year are actually spent. Table No. 1 shows these six locations with the time study rate, the rate necessary per FY18 work plan, and difference between the time study rate and the necessary rate to achieve planned annual processing volume.

Table No. 1: Processing Rates (cubic feet per hour) to Meet FY18 Annual Work Plan Volumes

Location	Time Study Rate	FY18 Necessary Rate	Difference
Archives II	0.357	1.40	-1.05
RE-PA	1.36	2.19	-0.83
RM-CH	1.20	1.51	-0.31
RM-DV	2.33	3.00	-0.67
RM-FW	2.29	3.11	-0.82
RW-SB	1.70	3.00	-1.30

⁷ Accessioning is the process of transferring physical and legal custody of permanent records from federal agencies to NARA.

⁸ As the impact of NARA’s Strategic Goal 3.2 is unknown at this time, the OIG plans to conduct a follow-up audit of Research Services’ analog processing to determine how Research Services handled any influx of analog records.

The largest concern in processing rates is at Archives II, as Archives II has the largest amount of unprocessed records, and the slowest processing times per the FY17 time study. In order to process only the expected accessions from FY18 through FY22, Research Services staff at Archives II (at current planned staffing levels) would have to process at more than twice the rate staff processed during FY17. The processing rate necessary to meet the strategic goal of 82 percent processed by FY21, to include the OIG's estimates of potential new accessions and current unprocessed backlog, could be over seven times the rate found by the time study. Any new accessions or transfer would increase the rate of processing necessary to meet strategic goals. With staffing increases unlikely, the gains in processing must be made by processing faster (see section below on timeliness).

Duplication of Processing Work

Research Services experienced duplication of effort in processing records as some work required to process records occurred during accessioning and then again during processing. Processing work such as checking disposition status of the series and HMS entry is completed during the accessioning process. However, historically some processing work performed by accessioning archivists was either not recorded or not communicated to processing archivists, who, without knowing, would repeat the work. Therefore, Research Services conducted a pilot project in FY17 to determine if basic processing work could be reasonably completed during accessioning.

The pilot project determined completing basic processing steps during accessioning was a good fit. One management official estimated accessioning archivists could complete 70 percent of basic processing for new accessions each year. To ensure work performed by accessioning archivists was not lost, Research Services implemented a processing assessment tab within HMS where accessioning archivists could record work performed on the series. For example, if an accessioning archivist completed work for five out of nine basic processing standards, the HMS tab would record the work completed, so the processing archivist would know to address only the four remaining standards. Also, Research Services requested and received approval to add three new accessioning archivists to focus on performing basic processing steps on new accessions. The hiring for these three positions was not completed, and NARA's FY19 budget will eliminate these vacant positions.

Quality Control

We found inconsistencies in quality control activities and documentation across various Research Services' units caused by lack of details in the Processing Manual, and incorrect application of Processing Manual requirements. These issues resulted in inconsistent processes and loss of efficiencies which could have been realized.

Quality Control Selection. Research Services archival units select processed entries for quality control review differently across units. The selection process differs because the Processing Manual does not provide specific selection criteria. The Processing Manual states one out of five

entries will be selected at random. Without further specific instructions on how the entries should be selected, and what population the entries should be selected from, inconsistency occurs across units. One Research Services official informed the OIG of their selection process, but acknowledged other units or other officials might use a different process. Another official stated their unit had not yet decided on a specific selection method to ensure one out of five entries was reviewed. There are multiple methods to selecting the one out of five entries to review each quarter. Each method leads to a varying total number of entries reviewed. The current selection method for one unit separates all processed entries by record group, then selects approximately one out of five entries by employees who completed an entry within the record group. However, employees may not always complete exactly five entries. Therefore, a supervisor will judgmentally select about one out of five entries. For example, if one employee processes six entries, a supervisor may select two entries, or 33%, for quality control. Using this selection method leads to more entries being reviewed than necessary to comply with the Processing Manual. The OIG determined the unit in question consistently reviewed one out of four entries, instead of one out of five. It is uncertain whether the benefits of increased review provide any greater management assurance on the operation of internal control. Further, the time spent performing reviews above the required threshold might be better spent performing other tasks.

Quality Control Documentation. RDTP has developed a quality control checklist for supervisors to use when performing quality control reviews. The checklist contains fields for the supervisor to check each of the nine basic processing standards are correct. Another archival unit uses a similar, but slightly different checklist to perform the quality control review. Both checklists are compiled manually in paper format. GAO's *Standards for Internal Control in the Federal Government* state ongoing monitoring may include automated tools, which can increase objectivity and efficiency by electronically compiling evaluations of controls and transactions. One management official stated using enhanced technology to access HMS data from the record storage location would make the quality control process more efficient.

