

NATIONAL ARCHIVES *and*  
RECORDS ADMINISTRATION

OFFICE *of*  
INSPECTOR GENERAL



Audit of NARA's Digitization Partnerships

March 30, 2015

OIG Audit Report No. 15-10

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## Executive Summary

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The National Archives and Records Administration's (NARA) 2014 Strategic Plan is based on four strategic goals. The first of these goals—"Make Access Happen"—establishes public access as NARA's core purpose. Further, this goal includes an initiative to digitize all analog archival records in order to make them available online. Similar digitization initiatives have been a part of NARA's Strategic Plans for the past eight years. In July 2014, the Office of the Inspector General (OIG) issued Audit Report No. 14-12: Audit of Selected Aspects of NARA's Digitization Program. Based on the findings identified in that report, additional audits were planned related to NARA's Digitization Program. This audit report—Audit of NARA's Digitization Partnerships—is the first in a series of follow-on Digitization Program audits.

The overall objective of this audit was to evaluate NARA's current Digitization Partnership process. Specifically, we assessed NARA's efforts in establishing partnerships and the controls in place to ensure both NARA and the various partners are meeting the terms and conditions set forth in NARA's Digitization Partnership Agreements and policy. Our audit found that although NARA's Digitization Strategy identifies a set of partnership agreement principles developed "to ensure that NARA maintains its public trust," Office of Innovation management has not fully and consistently implemented these principles. As a result, NARA has unnecessarily impeded the digitization approach in which the agency depends upon most significantly in meeting its strategic initiative to make all analog archival holdings available online.

Further, although NARA's Strategic Plans and policy over the past decade state the agency is working to expand digitization partnerships, the rate of expansion necessary to meet its overall digitization initiative has not been achieved. As a result, despite reporting progress in creating new digitization partnerships, no new major partnerships were created since 2008 and overall reported partnership progress has halted. In addition, the Office of Innovation has not developed adequate controls to ensure accurate reporting and tracking of its Digitization Partnership strategy. As a result, Congress, the public, and top NARA decision makers are not provided with accurate performance data related to the digitization strategy NARA relies most heavily upon in meeting its strategic goal of digitizing all 12 billion of its analog records.

This report makes 11 recommendations to strengthen the management, accountability, and oversight of NARA's Digitization Partnership program.

## Background

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Over the past decade, the National Archives and Records Administration (NARA) has made the digitization of its vast record holdings a major initiative within the agency's strategic planning. NARA's 2000 Strategic Plan recognized the American public "increasingly expects immediate electronic access to information at no cost." Later, NARA's 2006 Strategic Plan incorporated specific digitization goals, stating NARA "will provide prompt, easy, and secure access to our holdings anytime, anywhere." Most recently, NARA's 2014 Strategic Plan included an initiative to digitize all analog archival records in order to make them available online.

In facilitating NARA's digitization goals, the agency issued its "Strategy for Digitizing Archival Materials for Public Access," in May 2008.<sup>1</sup> NARA's Digitization Strategy identifies five approaches for digitizing and making holdings available online. These approaches include: 1) Digitization Partnerships, 2) Gather Previously Digitized Materials, 3) In-house Digitization Efforts, 4) Preservation Reformatting, and 5) Online Catalog. Of these five digitization approaches, the Digitization Partnership strategy has accounted for the vast majority of records digitized at NARA. NARA's 2014 Open Government Plan states the public has access to over 235 million images from the agency's digitized collection. Further, the 2014 Open Government Plan states digitization partnerships created over 97 percent of these images, and NARA foresees this trend continuing in the future.

The Office of Innovation currently manages NARA's Digitization Program. The Office of Innovation, led by NARA's Chief Innovation Officer, oversees the agency's Open Government and Digital Government Strategy efforts, the online public catalog, Digitization Strategy, and Digitization Partnerships. In addition, the Office of Innovation oversees NARA's internal digitization labs.

In July 2014, the Office of the Inspector General (OIG) issued Audit Report No. 14-12: Audit of Selected Aspects of NARA's Digitization Program. Based on the findings identified in that report, additional audits were planned related to NARA's Digitization Program. This audit report—Audit of NARA's Digitization Partnerships—is the first in a series of follow-on Digitization Program audits. The focus of this report is on NARA's Digitization Partnership program, which as noted above, accounts for the vast majority of the traditional records digitized at NARA.

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<sup>1</sup> Prior to the issuance of this audit report, NARA updated its Digitization Strategy on December 24, 2014. The updated Digitization Strategy retains the digitization partnership approach, which to date has contributed to the vast majority of online content made available.

## Objectives, Scope, Methodology

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The overall objective of this audit was to evaluate NARA's current Digitization Partnership process. Specifically, we assessed NARA's efforts in establishing partnerships and the controls in place to ensure both NARA and the various partners are meeting the terms and conditions set forth in NARA's Digitization Partnership agreements and policy.

To accomplish our objective, we reviewed NARA's Strategy for Digitizing Archival Materials; NARA Directive 816, "Digitization Activities for Enhanced Access," March 2004; Digitization Standards at the National Archives and Records Administration, April 2013; Technical Guidelines for Digitizing Archival Materials for Electronic Access, June 2004; Office of Management and Budget (OMB) Memorandum 10-06, "Open Government Directive," December 2009; OMB Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, February 2002; GAO-14-704G, "Standards for Internal Control in the Federal Government," September 2014; as well as Executive Orders and other requirements applicable to NARA's Digitization Partnership program.

