CONSIDERATIONS FOR NARA ON THE FUTURE OF RECORDKEEPING

By Eliot Wilczek, Krista Ferrante, and Mike Fleckenstein

All agencies depend on the National Archives and Records Administration (NARA) as their recordkeeping partner. NARA is the lead agency for ensuring that the federal government carries out effective and accountable recordkeeping practices and preserving federal records for the life of the Republic. NARA's responsibilities include:

- Preserving government records of enduring value through the National Archives, Presidential Libraries, and the Center for Legislative Archives

- A range of records management policy, oversight, reporting, and services responsibilities, including the operation of Federal Records Centers

- Providing Freedom of Information Act (FOIA) oversight, dispute resolution, and ombudsman services through the Office of Government Information Services

- Managing the Information Security Oversight Office, which provides oversight of the security classification system and the National Industrial Security Program and operates the National Declassification Center

- Managing the Office of the Federal Register, which administers the Electoral College and the constitutional amendment process, and provides access to the official texts of laws, regulations, notices, and presidential documents

- Awarding grants that support the preservation and use of America's documentary heritage through the National Historical Publication and Records Commission

All federal agencies depend on effective recordkeeping to fulfill their missions. Through robust recordkeeping practices the federal government can more effectively and equitably support citizen services at scale; protect rights, benefits, safety, and privacy; ensure the appropriate sharing of current and accurate information; and preserve the government's historical memory. Records enable federal agencies to be more effective, transparent, and accountable organizations, making recordkeeping an essential part of fostering trust in the government.

As we approach a full embrace of digital government and the final deadlines of OMB (Office of Management and Budget)-NARA Memo 19-21 "Transition to Electronic Records," now is the time to forecast how documentation and communication practices in the 2020s will impact government recordkeeping. Additionally, NARA is currently transitioning to the eleventh Archivist of the United States. This is a natural and important juncture for the agency to strategically assess the successes and challenges it had under the stewardship of Archivist David S. Ferriero over the past twelve years. It is the right time to ask how NARA can lead the federal government forward to the next generation of federal recordkeeping practices that effectively support agency missions, enable accountability and transparency across the entire government, and protect the rights and benefits of all Americans.[1] We should take this opportunity to imagine how a new paradigm of records management can meet the challenges of these evolving environments.

The MITRE Corporation is a not-for-profit company chartered to work in the public interest to tackle difficult problems that challenge the safety, stability, security, and well-being of our nation. We operate multiple federally funded research and development centers (FFRDCs) on behalf of the federal government and participate in public-private partnerships across national security and civilian agency missions. We invest in independent research and operate a Policy Center to bring data and evidence to policy decisions.

MITRE brings to bear a wide range of domain expertise, including records management, data management, privacy, systems engineering, acquisition, and administrative law, to work with government to address its records and information management challenges. We draw on this expertise to formulate recommendations for NARA continuing to lead the government's recordkeeping maturation. Our aim is to support NARA's mission of enabling modern solutions for making high-value government records accessible to the public, focusing on four areas of opportunity.

1. Fostering Cross-Professional Collaboration

The federal government manages complex information ecosystems that demand the support of cross-professional collaboration. However, many information management disciplines have evolved independently. While we are seeing a strengthening of cross-agency collaboration by entities such as the Federal Chief Data Officers (CDO) Council, these councils are bounded by professional areas of practice. NARA should play a leading role in establishing collaboration across related information management disciplines.

Recommendation 1.1:
NARA should facilitate the establishment of an inter-council working group of the Federal Records Management Council and the Chief FOIA Officers Council, charged with defining and piloting opportunities where records management and FOIA partnerships could bear fruit.

Recommendation 1.2:
Building on this bi-council collaboration, NARA should seek multi-council partnerships by establishing a working group with other councils, such as the Federal Chief Data Officers Council.

Recommendation 1.3:
NARA should facilitate the establishment of a Declassification Officers Council, modeled on the Chief FOIA Officers Council.