Accuracy vs. Timeliness. In their quality control reviews, archival units consider only the accuracy of the processed entries, not the timeliness of the employee in processing the entry. Therefore, supervisors may not have trend information on how quickly an employee can accurately process a series. Also, one of the issues the OIG identified in our review of processed entries was some employees had exceeded basic processing standards when performing the processing of the entry. As Research Services works toward achieving a standard processing rate, tracking timeliness in its quality control review may aid the office in monitoring its success in achieving the goal rate.

Internal Control Reporting

As Research Services assessed its processing function as high risk, the office is required to perform internal control testing for the processing function as defined in NARA Directive 161. However, the test plan developed by Research Services in its ICP Reports does not meet the

requirements for internal control testing. NARA Directive 161, Appendix A (2018), states control testing is often a one time, deep dive analysis performed in response to a specific concern. Further, that policy defines control monitoring as the processes and activities that are built into the daily operations of the function that provide feedback on a regular basis. They include things such as quality control activities, regular reviews via sampling or spot check, and analysis of quantitative and qualitative information relating to the function. In the test plans and test results sections for both Processing ICP Reports, Research Services reports on routine, quality control work performed to provide feedback on a regular basis. Therefore, Research Services is reporting monitoring information in their test plan, and not testing internal controls as defined in NARA Directive 161, Appendix A (2018). Research Services could use trend information gathered during monitoring to determine the specific concern area(s) the internal control testing would explore.

PMRS Metric

Although the OIG found the PMRS processing metric for Research Services locations to be accurate, and determined Research Services locations are reviewing their processing percentages and backlog on a routine basis in HMS, we also found Research Services is not verifying the accuracy of data in PMRS. Research Services management officials stated they were unaware of any policy requiring a regular review of PMRS metrics. NARA Interim Directive 164-1 contains requirements for units owning PMRS metrics to document their review policies. GAO's *Standards for Internal Control in the Federal Government* states management should implement control activities through policies, and policies may be further defined through day-to-day procedures. NARA Interim Directive 164-1 Attachment A is the template for the PMRS metric review procedure. While the OIG found the data reported out of HMS matched PMRS during the time period tested, there is risk PMRS may not accurately report data in the future. As the agency reports publicly on processing numbers obtained from PMRS, the accuracy of the metric is crucial. Without review procedures implemented and executed, the metric could become inaccurate without responsible staff monitoring its continued accuracy.

Recommendations

We recommend the Executive for Research Services:

Recommendation 1: Develop a plan to improve rates of processing at Archives II.

Management Response

The Executive for Research Services will conduct an evaluation of processing actions of the Archives II processing unit against the NARA Analog Records Processing Policy Thresholds and the Research Services Processing Manual to identify any patterns of discrepancies that affect the processing rates. If patterns emerge, a plan for correcting them will be implemented in order to increase the processing rate.

Target Completion Date: March 29, 2019

OIG Analysis

We consider NARA's proposed actions responsive to our recommendation. This recommendation will remain open and resolved pending completion of the corrective actions identified above.

Recommendation 2: Update the Processing Manual to enhance procedures for quality control work including selection and consistent documentation across all units.

Management Response

The Executive for Research Services will appoint a working group of processing managers to develop standard procedures for quality control on completed processing projects. The Executive will review and approve the standard procedures. The standards will be added to the Processing Manual.

Target Completion Date: March 29, 2019

OIG Analysis

We consider NARA's proposed actions responsive to our recommendation. This recommendation will remain open and resolved pending completion of the corrective actions identified above.

Recommendation 3: Implement timeliness reviews as part of quality control reviews.

Management Response

The Executive for Research Services will develop and issue to managers new guidelines for quality control reviews of unit and individual processing results against expected targets with provisions for tracking assignments, performance standards, follow-up, and accountability.

Target Completion Date: January 31, 2019

OIG Analysis

We consider NARA's proposed actions responsive to our recommendation. This recommendation will remain open and resolved pending completion of the corrective actions identified above.

Recommendation 4: Revise Processing ICP Reports to comply with NARA Directive 161 internal control testing requirements.

Management Response

The Executive for Research Services will conduct a review of unit processing audit results in FY 2018. The Executive will use the audit results to test the accuracy of how the processing policy and Processing Manual are applied by staff.

Target Completion Date: June 28, 2019

OIG Analysis

We consider NARA's proposed actions responsive to our recommendation. This recommendation will remain open and resolved pending completion of the corrective actions identified above.