We interviewed NARA personnel from the Offices of Innovation and Research Services responsible for managing, overseeing, and implementing NARA's Digitization Program. We reviewed NARA's current and previous Strategic Plans, Performance and Accountability Reports, Open Government Plans, and Annual Performance Plans; Partnership Agreements, Working Group Charter, Performance Measurement and Reporting System inputs, NARA's intranet and public-facing webpages, and other applicable documents and information related to NARA's Digitization Partnership program.

Our audit work was performed at Archives II between May 2014 and February 2015. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that 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 that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## Audit Results

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### 1. NARA's Digitization Partnership Agreements

Although NARA's Digitization Strategy identifies a set of partnership agreement principles developed "to ensure that NARA maintains its public trust," Office of Innovation management has not fully and consistently implemented these principles. This condition exists due to a lack of clear responsibility, oversight, and accountability within NARA's Digitization Partnership program. Government Accountability Office Standards for Internal Control in the Federal Government state management should design policies, procedures, techniques, and mechanisms to achieve the entity's objectives and address related risks. As a result of not fully implementing partnership principles, NARA has unnecessarily impeded the digitization approach in which the agency depends upon most significantly in meeting its strategic initiative to make all analog archival holdings available online.

NARA's May 2008 "Strategy for Digitizing Archival Materials for Public Access" (Digitization Strategy) prior to being updated in December 2014, stated "to ensure that NARA maintains its public trust, NARA has developed a set of principles to guide partnership agreements." In part, these principles specify:

- NARA will publicize and seek written comment on proposed partnerships,
- Partners may not claim copyright in the digital copy,
- Partners digitize full series or file segments of records,
- Digital copies provided by partners adhere to NARA's technical specifications,
- Partners shall pay all direct costs associated with the digitizing partnerships, and
- NARA intends to make the digital copies available as quickly as funds and capabilities allow, once permitted to do so by the terms of the partnership.

#### Publicizing NARA Partnership Agreements

NARA's Digitization Strategy directs readers to its public digitization webpage for a list and description of current partnerships into which NARA has entered formally. The table below summarizes the information contained on NARA's digitization partnership webpage:

	Partner	Year Started
1	Google	2006
2	EMC Corporation	2006
3	Fold3	2007
4	University of Texas	2007
5	FamilySearch	2007
6	Ancestry	2008
7	American University	2013

In addition, NARA’s Digitization webpage contains links to a majority of the signed partnership agreements. These agreements stipulate the terms of the digitization partnership between NARA and the individual partners. Although NARA’s Digitization Strategy states the webpage includes a current list of NARA’s digitization partnerships, a number of the partnerships listed are no longer active. Only three (Fold3, FamilySearch, and Ancestry) of the seven partnerships listed on NARA’s public webpage are specifically identified as “ongoing.”

NARA Directive 816, “*Digitizing Activities for Enhanced Access*,” (Directive 816) dated March 8, 2004, defines “Partners” as external entities such as foundations, universities, libraries, individuals, professional associations, commercial entities, and Federal, state, and local agencies with which NARA collaborates to digitize and make archival holdings available in digital format. In addition, Directive 816 states digitizing projects involving partners “must produce a memorandum of understanding or similar agreement between NARA and all partners in the project after the Archivist has approved the project.”

The Office of Innovation has reported additional digitization efforts involving organizations that meet the Directive 816 definition of a partner. However, they are not consistently publicized on NARA’s digitization partnership webpage. Examples include:

- *U.S. Fish and Wildlife Services.* In the Office of Innovation’s FY 2013 Quarterly Report to the Archivist, dated November 6, 2013, the Chief Innovation Officer stated NARA signed a digitization agreement with the U.S. Fish and Wildlife Services in August 2013.
- *National Oceanic and Atmospheric Administration (NOAA).* In a June 2014 presentation to the Digitization Governance Board<sup>2</sup>, the Chief Innovation Officer reported NARA had partnered with NOAA to digitize 350,000 records.

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<sup>2</sup> NARA’s Digitization Governance Board, established by the Archivist of the United States on April 23, 2014, exists to organize, coordinate, and prioritize digitization services for the agency.

- *Academics.* The Chief Innovation Officer also reported in the June 2014 presentation to the Digitization Governance Board that NARA had partnered with academia to digitize 1.2 million records.

Further, the Chief Innovation Officer reported the agency signed a new digitization agreement in January 2013 with American University to digitize a sample of bankruptcy case files. This partnership was not reported on NARA’s list of current partnerships webpage until after October 2013. In addition, a white paper created by the Office of Innovation entitled “Partnerships: Building a Program,” states “NARA is also partnering with organizations such as Google and Apple....” However, according to the Chief Innovation Officer, Google and Apple are a different type of partnership—not technically “digitization partnerships”—therefore, they should not be included on NARA’s public list.

When the OIG inquired about partnerships not listed on NARA’s public webpage, Office of Innovation management stated “all partnerships, as defined by requiring a 30-day notice, are on the webpage.” However, NARA’s Digitization Strategy states the agency “will publicize and seek written comments on proposed partnerships before they are signed. [NARA] will do so by alerting the public and interested communities by making announcements on our websites....” NARA’s Digitization Strategy does not identify partnerships that are exempt from this public notice. Further, the only distinction Directive 816 makes is that the Archivist approves digitization partnerships with external entities and any projects involving more than 400 hours of effort or 500 digital surrogates—criteria all the partnerships listed above meet.