Recommendation 1.4:
NARA should offer Senior Agency Officials for Records Management (SAORMs) and Agency Records Officers (AROs) support for cross-professional initiatives that address thorny information management challenges. In return, NARA should request that agencies it supports share their experiences with other agencies.

2. Strengthening the Recordkeeping Workforce

AROs and their records management programs need sufficient support, capacity, and strategic partnerships to lead their agencies to the next generation of recordkeeping. Supporting this capacity requires a thorough and measurable understanding of the federal recordkeeping workforce. Now is a good opportunity for NARA to reevaluate its reporting framework to capture this records workforce capacity with greater fidelity.

Recommendation 2.1:
NARA should adjust the SAORM Report and Records Management Self-Assessment (RMSA) to capture more structured data on the number and grade of staff in agency records offices and their training. These reports should also document the scope of records offices' responsibilities and the collaborations they have established within their agencies.

Recommendation 2.2:
NARA, through the Office of Government Information Services, should encourage the Department of Justice's Office of Information Policy to enhance the FOIA annual report's section on personnel and costs to capture the grades of FOIA staff and the amount of their FOIA experience.

Recommendation 2.3:
NARA, through a collaborative effort of the Information Security Oversight Office (ISOO), the Public Interest Disclosure Board (PIDB), and the National Declassification Center (NDC), should examine the feasibility of documenting the number, grade, experience, and cost of declassification officers.

3. Leading the Government to Zero-Click Recordkeeping

NARA should build on the records management industry trend of developing tools that integrate electronic records management activities into the flow of mission-based work by articulating a vision of zero-click recordkeeping. In this vision, records management rules are integrated or embedded in business systems to execute recordkeeping actions within the course of people doing their mission-driven work.

Recommendation 3.1:
NARA should create a white paper that articulates a vision of zero-click recordkeeping. NARA can use this white paper to raise the profile of its current Federal Electronic Records Modernization Initiative (FERMI) work and facilitate a conversation across government, industry, and academia about what federal electronic records management should look like by the end of the 2020s.

Recommendation 3.2:
NARA, in partnership with the Office of Management and Budget, should issue a joint memo that provides guidance and requirements that move agencies closer to zero-click recordkeeping. This memo would build on the white paper and the conversations described in Recommendation 3.1.

4. Constructing a Modern Infrastructure for Records Review and Release

Agencies are struggling to keep pace with the growing demand for Freedom of Information Act requests. Additionally, many agencies are struggling to manage and declassify a growing volume of analog and digital records, working with assumptions and processes instituted in the 1950s. NARA should lead the government in embracing new technologies and strategies, particularly AI-assisted review tools and a risk-based approach, to declassification and FOIA.

Recommendation 4.1:
The Office of Government Information Services (OGIS) and ISOO should create incentives and expectations to lead agencies toward using Artificial Intelligence and Machine Learning (AI/ML) to support manual document review decisions as a routine practice for FOIA and declassification programs.

Recommendation 4.2:
In addition to fostering the use of AI/ML, OGIS and ISOO should lead efforts to draft risk-based frameworks for document review decisions. They should outline guidelines to adopting risk-based review frameworks, including the benefits and limitations of applying a risk-based approach to given situations.

OPPORTUNITY ONE: FOSTERING CROSS-PROFESSIONAL COLLABORATION

The federal government generates a vibrant information ecosystem that is far too complex and dynamic to neatly categorize assets as simply "data" or "records" or "information." All assets have characteristics of data, recordkeeping, and information, as well as access and rights concerns. In fact, we see that, in general, agencies would profit from managing data as records. Agencies cannot support a healthy information ecosystem with siloed professional outlooks, such as records officers concerning themselves with only the segment of agency information assets that have been traditionally considered records.[2] Indeed, MITRE has seen how this siloed approach can isolate records officers and their staff from strategically significant conversations about information governance and management.