Recommendation 5: Establish procedures for review of the PMRS metric as defined in NARA Interim Directive 164-1.

Management Response

The Executive for Research Services will issue an R numbered memo reminding the archival operations unit heads that they must review their monthly PMRS metrics, as defined in NARA Interim Directive 164-1.

Target Completion Date: October 31, 2018

OIG Analysis

We consider NARA's proposed actions responsive to our recommendation. This recommendation will remain open and resolved pending completion of the corrective actions identified above.

Finding 2. Opportunities to Streamline Archival Functions

All means of efficiencies between processing and digitization have not been identified as Research Services has not considered digitization in its basic processing assessments.. This condition occurred as NARA did not consider digitization as a standard of basic processing. NARA's 2015-2024 Digitization Strategy established five digitization approaches, including Approach 4: Culture of Digitization, which stated incorporating digitization and a focus on online access into its work processes, NARA will ensure images can be efficiently added to the National Archives Catalog. As a result of the condition found, Research Services loses the opportunity to further digitization efforts and improve tracking and prioritization of series for digitization.

Any digitization work will occur on processed series. If an unprocessed series is requested for digitization, Research Services staff will first process the series to at least a basic level. However, for most basic processing, digitization is not a factor. While resources spent digitizing are resources not spent processing, and vice versa, NARA maintains separate processing and digitization goals in its 2018-2022 Strategic Plan and must perform both functions, and properly balance resources to maximize both goals.

Research Services' Processing Manual includes digitization as part of the justification for an augmented processing project, but not basic processing. The Processing Assessment, Planning, and Tracking (APT) Form contains a comment field, "Other Suggested Actions," where staff can elect to enter notes on digitization. However, the Processing APT Form, and now the HMS processing assessment tab, do not contain a way to track digitization as part of the processing assessment. The OIG determined adding a field to the Processing APT Form and HMS Processing Assessment Tab for staff to mark series as good candidates for digitization would allow NARA to streamline processing and digitization goals. As processing staff assess series for the current basic processing standards, the potential for labeling the series as a good candidate for digitization exists. NARA management officials believed adding consideration of digitization during processing would not add significant time to the process. Those officials believed considering digitization during processing would be effective, but stated criteria would have to be developed in the Processing Manual to guide staff when making the digitization consideration. One NARA official suggested not only developing criteria on whether the series was a good candidate for digitization, but to also develop criteria allowing staff to note what type of digitization equipment (e.g. overhead scanner) would be appropriate for the series.

Currently, digitization ideas are tracked across different offices, units, and staff members. Without adding digitization to processing assessments, and consolidating digitization priorities in one centralized location, Research Services may not be adequately assessing and tracking digitization priorities when planning digitization work.

Recommendations

We recommend the Executive for Research Services:

Recommendation 6: Develop and implement procedures for the identification of digitization series candidates during processing.

Management Response

The Executive for Research Services will develop and implement procedures for the identification of candidates for digitization during processing.

Target Completion Date: March 29, 2019

OIG Analysis

We consider NARA's proposed actions responsive to our recommendation. This recommendation will remain open and resolved pending completion of the corrective actions identified above.

Finding 3. Organizational Placement of Digitization Activities

NARA's Imaging Digitization Lab is not organizationally aligned with the Research Services archival units for whom the lab performs digitization work. The Imaging Digitization Lab was not realigned under Research Services archival units as management may not have sufficiently evaluated the organization's structure during a May 2014 reorganization effort of other digitization labs. GAO's *Standards for Internal Control in the Federal Government* state management develops an organizational structure with an understanding of the overall responsibilities, and assigns these responsibilities to discrete units to enable the organization to operate in an efficient and effective manner, comply with applicable laws and regulations, and reliably report quality information. Without proper alignment, organizational barriers and inefficiencies may continue to exist in the digitization process.

NARA has three Digitization Labs at Archives II: Imaging, Motion Picture, and Audio/Video. Research Services has also created several "mini-Labs" throughout the building where digitization work occurs within the archival unit. When the Office of Innovation (Innovation) was created in 2012, all Digitization Labs fell under the purview of the Chief Innovation Officer. However, in May 2014, the Motion Picture and Audio/Video Digitization Labs were restructured under Research Services. The move was made to more closely align the labs with the custodial units for whom the labs are performing archival work including accessioning, processing, inspection, preservation, and the creation of access copies. The move recognized the importance of the labs in preserving and making accessible audio/video and motion picture film and allowed the functions to be performed within the structure of the archival units. However, the Imaging Digitization Lab remained a part of Innovation's Digitization Division.