Although a principle of NARA’s Digitization Strategy is to publicize digitization partnerships, the Office of Innovation has not consistently and accurately made this information available to the public. The public webpage NARA’s Digitization Strategy directs readers to does not accurately reflect current partners. Many of the partners listed are not active, while other partnerships NARA has reported elsewhere have not been publicized and approved in accordance with NARA’s Digitization Policies and Strategy.

#### Copyright of Digital Record

Both Directive 816 (issued in March 2004) and NARA’s Digitization Strategy stipulate the partner may not claim rights to the digital copy. However, the February 2006 Google Partnership Agreement—including on NARA’s current list of partners in which the agency is working to digitize and make available holdings—states:

“NARA acknowledges and agrees that Google may use the digitized works as part of the Google services, and, as between Google and NARA, Google shall own all



rights, title, and interest in and to the digitized copy created by Google of such digitized works.”

The Google Partnership Agreement was not updated after NARA’s Digitization Strategy was first issued in May 2008. Office of Innovation management stated the efforts of this agreement were performed years ago and are not ongoing. However, the agreement remains on NARA’s current list of partners referenced in the agency’s Digitization Strategy and available on NARA’s public digitization webpage. Further, unlike most other digitization partnership agreements, the Google Partnership Agreement does not include a termination date. This outdated partnership agreement which contradicts digitization principles established to maintain the public’s trust illustrates the Office of Innovation’s need to review and update its current public listing and aging partnership agreements.

Full Series of Records

NARA’s Digitization Strategy states “to provide for full access and effective preservation, partners will digitize full series or file segments of records, not just selected documents.” However, the tracking processes NARA has in place does not ensure this happens. Only one of NARA’s major partners provides data necessary to track project status to completion. Based on the data provided by this partner, some projects that still require substantial effort to complete have not been worked on by the partner in years. Meanwhile, numerous other projects were started and completed by this partner while those summarized in the table below were put on hold:

Number of Images	First Imported	Last Updated	Number of Rolls	Processed Rolls	Percent Complete
360,912	12/5/2006 6:42:47 PM	2/4/2008 2:28:34 PM	369	308	83%
22,575	6/23/2008 8:13:54 AM	8/29/2008 10:05:44 AM	18	16	89%
36,861	5/8/2008 9:57:44 AM	12/4/2008 11:42:52 AM	28	25	89%
88,912	11/26/2007 5:23:36 PM	12/31/2008 1:06:29 AM	69	67	97%
479,809	4/2/2008 11:37:32 AM	3/7/2009 3:32:45 AM	518	507	98%
2,313,321	9/26/2006 3:08:52 PM	4/3/2010 1:33:05 AM	955	235	25%
99,008	10/18/2009 10:51:00 PM	6/24/2010 3:38:04 PM	1,854	119	6%
137,418	10/18/2009 11:20:28 PM	7/21/2010 4:53:17 AM	1,784	124	7%
137,133	10/19/2009 9:05:02 AM	7/21/2010 10:56:52 PM	2,076	128	6%
1,067,236	8/29/2008 11:17:16 PM	8/13/2010 5:25:11 PM	883	856	97%
979,116	8/29/2008 10:39:34 PM	11/2/2010 2:02:34 PM	1,457	888	61%
464,513	12/5/2006 4:13:43 PM	5/10/2011 5:34:32 PM	437	417	95%
323,024	9/24/2009 8:51:43 PM	10/15/2012 12:10:16 PM	189	111	59%
485,889	9/11/2012 11:04:28 AM	11/7/2012 4:58:20 PM	828	676	82%

As an example, a large project started in September 2006 was last worked on over four years ago in April 2010 (see the highlighted row in the table above). This project—reported as only 25 percent complete—consists of 2.3 million images (contained on 955 rolls of microfilm). NARA’s Digitization Partnership Coordinator—who received the monthly status reports from the partners—was uncertain as to why these projects were on hold and not completed. Therefore, the Digitization Partnership Coordinator contacted the partner for an explanation. The partner stated “most of them have been put on hold for the following reasons: budget, priority, or business.” In some cases, the partner’s parent company already digitized the same records. However, for others, the partner stated they still plan to complete the projects once they have the necessary budgetary resources available.

Considering NARA only receives this type of tracking data from one of its partners—coupled with partnership digitized records typically remaining stored on hard drives for over five years before NARA accesses them (see “Timeliness of Making Digital Copies Available” section below)—there is little control over whether full series are actually completed. Further, these incomplete and postponed projects distort the progress reported in NARA’s annual reporting to Congress and the public. Historically, NARA has reported on the percent of traditional records available online. However, the metrics defining this progress measurement states “if only part of an item is online (such as selected pages of a multi-page document), we count the whole item.” Therefore, as shown in the chart above, a number of projects that have been incomplete for years are reported as fully digitized using NARA’s performance metrics. Conversely, efforts in future years are distorted in progress reports because projects that are completed over multiple years are fully reported in the first year—not across the years in which the efforts actually take place.