As such, we see the successful management of information ecosystems benefiting from a mission-oriented approach of sustained and well-supported cross-professional collaboration across "data" and "information" management. This is especially noteworthy, as most major agencies have cross-cutting records management, data management, privacy, FOIA, classification, cybersecurity, and user experience ecosystems and concerns.

Historically, these interrelated disciplines all relating to information management have evolved independently. Over the past decade we have seen a strengthening of cross-agency collaboration within professions by the establishment of several councils, such as the Chief FOIA Officers Council in 2016 and the Federal Chief Data Officers Council in 2020. These councils have helped to strengthen professional practice in the federal landscape, allowing people to exchange ideas for tackling information management challenges, establishing best practices, and developing strategies for meeting new laws and regulations. MITRE has seen first-hand, for example, how the CDO Council fosters a community from which chief data officers draw insights and experience for tackling their agency's data challenges. These councils, however, are defined and bounded by professional areas of practice.

The federal government should establish and support sustainable mechanisms that foster more robust cross-professional collaboration. NARA should play a leading role in establishing meaningful cross-professional collaboration that enables the government to tackle its information management challenges. The practice of records management in the federal government predates most other areas of information management. The capabilities are well established, putting records managers in an opportune position to inject efficiency into information management by leading and supporting cross-information management collaboration.

Recommendation 1.1:
NARA should facilitate the establishment of an inter-council working group of the Federal Records Management Council and the Chief FOIA Officers Council. This working group could be charged with defining and piloting opportunities where records management and FOIA partnerships could bear fruit, such as identifying strategies for making records and electronic records management systems more "FOIA-ready."[3]

Recommendation 1.2:
Building on this bi-council collaboration, NARA should seek multi-council partnerships by establishing a working group with other councils, such as the Federal Chief Data Officers Council.[4]

Recommendation 1.3:

Addressing the nation's significant declassification and records access challenges will depend on cross-agency and cross-professional collaboration. To foster and support the necessary collaboration, NARA should facilitate the establishment of a Declassification Officers Council, modeled on the Chief FOIA Officers Council. This would be an important first step toward creating a federated National Declassification System (NDS).[5]

In addition to using these councils as vehicles for cross-professional collaboration, NARA should look for opportunities to facilitate cross-professional collaboration within agencies. NARA has already identified this need, noting that "SAORMs should promote an information governance framework that requires collaborative relationships between records management staff, data management programs, and information technology staff to integrate records management into the agency's information resource management strategy."[6]

Recommendation 1.4:

NARA should offer SAORMs and AROs support for cross-professional initiatives that address thorny information management challenges within agencies in exchange for their willingness to share their experiences with other agencies to build cross-professional collaboration best practices across government.

The government's most difficult and important records and information challenges are entangled, deep-seeded, and complex. These problems are often resistant to solution and are frequently characterized as "wicked problems"—vitally important, yet ill-defined, societal problems that "rely upon elusive political judgment for resolution."[7] Wicked problems cannot be solved by a single profession with a business-as-usual approach. These problems require novel approaches that span professions and established modes of thought. For example, our most fundamental FOIA challenges require not just FOIA expertise, but the full engagement of records managers, privacy professionals, systems engineers, user experience designers, and administrative law experts along with a heterogenous user community. These recommended steps build a more robust infrastructure for the sustainable cross-professional collaboration needed to address our most vexing records and information management challenges.

OPPORTUNITY TWO: STRENGTHENING THE RECORDKEEPING WORKFORCE

AROs and their records management programs play central roles in ensuring that their agencies effectively manage records and meet their recordkeeping obligations. For agencies to advance to the next generation of records management, they need to support the development of strong AROs and records management programs with sufficient capacity and strategic partnerships to provide the necessary recordkeeping leadership. In 2020, SAORMs identified lack of resources (time, staff, and money) as the second leading records management challenge at their agencies.[8] Addressing these persistent resource challenges requires a thorough and measurable understanding of the government's records management workforce and qualitative understanding of their capacity to lead their agencies in effective records management.[9]

We are quickly approaching the M-19-21 deadlines requiring agencies to close their records storage facilities, transfer temporary paper records to commercial records storage facilities instead of Federal Records Centers, and transfer permanent records to NARA in electronic formats with appropriate metadata. Because significant portions of NARA's Senior Agency Official for Records Management Annual Report (SAORM Report), RMSA, and Federal Electronic Records and Email Management Maturity Model Report measure compliance with M-19-21, this is a good moment for NARA to reevaluate these reports and look for opportunities to measure the recordkeeping workforce more carefully.

