

June 2008

# FEDERAL RECORDS

National Archives and Selected Agencies Need to Strengthen E-Mail Management

This report was revised July 28, 2008, to correct figure 1, page 13. This figure initially and inadvertently contained incorrect or repetitious information and was replaced.





Highlights of GAO-08-742, a report to congressional requesters

## FEDERAL RECORDS

## National Archives and Selected Agencies Need to Strengthen E-Mail Management

## Why GAO Did This Study

Federal agencies are increasingly using electronic mail (e-mail) for essential communication. In doing so, they are potentially creating messages that have the status of federal records, which must be managed and preserved in accordance with the Federal Records Act. Under the act, both the National Archives and Records Administration (NARA) and federal agencies have responsibilities for managing federal records, including e-mail records.

In view of the importance that email plays in documenting government activities, GAO was asked, among other things, to review the extent to which NARA provides oversight of federal records management, describe selected agencies' processes for managing e-mail records, and assess these agencies' e-mail policies and key practices. To do so, GAO examined NARA guidance, regulations, and oversight activities, as well as e-mail policies at four agencies (of contrasting sizes and structures) and the practices of selected officials.

### What GAO Recommends

GAO is recommending that NARA develop and implement a comprehensive oversight mechanism and that the four agencies address weaknesses in records management oversight, policies, and practices. Officials from the five agencies indicated, in comments on a draft of this report, that they were implementing or intended to implement GAO's recommendations.

To view the full product, including the scope and methodology, click on GAO-08-742. For more information, contact Linda Koontz at (202) 512-6240 or koontzl@gao.gov.

## What GAO Found

Although NARA has responsibilities for oversight of agencies' records and records management programs and practices, including conducting inspections or surveys, performing studies, and reporting results to the Congress and the Office of Management and Budget (OMB), in recent years NARA's oversight activities have been primarily limited to performing studies. NARA has conducted no inspections of agency records management programs since 2000, because it uses inspections only to address cases of the highest risk, and no recent cases have met its criteria. In addition, NARA has not consistently reported details on records management problems or recommended practices that were discovered as a result of its studies. Without more comprehensive evaluations of agency records management, NARA has limited assurance that agencies are appropriately managing the records in their custody and that important records are not lost.

The four agencies reviewed generally managed e-mail records through paperbased processes, rather than using electronic recordkeeping. A transition to electronic recordkeeping was under way at one of the four agencies, and two had long-term plans to use electronic recordkeeping. (The fourth agency had no current plans to make such a transition.) Each of the business units that GAO reviewed (one at each agency) maintained "case" files to fulfill its mission and used these for recordkeeping. The practice at the units was to include e-mail printouts in the case files if the e-mail contained information necessary to document the case—that is, record material. These printouts included transmission data and distribution lists, as required.

All four agencies had e-mail records management policies that addressed, with a few exceptions, the requirements in NARA's regulations. However, the practices of senior officials at those agencies did not always conform to requirements. Of the 15 senior officials whose practices were reviewed, the email records for 7 (including all 4 at one agency) were managed in compliance with requirements. (One additional official was selected for review but did not use e-mail.) The other 8 officials generally kept e-mail messages, record or nonrecord, in e-mail systems that were not recordkeeping systems. (Among other things, recordkeeping systems allow related records to be categorized according to their business purposes.) If e-mail records are not kept in recordkeeping systems, they may be harder to find and use, as well as being at increased risk of loss from inadvertent or automatic deletion. Factors contributing to noncompliance included insufficient training and oversight as well as the difficulties of managing large volumes of e-mail. Without periodic evaluations of recordkeeping practices or other controls to ensure that staff are trained and carry out their responsibilities, agencies have little assurance that e-mail records are properly identified, stored, and preserved.

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### Abbreviations

CIO	Chief Information Officer
DHS	Department of Homeland Security
ECMS	Enterprise Content Management System
e-mail	electronic mail
EPA	Environmental Protection Agency
FTC	Federal Trade Commission
HERS	HUD Electronic Record System
HUD	Department of Housing and Urban Development
NARA	National Archives and Records Administration
OMB	Office of Management and Budget
R&D	research and development

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United States Government Accountability Office Washington, DC 20548

June 13, 2008

The Honorable Henry A. Waxman Chairman Committee on Oversight and Government Reform House of Representatives

The Honorable William Lacy Clay Chairman Subcommittee on Information Policy, Census, and National Archives Committee on Oversight and Government Reform House of Representatives

Federal agencies are increasingly using electronic mail (e-mail) for essential communication, and in doing so, they are potentially creating messages that have the status of federal records. According to the Federal Records Act,<sup>1</sup> federal records are materials in whatever form that document government functions, activities, decisions, and other important transactions, and such records must be managed and preserved in accordance with the act.<sup>2</sup> As the volume of federal e-mail grows, so does the challenge of managing electronic records.

Under the act, the National Archives and Records Administration (NARA or the Archives) has responsibilities for oversight and guidance of federal records management, including management of e-mail records. Agencies also have records management responsibilities, including the responsibility to develop e-mail management policies and practices that include specific requirements, such as defining staff responsibilities for determining whether an e-mail (including any associated attachments) is a federal record and, further, requiring preservation of record e-mail.

In view of the importance that e-mail plays in documenting government activities, you asked that we review federal e-mail records management. Specifically, our objectives were to

<sup>&</sup>lt;sup>1</sup>The relevant provisions of the Federal Records Act of 1950 and subsequent records management statutes are largely codified in Chapters 21, 29, 31, and 33 of Title 44 of the U.S. Code.

<sup>&</sup>lt;sup>2</sup>The definition of a record is given at 44 U.S.C. 3301.