### Technical Specifications

Both Directive 816 and NARA’s Digitization Strategy stipulate partnership adherence to NARA technical specifications. The following table summarizes technical specifications included in digitization project plans provided by the Office of Innovation:

Project Plan	Partner	Date	File Format	Pixels Per Inch	Metadata Format
Photographs of U.S. Air Force Activities	Fold3.com	Nov 2007	TIFF, 8-bit grayscale/24-bit color	400	XML
Vietnam Unit Award Files	Fold3.com	Oct 2008	TIFF	400	XML
Index to Naturalization Petitions	Family Search	May 2012	TIFF 256 8-bit grayscale	300	XML
Service Records	Fold3.com	May 2012	TIFF 24-bit color images	300	XML
Petitions and Naturalizations	Family Search	Jul 2012	8-bit grayscale	300	XML
Land Entry Records	Family Search	Sep 2012	TIFF	300	XML
British Expeditionary Forces	Ancestry	Aug 2013	TIFF 24-bit color images	300	XML
Canadian & Australian Forces	Ancestry	Aug 2013	TIFF 24-bit color images	300	XML
Homestead Certificates	Family Search	Jan 2014	TIFF	300	XML
Draft Cards	Ancestry	Feb 2014	TBD	300	TBD
Compiled Military Service Records	Fold3.com	Feb 2014	TBD	300	TBD
Land Records	Family Search	Apr 2014	TIFF & JPEG	300	XML
Lists of Outgoing Passengers	Ancestry	Jun 2014	TIFF & JPEG	300	XML
Lists of Incoming Passengers	Ancestry	Jun 2014	TIFF & JPEG	300	XML

NARA's Partnership Agreements at times differ in the technical specifications required of the digitizing partner. For example, NARA stipulates 300 pixels per inch (ppi) grayscale for paper records digitized by Ancestry; whereas NARA's Partnership Agreement with Fold3 stipulates 400 ppi grayscale while digitizing paper records. However, the Partnership Agreements typically defer to the individual project plans for specific technical specifications and formats required of each project. As shown in the table above, these technical specifications often varied from one project to another (see highlighted cells). In some cases, file formats were incomplete or not provided at the time project plans were issued.

Although NARA's Online Public Access (OPA) system—the system NARA developed to provide public access to digitized records—was initially rolled out in December 2010, NARA did not inform its digitization partners of the appropriate technical specifications necessary for the records to be accessible through OPA until April 2014. As a result, records digitized by partners and placed in embargo<sup>3</sup> prior to 2014 will have to be converted to a format compatible with OPA. NARA paid \$30,000 to convert the 12 million records that left embargo in 2014 and anticipates the need for similar conversation efforts in each of the following years. Future year conversion costs could have been avoided if NARA stipulated a digital image format compatible with OPA or waited to request delivery of the images until the correct OPA formats were known.

NARA's major Partnership Agreements also state "NARA and [the Partner] will ensure that sufficient technical and functional metadata is created according to NARA Standards." However, as with the incompatible digitized record image format discussed above, the metadata format was also determined to be unusable by NARA's OPA system.

<sup>3</sup> NARA's major Partnership Agreements often stipulate NARA will not have full and unrestricted rights to use the partnership digitized records until five years after the records were digitized by the partner. The term "embargo" is used by NARA to describe this five year period.

In 2013, the first 250,000 images and metadata digitized by partners came out of embargo and became eligible for public availability by NARA. However, a Business Need Summary completed by the Office of Innovation on March 18, 2014, stated “lengthy and intensive efforts on the part of the Innovation Office staff” were needed to transform the metadata and images in order to make them available in OPA. If NARA had ensured sufficient technical and functional metadata was created at the time of digitization—and when OPA was first rolled out in December 2010—the intensive efforts and ongoing resources needed to convert current and future unembargoed metadata and images would not be necessary.

#### Payment of Direct Costs

NARA’s May 2008 Digitization Strategy (in effect until December 2014) stated the partner shall pay all direct costs associated with the digitizing partnerships, to include project management, document identification, collections security, document preparation, metadata collection and quality control, data management, digital conversion, and partner’s delivery, marketing, and maintenance, especially when the partner is for-profit or the project is large in scale.

OIG personnel identified instances in which NARA has not consistently met this principle or the requirements contained in Directive 816 as they relate to cost and expense responsibilities. Due to an ongoing lack of management, oversight, and enforcement of NARA’s digitization partnership agreements, OIG personnel identified over \$420,000 in direct partnership digitization costs that may not be recoverable. In the December 2014 update to NARA’s Digitization Partnership Principles, the agency reworded its cost responsibility principle to state “a partner may be responsible for costs associated with the digitizing partnership,” whereas the previous version stated “the partner shall pay all direct costs associated with the digitizing partnerships.”

#### Timeliness of Making Digital Copies Available

The May 2008 Digitization Strategy states NARA “intends in principle to make the digital copies available as quickly as funds and capabilities allow, once permitted to do so by the terms of the partnership.” NARA’s updated Digitization Strategy, dated December 24, 2014 states “the focus of this strategy is how we plan to make our analog records available to the public online as quickly, efficiently, and cost-effectively as possible.” The Archivist previously iterated the agency’s intent to provide timely access in an article he authored entitled “NARA’s New Strategic Plan Outlines ‘Stretch’ Goals,” dated May/June 2014. In the article, the Archivist stated “we plan to make

accessible...as many of our 12 billion pages of traditional (paper) records as we can as *quickly* as we can digitize them....”

As identified in OIG Audit Report 14-12, over 12 million records were digitized by NARA’s digitization partners during 2008. In accordance with NARA’s partnership agreements, these 12 million records were placed in embargo for five years—becoming available January 1, 2014. Although NARA was aware of these records becoming available for five years, the agency was unprepared to make them accessible—both in terms of OPA scalability and incompatible formats of digitized records and metadata. A year later in January 2015, these 12 million records were still not accessible to the public in OPA.

#### Digitization Partnership Agreement Oversight and Management

The Office of Innovation webpage states it is responsible for overseeing NARA’s digitization strategy and partnerships. Based on interviews and information requests from the Office of Innovation, oversight is primarily limited to four of the seven partnerships identified on NARA’s digitization partnership list. The Office of Innovation was not involved with the Google, EMC, and University of Texas agreements. Office of Innovation Management stated there may be other digitization partnership agreements through Presidential Libraries and Foundations in which they were not aware. In order to ensure consistent implementation of its Digitization Strategy, the Office of Innovation should maintain involvement and oversight of all NARA’s digitization partnerships.