Recommendation 2.1:

NARA should adjust the SAORM and RMSA reports to capture more structured data on the number and grade of staff in agency records offices and their training. These reports should also document the scope of records offices' responsibilities and the collaborations they have established within their agencies, building on current questions in the RMSA and SAORM reports about stakeholders and information governance relationships.

It is equally important to have a detailed understanding of the workforce capacity of FOIA and declassification program staff. FOIA and declassification is intensive work that requires deep, specialized knowledge. Successful FOIA and declassification programs require well-supported and well-trained workforces with extensive experience.[10] A foundational step in this effort is having accurate data on the size and experience of this workforce.

Recommendation 2.2:

NARA, through the Office of Government Information Services, should encourage the Department of Justice's Office of Information Policy to enhance the FOIA annual report's section on personnel and costs to capture the grades of FOIA staff and the amount of experience they have doing FOIA work.[11]

Recommendation 2.3:

NARA, through a collaborative effort of the ISOO, PIDB, and NDC, should examine the feasibility of documenting the number, grade, experience, and cost of declassification officers.[12]

MITRE has worked with multiple agencies that have been challenged to find meaningful and sufficiently detailed information on the size, shape, and responsibilities of peer agencies' records management, FOIA, and declassification programs in their efforts to support these programs effectively and appropriately. Enacting these recommendations can facilitate usable measures of recordkeeping workforces that will enhance agencies' abilities to properly support their recordkeeping professionals and leaders.

OPPORTUNITY THREE: LEADING GOVERNMENT TO ZERO-CLICK RECORDKEEPING

Over the past decade NARA has issued a wide range of guidance, instructions, and directives, anchored by OMB-NARA Memo 12-18, Memo 14-16, and Memo 19-21, that have helped to lead the government in the transition from paper to electronic records management.[13] As we approach the final deadline in M-19-21, NARA should continue to lead the government into the future with the next phase of digital recordkeeping.

This next phase should focus on integrating electronic records management activities into the flow of agencies' mission-based work. The records management industry has recognized the importance of minimizing the employee burden of "doing" records management. NARA, as part of its FERMI, in partnership with the General Services Administration, is currently pushing the federal government in this direction with the publication of the Electronic Records Management (ERM) Federal Business Lifecycle and Business Capabilities as part of the Federal Integrated Business Framework (FIBF).[14] By articulating ERM requirements as a component of FIBF, NARA is framing records management as a common business function. This helps put the federal government on the path of managing records within the flow of mission-based work.

NARA should expand on and raise the profile of these efforts by articulating a vision of zero-click recordkeeping. In zero-click recordkeeping, records management rules are embedded in business systems and data to enable recordkeeping actions as integral to people doing their mission-driven work. Thus, the time people spend "doing" records management is minimized to the greatest extent possible. This vision is not just for the sake of better records management but is central to effective and equitable delivery of government services. All agencies need to have well-structured, richly described, easily discoverable and sharable, yet carefully controlled records to meet the President's Management Agenda (PMA) priority of delivering "excellent, equitable, and secure Federal services and customer experience," particularly services "for key life experiences that cut across Federal agencies."[15] However, to meet this PMA vision, federal employees' time cannot be consumed by records management tasks and must be preserved for focusing directly on mission-oriented services.

Zero-click recordkeeping takes the burden of recordkeeping decisions off the government workforce but places tremendous demands on records managers and recordkeeping tools. Achieving this vision will require partnerships among government, industry, and academia. NARA should play a central role in defining, along with industry and academia, required characteristics of zero-click recordkeeping, and helping agencies identify strategies for achieving this vision.