Currently, textual digitization work occurs within Research Services archival units and field offices by archivists and archives technicians, in Research Services' monitored research rooms by NARA digitization partners, and in Innovation's Imaging Digitization Lab by digital imaging specialists. When records are selected for digitization, the records must undergo archival work (e.g. removing staples) to prepare the records to be scanned. This archival work is performed solely by archivists or archives technicians within Research Services, no matter who will perform the scanning (e.g. partner or digitization lab staff). For internal (non-partner) digitization projects, Research Services personnel can prepare and scan the records internally, or the personnel can prepare the records and submit a work request for the Imaging Digitization Lab to scan the records. Research Services personnel may elect to scan records themselves with digitization equipment located within Research Services space due to sensitivity of records (e.g. preservation concerns or access restrictions). Also, Research Services personnel communicated concerns over the length of time it takes for the Imaging Digitization Lab to digitize records and difficulties navigating organizational silos between Research Services and Innovation. NARA management officials from both offices told the OIG the Imaging Digitization Lab would fit best within Research Services.

Currently, Research Services is the primary stakeholder as the custodian of the archival materials being digitized and the entity responsible for much of the processes to enable digitization. Realigning the Imaging Digitization Lab under Research Services may provide stronger, more streamlined control over digitization of textual materials at NARA. Research Services staff would continue performing the archival preparation work for digitization, while adding Imaging Digitization Lab staff to perform scanning functions. Time estimates for Research Services digitization projects for staff to prepare and scan the records found approximately 75 percent of time was spent scanning. By aligning the Imaging Digitization Lab with the archival unit, NARA could free up Research Services staff time to be allocated to other functions. The strengths of both staffs could be combined to accelerate both the number of cubic feet processed and the number of images produced by Research Services. Innovation would continue to accelerate NARA's innovation in public access delivery, expand transparency, participation, and collaboration internally, and maintain an enterprise-wide perspective when interacting with entities outside the agency.

Recommendations

We recommend the Archivist of the United States:

Recommendation 7: Consider realigning the Imaging Digitization Lab under Research Services.

Management Response

The Archivist of the United States will consider realigning the Imaging Digitization Lab under Research Services.

Target Completion Date: August 30, 2019

OIG Analysis

We consider NARA's proposed actions responsive to our recommendation. This recommendation will remain open and resolved pending completion of the corrective actions identified above.

Other Matter – Impact of Digitization on Processing

We found digitization does not currently fit into analog processing⁹ in Research Services as the nine standards for basic processing do not include any steps for digitization. Therefore, a series can be processed without undergoing any digitization work. However, if a series is to be digitized, either internally or by a digitization partner, the series must be processed. If an already processed series is selected for digitization, Research Services staff will begin the archival work necessary to prepare the records for digitization (e.g. removing fasteners). If an unprocessed series is selected for digitization, Research Services staff will first process the series to a basic level, then begin the archival preparation work. Whereas a record must be processed before it is digitized, a record does not have to be digitized before it is processed.

To address the impact of digitization on processing, the OIG first considered whether digitization could become part of the Processing workflow. We sought to determine if NARA could require all records to be digitized before the records were considered “processed.” NARA’s 2015-2024 Digitization Strategy established five digitization approaches, including Approach 4: Culture of Digitization, which stated incorporating digitization and a focus on online access into its work processes, NARA will ensure images can be efficiently added to the National Archives Catalog. This approach has led to a line of thinking in the agency of placing digitization within all work processes, including processing, so all work performed eventually leads to records being digitized and made publicly accessible online.

During initial conversations with NARA management officials, the OIG learned making digitization a requirement for processing would lengthen processing times exponentially. Using separate time study data conducted for processing and digitization by Research Services personnel, the OIG estimates adding digitization to the processing workflow would increase processing times by nearly ten times the current rate. The OIG considered data for both processing and digitization of one cubic foot of records identified as “easy.”¹⁰ More difficult series would only increase the time taken to process then digitize the records. We determined the addition of digitization into the processing workflow would be unrealistic without significant technological advances and/or significant staff resources.

The OIG also considered the impact digitization partnerships have on Research Services’ personnel and resources devoted to processing. While NARA digitization partners can further

⁹ The OIG did not consider digitization’s impact on electronic records processing. Digitization’s impact on electronic records processing could be considered for future audit coverage by the OIG.

¹⁰ Research Services defined “easy” in processing as a series with a straightforward application of basic processing standards. “Easy” for digitization was defined as a series in good condition needing limited prep work (e.g. staple removal).

digitization goals, the digitization partnerships can also deter processing goals without effective communications and planning between Research Services and the Office of Innovation.