Further, as detailed in OIG Audit Report 14-12, the Office of Innovation has not updated its Partnership Agreements since they were first created. In September 2010 NARA’s Digitization Working Group was tasked with developing a new digitization policy for partnership agreements. In a September 2012 Executive Leadership Team Meeting the former Chief Operating Officer stated “existing contracts are ending...hoping for 0 year embargo.” This corresponds with NARA’s May 2008 Digitization Strategy, which states “after the agreed-upon period of time, NARA will have the right to provide free online access to the digitized materials. We will strive to minimize that period of time, with short time frames making a partnership offer more attractive.” However, although most Partnership Agreements are over six years old (surpassing the typical five-year term), no renegotiations or updates have been made to reflect lessons learned or more favorable embargo terms.

## **Recommendations**

We recommend the Chief Innovation Officer:

1. Conduct an agency-wide inventory of Digitization Partnerships and update NARA's partnership webpage to reflect current partners.
2. Establish criteria for which Digitization Partnerships require public notification and approval by the Archivist.
3. Update Partnership Agreements over five years old, giving consideration to Digitization Partnership principles, copyrights, and embargo periods.
4. Develop criteria for partners starting new projects while others are incomplete or on hold for prolonged periods of time.
5. Establish procedures to review partnership image and metadata for proper formats at the time of digitization.
6. Develop uniform partner provided monthly status reports that include project start date, last time project was worked on, percent complete, estimated completion date, and actual completion date.

## **Management Response**

Management concurred with the recommendations.

## 2. Expanding Digitization Partnerships

Although NARA's Strategic Plans and policy over the past decade state the agency is working to expand digitization partnerships, the rate of expansion necessary to meet its overall digitization initiative has not been achieved. Most recently, this condition exists because the Office of Innovation has not obtained the resources and provided the strategic direction necessary to fully develop its Digitization Partnership program. Government Accountability Office Standards for Internal Control in the Federal Government state management should periodically review policies, procedures, and related control activities for continued relevance and effectiveness in achieving the entity's objectives. Further, Government Accountability Office Standards state effective information and communication are vital for an entity to achieve its objectives. Despite reporting progress in creating new digitization partnerships, no new major partnerships were created since 2008 and overall reported partnership progress has halted.

NARA's 2014 Strategic Plan is based on four strategic goals. The first of these goals—"Make Access Happen"—establishes public access as NARA's core purpose. Further, this goal includes an initiative to digitize all analog archival records to make them available online. NARA's 2014 *Open Government Plan* states—"Through NARA's online catalog and partner websites, the public has access to over 235 million images from our digitized collection. Partners created over 97 percent of these images and NARA foresees this trend continuing in the future."

Over a decade ago, NARA's 2003 Strategic Plan "Ready Access to Essential Evidence," stated NARA "will seek access partners to expand our online products, including digital copies of records, indexes, publications, and exhibits." This same statement was echoed in NARA Directive 816, "Digitizing Activities for Enhanced Access" issued in March 2004. Over the years, NARA's revised Strategic Plans, Performance and Accountability Reports, Annual Performance Plans, and Open Government plans have all indicated NARA is exploring a variety of new digitization partnership opportunities.

- *NARA's Strategic Plan 2006*: "We will work to establish partnerships with both governmental and private institutions to facilitate the availability of NARA holdings over the Internet."
- *FY 2007, 2008, 2009 Annual Performance Plans*: "NARA is exploring new partnership opportunities that would digitize many of our holdings."
- *FY 2008 Performance and Accountability Report*: "We continued developing new partnerships to help us make more of our archival holdings available online."

- *FY 2010 Annual Performance Plan*: “We intend to accomplish much of this goal through partnerships with other organizations that want to publish our holdings.”
- *Open Government Plan 2012*: “Explore expanding our work with digitization partners.”
- *September 2012 Executive Leadership Team Meeting*: NARA’s former Chief Operating Officer “has met with three different digitization companies about potential digitization partnerships. Stay tuned for additional details.”
- *Office of Innovation 4<sup>th</sup> Quarter FY 2013 Report to the Archivist*: “Staff met several times with representatives from the National Archives’ digitization partners and with potential new partners.”
- *Open Government Plan 2014*: “NARA will seek to expand digitization partnerships.”

Partnership Expansion

NARA’s Digitization Strategy directs stakeholders to the agency’s digitization webpage “for a list and description of current partnerships into which NARA has entered formally.” The table below summarizes the information contained on NARA’s website:

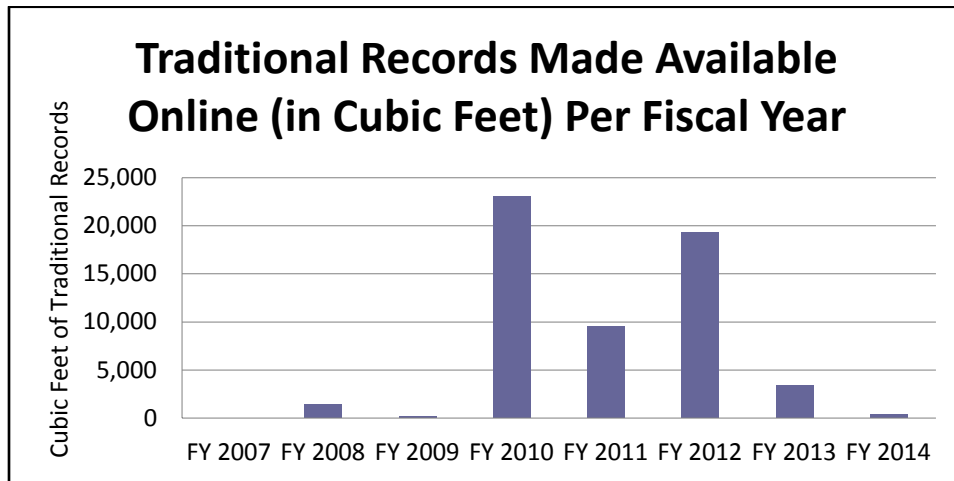
Partner		Year
1	Google	2006
2	EMC Corporation	2006
3	Fold3.com	2007
4	University of Texas	2007
5	Family Search	2007
6	Ancestry.com	2008
7	American University	2013

Although developing and expanding new partnerships has been a consistent theme in NARA’s Open Government Plans, Performance Plans, and Accountability Reports—from 2008 to present—only one new partnership was reported on NARA’s “current” public list. Further, the first partner added to the list in the past six years will only be digitizing a 0.025 percent sample of the records identified within the scope of that particular record group. Therefore, this newest partner does not reflect a major expansion in overall partnership digitization efforts.



Partnership Digitization Progress

One method of measuring expansion of digitization partnership opportunities is tracking NARA’s progress in creating new partnerships (as described above). Another way to measure expansion is by tracking the increase in effort by the current population of digitization partnerships over a period of time. Through FY 2014, partnership digitization efforts were measured and reported in combination with NARA’s other digitization strategies in the agency’s Performance Measurement and Reporting System<sup>4</sup> (PMRS). However, as stated in NARA’s 2014 Open Government Plan, 97 percent of the agency’s digitized records made available online were created by Digitization Partners. Therefore, the “traditional records made available online” data reported in PMRS is predominantly a measurement of NARA’s partnership digitization efforts. The graph below reflects the data reported by the Office of Innovation in PMRS as of the end of FY 2014.

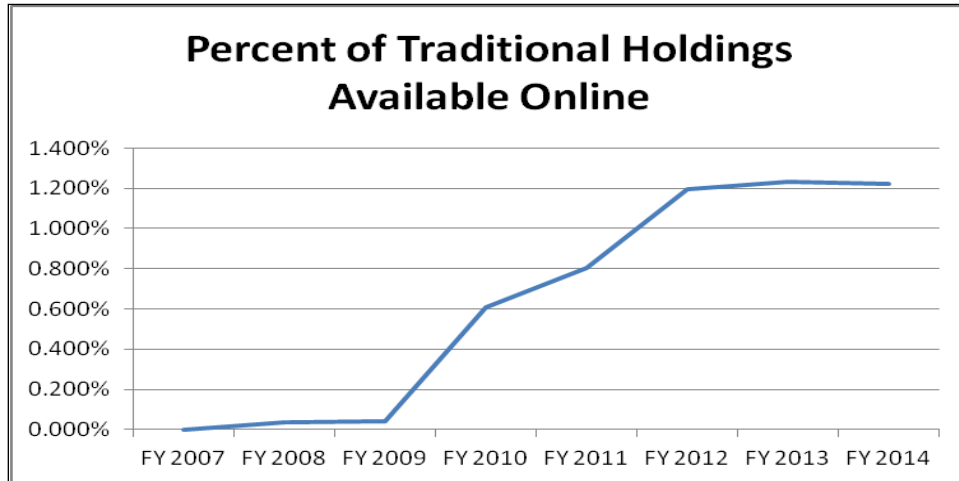


The PMRS data depicts a large increase in the number of traditional records made available online in FY 2010, however—based on NARA’s reporting—this level of annual progress has not been achieved since. When this graph was presented to Office of Innovation management, the Chief Innovation Officer stated reduced progress after FY 2010 may be an implication of incomplete projects being fully counted in the year they were started (discussed previously in the “Full Series of Records” section of the report). Office of Innovation personnel also stated most early projects involved digitizing records contained on microfilm, which are faster to digitize than original records. Based on NARA’s “Microfilm Publications and Original Records Digitized by Our Digitization Partners” public webpage, approximately 72 percent of partnership projects to date

<sup>4</sup> PMRS is the official source for statistical management information at NARA. In particular, it reports how NARA is doing relative to the numeric goals in NARA’s Strategic Plan and the various annual performance plans. These results form the basis for reports to Congress each year.

pertained to microfilm digitization, the remaining 28 percent involved the digitization of original records.

In addition, the Office of Innovation has historically reported progress in PMRS based on percentage of traditional records made available online. The graph below illustrates this information. Four years after NARA had established its last major digitization partnership, the Office of Innovation reported 1.2 percent of NARA’s traditional records were available online. However, over the next two years, reported progress had halted. The number of traditional records reported as being made available online in proportion to the total number of traditional records coming into the agency in FY 2014 was less than in the previous year—thus, Percent of Traditional Holdings Available online is slightly less in FY 2014 than in FY 2013.



Therefore, although NARA has reported efforts to expand and explore new digitization opportunities since FY 2006, the agency has not realized consistent, increased results from these efforts.