Recommendation 3.1:

NARA should create a white paper that articulates a vision of zero-click recordkeeping. NARA should use the white paper to raise the profile of its current FERMI work and facilitate a focused conversation across government, industry, and academia about what electronic records management should look like in the federal government by the end of the 2020s.

Recommendation 3.2:

NARA, in partnership with the Office of Management and Budget, should issue a joint memo that provides guidance and requirements that move agencies closer to zero-click recordkeeping.[16] This memo would build on the white paper and the conversation about it, as described in Recommendation 3.1.

MITRE routinely works with agencies that fully embrace their compliance obligations, including their recordkeeping duties, but struggle with how much time these obligations take away from their mission-based work. These agencies are eager for this next generation of records management tools where recordkeeping work is minimized for most employees. However, they need NARA as a strategic partner to realize this vision. The recommended white paper and joint memo would

OPPORTUNITY FOUR: CONSTRUCTING A MODERN INFRASTRUCTURE FOR RECORDS REVIEW AND RELEASE

Making agency records publicly available is a cornerstone of ensuring the federal government is transparent and accountable to the American people. However, agencies are facing steep challenges with declassifying records and releasing records through FOIA in the digital age. Agencies must make countless decisions every day with regard to releasing records to the public using processes that foster transparency while safeguarding rights, safety, and security. These decisions must be made equitably, consistently, correctly, on time, at scale, and within tight resource constraints.

The government's infrastructure for supporting FOIA is struggling to keep pace with the demands for making records available to the public while still protecting national security and the rights of individuals. In fiscal year (FY) 2021, agencies received over 838,000 FOIA requests and faced 615 FOIA litigation lawsuits.[17] MITRE has seen first-hand the broad array of policy, technical, process, and personnel challenges that agencies face in meeting their daunting FOIA obligations.

In addition, the government's classified records infrastructure is under tremendous strain. In a May 2021 letter to the President, the Chair of the Public Interest Declassification Board asserted that the "classification and declassification system is in crisis and near failure…[and] at a breaking point."[18] The system is still largely rooted in assumptions and processes instituted in the 1950s, and is not equipped to classify, safeguard, and declassify the estimated billions of classified documents and petabytes of classified data. It does not meet the challenges of digital government nor take advantage of its affordances. The system also comes at a non-trivial cost, with ISOO estimating the federal government spent $18.39 billion on security classification overall and $102.58 million for declassification in FY17.[19] This system also carries significant risk, as Director of National Intelligence Avril Haines recently noted that "deficiencies in the current classification system undermine our national security, as well as critical democratic objectives, by impeding our ability to share information in a timely manner."[20]

Agencies are responsible for declassifying all permanent records before transferring them to NARA.[21] Declassification, the activity that ensures that some of the government's most historically significant actions are ultimately understood by the public, is a particularly slow and antiquated process. Declassification is managed by each classifying agency, whose declassification offices manually review every page of a document or data set against their own security classification guides (SCGs). Agencies do not share their SCGs with each other, so if a document has information that is of interest to more than one agency, each of those agencies must conduct an independent review according to its own SCGs. This is an extremely labor-intensive process, and it can take months to review a single document. The antiquated and slow declassification review process has put permanent records at risk for destruction and, conversely, potentially delays the scheduled destruction of temporary classified records.

Moving from a 1950s-era model to one that is appropriate for the twenty-first century is urgently needed to support and safeguard current and future government records.

Because of the scale, complexity, and nature of electronic records and digital assets, the government needs to move from manual page-by-page review of materials for FOIA release and declassification to an AI-assisted and risk-based review approach to declassification and FOIA review.[22] In a risk-based approach agencies systematically evaluate the cost of page-by-page review, the potential harms of mistaken release or declassification, and their tolerance for such mistakes. For example, an agency's FOIA program could evaluate the risks associated with its most frequently requested types of records. This evaluation would enable the agency to calibrate the level of manual exemption review needed for these frequently requested records, perhaps even determining if it can rely entirely on AI tools to review low-risk records. This kind of AI-assisted risk-based approach would enable an agency to significantly speed up its FOIA processing times and save its personnel for reviewing the most sensitive and complex records.