Research Services is responsible for providing resources to prepare records for partner digitization and to monitor partners during digitization. It is crucial Research Services be made aware of new digitization partnerships in a timely manner. This timely communication is necessary so Research Services can adequately plan staffing and ensure resources are not constantly being shifted from other priorities (e.g. processing) to digitization. Better awareness of the resource implications of digitization partnerships on Research Services and improved communication between Research Services and the Office of Innovation regarding partnerships is needed to ensure NARA meets its processing goals.

Appendix A – Acronyms

Acronym	Definition
APT	Assessment, Planning, and Tracking
COO	Chief Operating Officer
FY	Fiscal Year
GAO	Government Accountability Office
HMS	Holdings Management System
ICP	Internal Control Program
NARA	National Archives and Records Administration
OIG	Office of Inspector General
PMRS	Performance Measurement and Reporting System
RDTP	Textual Processing Branch
U.S.C.	United States Code

Appendix B – Management Response



NATIONAL
ARCHIVES

Date: JUL 30 2018
To: James Springs, Inspector General
From: David S. Ferriero, Archivist of the United States
Subject: Management's Response to OIG Report 18-AUD-11, *Audit of Research Services' Analog Processing*

Thank you for the opportunity to provide comments on this final report. We appreciate your willingness to meet and clarify language in the report.

We concur with the seven recommendations in this audit, and in response, the attachment provides a summary of our proposed actions. As each recommendation is satisfied, we will provide documentation to your office. If you have questions about this action plan, please contact Kimm Richards at kimm.richards@nara.gov or by phone at 301-837-1668.



DAVID S. FERRIERO
Archivist of the United States

Attachment

NATIONAL ARCHIVES *and*
RECORDS ADMINISTRATION
8601 ADELPHI ROAD
COLLEGE PARK, MD 20740-6001
www.archives.gov

**Action Plan Response to OIG Report 18-AUD-11,
*Audit of Research Services' Analog Processing***

Recommendation 1: We recommend the Executive for Research Services develop a plan to improve rates of processing at Archives II.

Planned Action: The Executive for Research Services will conduct an evaluation of processing actions of the Archives II processing unit against the NARA Analog Records Processing Policy Thresholds and the Research Services Processing Manual to identify any patterns of discrepancies that affect the processing rates. If patterns emerge, a plan for correcting them will be implemented in order to increase the processing rate.

Target Completion Date: March 29, 2019.

Recommendation 2: We recommend the Executive for Research Services update the Processing Manual to enhance procedures for quality control work including selection and consistent documentation across all units.

Planned Action: The Executive for Research Services will appoint a working group of processing managers to develop standard procedures for quality control on completed processing projects. The Executive will review and approve the standard procedures. The standards will be added to the Processing Manual.

Target Completion Date: March 29, 2019

Recommendation 3: We recommend the Executive for Research Services implement timeliness reviews as part of quality control reviews.

Planned Action: The Executive for Research Services will develop and issue to managers new guidelines for quality control reviews of unit and individual processing results against expected targets with provisions for tracking assignments, performance standards, follow-up, and accountability.

Target Completion Date: Jan 31, 2019.

Recommendation 4: We recommend the Executive for Research Services revise Processing ICP Reports to comply with NARA Directive 161 internal control testing requirements.

Planned Action: The Executive for Research Services will conduct a review of unit processing audit results in FY 2018. The Executive will use the audit results to test the accuracy of how the processing policy and Processing Manual are applied by staff.

Target Completion Date: June 28, 2019.

Recommendation 5: We recommend the Executive for Research Services establish procedures for review of the PMRS metric as defined in NARA Interim Directive 164-1.

Planned Action: The Executive for Research Services will issue an R numbered memo reminding the archival operations unit heads that they must review their monthly PMRS metrics, as defined in NARA Interim Directive 164-1.

Target Completion Date: October 31, 2018.

Recommendation 6: We recommend the Executive for Research Services develop and implement procedures for the identification of digitization series candidates during processing.

Planned Action: The Executive for Research Services will develop and implement procedures for the identification of candidates for digitization during processing.

Target Completion Date: March 29, 2019.

Recommendation 7: We recommend the Archivist of the United States consider realigning the Imaging Digitization Lab under Research Services.

Planned Action: The Archivist of the United States will consider realigning the Imaging Digitization Lab under Research Services.

Target Completion Date: August 30, 2019

Appendix C – Report Distribution List

Archivist of the United States
Deputy Archivist of the United States
Chief Operating Officer
Deputy Chief Operating Officer
Chief of Management and Administration
Executive for Research Services
Chief Innovation Officer
Accountability
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