Resources and Strategic Direction

During meetings with Office of Innovation management, the Chief Innovation Officer acknowledged staffing constraints were impacting the management and productivity of the Digitization Partnership program. In January 2014, NARA’s Partnership Digitization Coordinator left the agency. At that time, the Director of Digitization (who also maintains the role of Branch Chief over Digitization Services) was assigned the added responsibility of managing and expanding NARA’s digitization partnerships. In October 2014, the Coordinator for Research Services Digitization was transferred to the Office of Innovation to take on the role of Digitization Partnerships Coordinator. However, the

Coordinator retired at the start of 2015. In September 2014, the Chief Innovation Officer and Director of Digitization met with the OIG to discuss future Digitization Partnership staffing proposals; however, the Office of Innovation must compete with other agency priorities in obtaining the staffing resources proposed.

Aside from staffing resources, NARA's Digitization Partnership program is also impacted by the agency's Digitization Strategy. As examined in OIG Audit Report 14-12, NARA's "Strategy for Digitizing Archival Materials for Public Access" was first issued in May 2008. Updating and making this strategy more comprehensive has been part of NARA's Open Government *Flagship Initiative* since 2010. Office of Management and Budget Memorandum 10-06 "Open Government Directive," dated December 8, 2009, defines Flagship Initiative as a specific, new transparency, participation, or collaboration initiative that is being implemented or will be implemented before the next update of the Open Government Plan. NARA's 2012 Open Government Plan includes the *Flagship Initiative* to "update our digitization strategy to expand our efforts to digitize records." By the time NARA's 2014 Open Government Plan was issued in May 2014, NARA had still not completed the update of its digitization strategy. NARA's updated Digitization Strategy was eventually issued nearly seven months later on December 24, 2014.

### **Recommendations**

We recommend the Chief Innovation Officer:

7. Work with NARA Executives to determine what staffing resources are needed and available to most effectively leverage NARA's Digitization Partnerships.
8. Establish a process that ensures NARA's Digitization Partnership Strategy, Principles for Partnerships, and digitization policy are reviewed and updated on a regular and timely basis.

### **Management Response**

Management concurred with the recommendations.

### 3. Digitization Partnership Progress Reporting

The Office of Innovation has not developed adequate controls to ensure accurate reporting and tracking of its Digitization Partnership strategy. Specifically, the Office of Innovation has not: 1) implemented a partnership digitization registry to track progress, 2) consistently measured or verified the number of analog records digitized by partners, and 3) developed a process to accurately account for partnership digitization efforts in NARA's Performance Measurement and Reporting System. These conditions exist because NARA and Office of Innovation management have not made the transparent progress reporting of NARA's digitization partnership program a priority. GAO Standards for Internal Control in the Federal Government state management should establish activities to monitor performance measures and indicators. Further, GAO Standards state management should internally and externally communicate the necessary quality information to achieve the entity's objectives. As a result of these reporting inadequacies, Congress, the public, and top NARA decision makers are not provided with accurate performance data related to the digitization strategy NARA relies most heavily upon in meeting its strategic goal of digitizing all 12 billion of its analog records.

Office of Management and Budget Memorandum 10-06 "Open Government Directive," directs agencies to take specific actions to implement principles of transparency, participation, and collaboration, which—the Directive states—"form the cornerstone of an open government." In NARA's *2010 Open Government Plan* (2010 Plan), the Archivist's introductory message responds to the President's Open Government Directive stating "the principles of open government are embedded in the mission and strategic goals of the National Archives and Records Administration." Further, the Archivist states "I expect the principles of transparency, participation, and collaboration to change the way we do things, the way we think about things, and the way we deliver services to the public."

In terms of informing the public of NARA's progress, the 2010 Plan states "building a culture of open government at the National Archives requires active communication of our progress to the public. We will strive to communicate in an efficient and clear way the major milestones and significant actions and business of our agency." The 2010 Plan specifically identifies "partnerships with outside organizations to increase access to archival material" as an area that will be communicated to the public. NARA's FY 2012 and FY 2014 Open Government Plans reiterate this exact same partnership communication objective.

### Tracking Progress

NARA's 2010 Plan acknowledges the American public expects online access to records; therefore digitization has become a fundamental part of the agency's business. The 2010 Plan states "efforts to digitize historical documents and make them available to the public online are of paramount importance for NARA but are also a massive, complex, and expensive undertaking." In moving forward with these efforts, NARA developed and implemented a strategic approach to digitization. One of the controls identified as part of this strategic approach pertains to tracking partnership digitization progress. The 2010 Plan states NARA will "develop a partnership digitization registry...to track all progress made in this area with the goal to make these registries available online to the public." Developing this registry to track partnership digitization efforts was also included in the "Appendix B: Task List" of the 2010 Plan.

NARA's *2012 Open Government Plan* (2012 Plan) "Appendix C: Implementation of 2010 Open Government Plan Task List" included an update on the status of the partnership registry task, stating "Microfilm publications and original records digitized by our partners are now available on our website...Registries have been established, but are not available on Archives.gov because they contain partner proprietary information." The 2012 Plan listed the status of this task as "Implemented and Ongoing." However, when the OIG requested to review the partnership registry, Offices of Innovation and Performance and Accountability personnel stated they were unfamiliar with such internal tracking registries. Further, NARA's Digitization Director and Digitization Partnership Coordinator stated the online "Microfilm Publications and Original Records Digitized by Our Digitization Partners" list is all that is maintained.

Until recently, the "Microfilm Publications and Original Records Digitized by Our Digitization Partners" list located on NARA's public facing website only included the records digitized by two of NARA's digitization partners. In addition, many of the records listed contained broken reference links. Office of Innovation personnel stated they were in the process of adding records from an additional partnership to the list and correcting broken links; however, these efforts took place more than two years after NARA's Open Government Plan reported the registry task as implemented and ongoing. Further, the list only includes data related to the microfilm publication number, publication title, partner, and record group. The information provided in the list does not allow NARA stakeholders the ability "to track all progress made in this area."