Recommendation 4.1:
OGIS and ISOO should create incentives and expectations to lead agencies toward using artificial intelligence and machine learning to support manual document review decisions as a routine practice for FOIA and declassification programs. This will enable agencies to make FOIA and declassification reviews more scalable rather than remaining an entirely manual page-by-page process. These efforts should include fostering events and collaboration between government, industry, and academia.[23]

Recommendation 4.2:
In addition to fostering the use of AI/ML, OGIS and ISOO should lead efforts to draft risk-based frameworks. This should include strategies for how to implement these approaches. OGIS and ISOO should carefully outline guidelines to adopting risk-based review frameworks, including the benefits and limitations of applying a risk-based approach to given situations.

These two recommendations cut a path for maturing FOIA and declassification processes so they can handle the size and complexity of the records produced by our twenty-first century digital government. First, the recommendations normalize the supplementing of current practices with AI techniques and tools. This provides agencies with the opportunity to gain experience with these technologies and learn best practices for using them. As a next step, the recommendations position agencies to use these technologies not just as a complementary tool but as an enabler to transforming how records are reviewed, declassified, and released at a policy level.

CONCLUSION
NARA has the opportunity to continue strengthening its leadership position in guiding the federal government to the next generation of recordkeeping. Our government's most important records and information management challenges are not simple records management, or data management, or privacy problems. They are thorny, vexing problems that cut across multiple information management domains and demand collaboration across a broad range of professions described in Opportunity One. Staying in traditional professional lanes will no longer suffice.

Addressing these records and information management challenges also demands, as noted in Opportunity Two, a well-supported recordkeeping, FOIA, and declassification workforce that not only has the necessary training and experience, but also has a seat at the right tables to effectively participate in those cross-professional collaborations. NARA is well-positioned to take key, foundational steps to ensure that this professional capacity building is well-defined and carefully measured.

NARA also needs to take a leading role in modernizing the government's recordkeeping, FOIA, and declassification infrastructure. NARA is integral in the government's adoption of next generation electronic records management solutions where recordkeeping activities are executed in the flow of people's mission-based work, as described in Opportunity Three. The federal government needs to turn to elegant solutions rather than try to squeeze more recordkeeping effort out of its employees to manage the growing volume and complexity of federal records.

Modernization is also needed in the government's FOIA, classification, and declassification infrastructure. As noted in Opportunity Four, the federal government needs to leverage artificial intelligence technologies and embrace risk-based frameworks to ensure that review, release, and protection of records can scale to the size and complexity of digital government.

Recommendations in these four opportunity areas outline a path for NARA to continue leading a recordkeeping infrastructure that enables records to be mission-supporting assets that foster accountable and effective government, serve the people, and strengthen our democracy.

About the Authors

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For more information about MITRE's work on records management and FOIA, about this paper, or the Center for Data-Driven Policy, contact policy@mitre.org.

REFERENCES

[1] Finally, these efforts align with NARA's 2022–2026 strategic plan, particularly Goal 3.1: "By 2026, NARA will provide policy, requirements, and oversight to support a transparent, inclusive, and fully digital government." National Archives and Records Administration, "2022–2026 Strategic Plan," March 2022, https://www.archives.gov/files/about/plans-reports/strategic-plan/nara-2022-2026-strategic-plan-march-2022.pdf

[2] Records have traditionally and commonly been thought of as documents such as memos, letters, policies, procedures, and similar documents. The terms "unstructured data" and "structured data" are frequently used to make a distinction between records and data. We feel that these traditional distinctions are misleading. The federal government's definition of a record makes it clear that a wide range of information assets, including structured data, are records. "All recorded information, regardless of form or characteristics, made or received by a Federal agency under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the United States Government or because of the informational value of data in them." 44 U.S.C. § 3301 Definition of Records.

[3] This recommendation builds on previous work to establish a closer working relationship between records managers and FOIA officers. The 2018–2020 FOIA Advisory Committee, Records Management Subcommittee urged more collaboration between the domains. "Final Report and Recommendations of the Records Management Subcommittee," May 28, 2020, https://www.archives.gov/files/ogis/assets/foiaac-rm-subcom-report-2020-05-28.pdf. In addition, the Records Management Self-Assessment report has a section on access to records under FOIA, including a question about the working relationship between the Agency Records Officer and the Chief FOIA Officer. National Archives and Records Administration, "2020 Records Management Self-Assessment," 2020, https://www.archives.gov/files/records-mgmt/agency/rmsa-reporting-template-2020.pdf, pgs. 19–21. Other connections NARA has made between records management and FOIA include placing three FOIA requirements into its Universal Electronic Records Management Requirements and offering records management training for FOIA officers. 2018–2020 FOIA Advisory Committee, Recommendation 2020-04, https://www.archives.gov/ogis/foia-advisory-committee/dashboard. For additional recommendations for collaboration opportunities between records management and FOIA, see 2018–2020 FOIA Advisory Committee, Recommendation 2020-09, "2018–2020 Final Report and Recommendations," July 9, 2020, https://www.archives.gov/files/ogis/assets/foiaac-final-report-and-recs-2020-07-09.pdf.

[4] The Federal Chief Data Officers Council provides a good foundation for inter-council collaboration as the CDO Council has ex-officio members representing eight other councils and committees, including the Chief Records Officer (NARA) representing the Chief Records Officers Council and the Director of the Office of Government Information Services (NARA), along with Director of the Office of Information Policy (Department of Justice), representing the Chief Freedom of Information Act Officers Council. Federal CDO Council, "Council Members," https://www.cdo.gov/council-members/.

[5] The NDS was proposed by the Public Interest Declassification Board. "A Vision for the Digital Age: Modernization of the U.S. Public Interest Declassification Board," 2020, https://www.archives.gov/files/declassification/pidb/recommendations/pidb-vision-for-digital-age-may-2020.pdf.

6 National Archives and Records Administration, "Federal Agency Records Management: 2020 Annual Report," September 2021. https://www.archives.gov/files/records-mgmt/resources/2020-federal-agency-records-management-annual-report.pdf, p.11.

7 Horst Rittel and Melvin Weber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 (1973): 160.

8 National Archives and Records Administration, "Federal Agency Records Management: 2020 Annual Report," September 2021. https://www.archives.gov/files/records-mgmt/resources/2020-federal-agency-records-management-annual-report.pdf, p. 3.

9 NARA indicated its commitment to strengthen its own workforce in its 2022–2026 strategic plan. In its "Build Our Future Through Our People" strategic area, NARA identifies four strategic areas to provide all NARA employees "with the learning and leadership opportunities necessary to support their career development, enable their successful transition to a digital environment, and thrive in an inclusive, supportive, and diverse work environment." NARA should leverage the experience it gains from this effort in its work to strengthen the recordkeeping workforce across government. National Archives and Records Administration, "2022–2026 Strategic Plan," March 2022, https://www.archives.gov/files/about/plans-reports/strategic-plan/nara-2022-2026-strategic-plan-march-2022.pdf.

10 Having a detailed understanding of the records management, FOIA, and declassification workforce aligns with the spirit of Priority 1 of the President's Management Agenda, "Strengthening and Empowering the Federal Workforce," particularly Strategy 2, "make every federal job a good job, where all employees are engaged, supported, heard, and empowered." "The Biden-Harris Management Agenda Vision: Toward an Equitable, Effective, and Accountable Government that Delivers Results for All," undated, https://assets.performance.gov/PMA/Biden-Harris_Management_Agenda_Vision_11-18.pdf.