NARA's major digitization partners provide monthly updates on completed projects. The Office of Innovation relies on the information provided by the partners to develop and update the list made available online. However, only one of NARA's major digitization

partners provides information necessary to track the progress of projects from beginning to completion. The information provided monthly from the partner includes number of images, the percentage processed, and the last time progress had been made on each digitization effort. However, NARA does not include any of this information in the list it maintains. Further, NARA does not receive uniform progress information from its other major digitization partners, nor does NARA have controls in place to independently verify data provided from partnerships is accurate.

### Reporting Consistency

Apart from the registries described in NARA's Open Government Plans, the agency has historically reported overall progress of its digitization partnerships using total combined quantity of records digitized. However, the total number of records digitized by partnerships reported to the public, management, and externally by digitization partners has not been measured in a uniform manner. As a result, this lack of consistency and transparency minimizes the usefulness of the data reported and its overall value in measuring progress.

For example, NARA's FY 2014 Annual Performance Plan reported partnerships digitized 60 million records. However, in a June 2014 briefing to the Digitization Governance Board, the Chief Innovation Officer reported 220 million partner digital copies. In September 2014, the Office of Innovation—in an effort to acquire digitization cloud storage—referenced 350 million images digitized by a single digitization partner. Further, during NARA's Virtual Genealogy Fair in October 2014, one of NARA's digitization partners reported digitizing 144 million images since 2007—not including federal census records. Internally, four months earlier, the Chief Information Officer reported this same partner had only created 78 million images to date.

A lack of uniform and consistent progress reporting was previously identified in OIG Audit Report 14-12, which focused on NARA's overall digitization efforts across its multiple strategies. However, as the Digitization Partnership strategy accounts for the vast majority of the records digitized—the specific progress of which is often reported to the public—it is particularly important NARA and its partners accurately measure and report these efforts.

### Performance Reporting

NARA's most recent Open Government Plan, issued for 2014-2016, states “through NARA's online catalog and partner websites, the public has access to over 235 million images from our digitized collection. Partners created over 97 percent of these images

and NARA foresees this trend continuing in the future.” The table below includes data reported in NARA’s FY 2015 Annual Performance Plan and PMRS at the end of FY 2014.

		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Percent of traditional records available online	Target	0.30%	0.65%	1.00%	1.20%	1.40%
	Actual	0.61%	0.81%	1.19%	1.23%	1.22%
Traditional records made available online during fiscal year (FY) in cubic feet		23,015	9,532	19,341	3,399	422

The data reported by NARA shows relatively little progress in traditional records available online since FY 2012 (see highlighted actual percentages above). The progress reported by NARA for its overall Digitization Program is highly reflective of its Digitization Partnership progress as the partnership efforts alone—as noted above—make up 97 percent of the traditional records available online. When this lack of reported progress was brought to the attention of Office of Innovation management, they initially attributed it to limitations in the scalability of NARA’s Online Public Access (OPA) system.<sup>5</sup> However, according to NARA Management, this reporting is not strictly contingent upon record accessibility through the agency’s online holdings catalog, but also includes records accessible through partnership websites. As partners typically make the records they digitize available in advance of NARA, the limitations of OPA should not impact NARA reporting.

Previously, OIG Audit Report 14-12 highlighted this overall issue. However, the focus of that audit was not specifically on Digitization Partnerships. In November 2014, the measurements for digitized archival records available online was removed from PMRS. NARA’s PMRS indicates this metric is being developed and data is not yet available. As OIG Audit Report 14-12 included recommendations to improve NARA’s overall digitization performance reporting, the redevelopment of this metric was anticipated.

**Recommendations**

We recommend the Chief Innovation Officer:

- 9. Establish a digitization partnership project tracking registry.
- 10. Ensure future Open Government Plans report on tasks and efforts related to Digitization Partnerships with complete accuracy and transparency.
- 11. Include specific measurements for partnership efforts in NARA’s revised Digitization performance reporting metrics.

<sup>5</sup> In December 2014, NARA announced the roll-out of a “new and improved” version of OPA. This most recent version is known as the National Archives Catalog.

**Management Response**

Management concurred with the recommendations.



## Appendix A – Acronyms and Abbreviations

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FY	Fiscal Year
GAO	Government Accountability Office
JPEG	Joint Photographic Experts Group standard
NARA	National Archives and Records Administration
NOAA	National Oceanic and Atmospheric Administration
OIG	Office of Inspector General
OMB	Office of Management and Budget
OPA	Online Public Access system
PMRS	Performance Measurement and Reporting System
PPI	Pixels Per Inch
TBD	To Be Determined
TIFF	Tagged Image File Format
XML	Extensible Markup Language

## Appendix B - Management's Response to the Report



Date: MAR 26 2015  
To: James Springs, Inspector General  
From: David S. Ferriero, Archivist of the United States  
Subject: OIG Revised Draft Audit Report 15-10, Audit of NARA's Digitization Partnerships

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

We concur with the 11 recommendations in this audit, and we will address them further in our action plan.



DAVID S. FERRIERO  
Archivist of the United States

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## **Appendix C - Report Distribution List**

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Archivist of the United States  
Deputy Archivist of the United States  
Chief Operating Officer  
Deputy Chief Operating Officer  
Chief Innovation Officer