11 The data captured in the annual reports is defined in Department of Justice, Office of Information Policy, "Department of Justice Handbook for Agency Annual Freedom of Information Act Reports," 2021, https://www.justice.gov/oip/docs/doj-handbook-for-agency-annual-freedom-of-information-act-reports.pdf/download.

12 This work should align with ISOO's multi-year effort to update its data collection and analysis efforts. Information Security Oversight Office, "2020 Report to the President," https://www.archives.gov/files/isoo/reports/fy-2020-isoo-annual-report-to-the-president-final.pdf.

13 M-12-18 "Managing Government Records Directive," M-14-16 "Guidance on Managing Email," and M-19-21 "Transition to Electronic Records."

14 "Federal Integrated Business Framework (FIBR): Electronic Records Management," https://ussm.gsa.gov/fibf-ERM/. These requirements are based on NARA's FERMI, which provides common, core requirements needed by all federal agencies to support their records management programs. https://www.archives.gov/records-mgmt/policy/fermi.

15 See Priority 2, Strategy 2 in "The Biden-Harris Management Agenda Vision: Toward an Equitable, Effective, and Accountable Government that Delivers Results for All," undated, https://assets.performance.gov/PMA/Biden-Harris_Management_Agenda_Vision_11-18.pdf. Well-managed records are also vital to the aims of Executive Order 14058 "Transforming Federal Customer Experience and Service Delivery to Rebuild Trust in Government," December 31, 2021.

16 This memo could be seen as a successor to M-12-18, M-14-16, and M-19-21.

17 Chief FOIA Officers Council, "Public Meeting," April 21, 2022, https://www.archives.gov/files/ogis/about-ogis/chief-foia-officers-council/cfo.council.meeting.slides.4.21.2022-compliant.pdf; Office of Information Policy, Department of Justice, "List of Freedom of Information Act Cases Received in 2020," https://www.justice.gov/oip/page/file/1372411/download; Office of Information Policy, Department of Justice, "List of Freedom of Information Act Cases Received in 2021," https://www.justice.gov/oip/page/file/1478516/download.

18 Ezra Cohen, Chair, Public Interest Declassification Board, Letter to Joseph R. Biden, President of the United States, May 3, 2021, https://www.archives.gov/files/pidb/recommendations/potus-letters-modernization-05.03.2021.pdf.

19 This is the most recent cost estimate on managing classified records and declassing records. Information Security Oversight Office, "2017 Report to the President," https://www.archives.gov/files/isoo/reports/2017-annual-report.pdf.

20 Dustin Volz, "Vast Troves of Classified Info Undermine National Security, Spy Chief Says," *Wall Street Journal*, January 27, 2022, https://www.wsj.com/articles/vast-troves-of-classified-info-undermine-national-security-spy-chief-says-11643286602.

21 Executive Order 13526 "Classified National Security Information," December 29, 2009, Section 3.2(d).

22 The PIDB strongly advocated for using artificial intelligence and a risk management framework in its May 2020 report, "A Vision for the Digital Age: Modernization of the U.S. National Security Classification and Declassification System." https://www.archives.gov/files/declassification/pidb/recommendations/pidb-vision-for-digital-age-may-2020.pdf. The 2018–2020 FOIA Advisory Committee recommended that the Archivist of the United States "should work with other governmental components and industry in promoting research into using artificial intelligence." Recommendation 2020-09, "2018–2020 Final Report and Recommendations," July 9, 2020, https://www.archives.gov/files/ogis/assets/foiaac-final-report-and-recs-2020-07-09.pdf.

23 The NextGen FOIA Tech Showcase hosted in February 2022 by the Chief FOIA Officers Council Technology Committee, OGIS, and OIP is an excellent example of this kind of collaborative event. https://www.archives.gov/ogis/about-ogis/chief-foia-officers-council/nexgen-foia-showcase. NARA should ensure that these are multi-directional conversations where industry is not just describing its offerings to government, but government can systematically articulate its challenges and needs to industry and academia.