- assess to what extent NARA provides oversight of federal records management programs and practices, particularly with regard to e-mail;
- describe processes followed by selected federal agencies to manage email records;
- assess to what extent the selected agencies' e-mail records management policies comply with federal requirements; and
- assess compliance of selected senior officials with key e-mail recordkeeping requirements.

To determine the extent to which NARA provided oversight of federal agencies' programs for managing and preserving federal e-mail records, we analyzed applicable laws, regulations, and guidance; reviewed NARA's oversight activities from 2003 to 2007, including its 2003 to 2007 reports to the Office of Management and Budget (OMB) and the Congress on records management activities; analyzed NARA reports and documents; and interviewed NARA officials.

To describe e-mail recordkeeping processes at selected federal agencies, we selected four federal agencies (the Environmental Protection Agency, the Federal Trade Commission, and the Departments of Homeland Security and of Housing and Urban Development), based on contrasting sizes and structures and on the significance of their records to protecting rights and documenting accountability. We reviewed agency documents, analyzed agency responses to a series of data collection instruments, interviewed agency officials, reviewed the e-mail management practices at one business unit at each agency, and inspected a limited number of sample e-mail records identified by the agencies to corroborate their statements.

To determine the extent to which the four agencies' policies comply with requirements, we analyzed applicable laws, regulations, and guidance to identify e-mail records management requirements, and we assessed the agencies' e-mail management policies against these requirements.

To assess compliance of selected senior officials with key recordkeeping requirements at each agency, we reviewed the e-mail management practices of four senior officials (including the agency head at each selected agency), based on agency responses to our data collection instruments, interviews with agency officials, and inspection of a limited number of sample e-mail records identified by the agencies to corroborate their statements. We did not attempt to assess the extent to which the agencies' staff correctly identified e-mail as federal records or the extent to which the agencies' records appropriately included e-mail. Additional detail on the objectives, scope, and methodology of this audit can be found in appendix I.

We conducted this performance audit from April 2007 to May 2008 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.

## **Results in Brief**

To fulfill its responsibility under the Federal Records Act for oversight of agency records management programs, NARA planned to conduct activities including inspections, studies, and reporting. However, despite its plans, in recent years its oversight activities have been primarily limited to performing studies. Although it has performed or sponsored six records management studies since 2003, it has not conducted any inspections since 2000. In addition, although NARA's reporting to the Congress and OMB has generally described progress in improving records management at individual agencies and provided an overview of some of its major records management activities, it has not consistently provided evaluations of responses by federal agencies to its recommendations, as required, or details on records management problems or recommended practices that were discovered as a result of inspections, studies, or targeted assistance projects. Without a consistent oversight program that provides it with a governmentwide perspective, NARA has limited assurance that agencies are appropriately managing the records in their custody, increasing the risk that important records will be lost.

The four agencies reviewed generally managed e-mail records through paper-based processes, rather than using electronic recordkeeping. A transition to electronic recordkeeping was under way at one of the four agencies, and two had long-term plans to use electronic recordkeeping. (The fourth agency had no current plans to make such a transition.) Each of the business units that we reviewed (one at each agency) maintained "case" files to fulfill its mission and used these for recordkeeping. The practice at the units was to include e-mail printouts in the case files if the e-mails contained information necessary to document the case—that is, record material. These printouts included transmission data and distribution lists, as required. Three of the four agencies we reviewed had policies in place that generally complied with key aspects of NARA's regulations on e-mail records management. At these agencies, the policies were each missing one of nine key elements. For example, one agency's policy did not specify, as required, that draft documents circulated via e-mail may be federal records; agency officials indicated that they planned to address the omission in updated guidance. At the fourth agency, the policy was missing three of eight applicable requirements.<sup>3</sup> One element of the policy was inconsistent with regulations, requiring only the sender of an e-mail message to determine record status; the regulation states that both sent and received messages could be e-mail records. According to agency officials, the policy was incomplete because the department's stated practice is not to use e-mail to create official records. However, this practice does not remove the requirement for employees to assess e-mail received for its record status, because the agency cannot know that employees will not receive e-mail with record status; the determination of record status depends on content, not medium. The agency's policy and guidance were silent on two other requirements. Agency officials stated that these were included in the policy by a reference to the NARA regulations in which they appear. However, this reference was too general to make the requirements clear.

For the senior officials whose practices we reviewed, recordkeeping requirements for e-mail were not always met. Of 15 senior officials,<sup>4</sup> the e-mail for 7 (including all 4 at the Federal Trade Commission) was managed in compliance with requirements.<sup>5</sup> The remaining 8 officials (at three agencies), did not consistently conform to key requirements in NARA's regulations for e-mail records, such as filing them in appropriate record-keeping systems. Instead, e-mail for these officials, whether record or nonrecord, was generally being retained in e-mail systems that lacked recordkeeping capabilities. (Among other things, a recordkeeping system allows related records to be grouped into classifications according to their business purposes.) If e-mail records are not kept in recordkeeping systems, they may be harder to find and use, as well as being at increased

<sup>&</sup>lt;sup>3</sup>One requirement was not applicable because of the configuration of the agency's network.

<sup>&</sup>lt;sup>4</sup>One senior official did not use e-mail, according to agency staff.

<sup>&</sup>lt;sup>5</sup>In addition, one official was using the e-mail system to store records in anticipation of a transition to an electronic recordkeeping system; when the ongoing transition is complete, the new system should allow this official's recordkeeping practices to be brought into compliance with requirements.

risk of loss from inadvertent or automatic deletion. Factors contributing to this noncompliance included inadequate training and oversight, as well as the difficulties of managing large volumes of e-mail. Without periodic evaluations or other controls to ensure that staff receive training and are carrying out their responsibilities, agencies have little assurance that email records are appropriately identified, stored, and preserved.

To address weaknesses in records management policies and practices, we are making recommendations to the Archivist that address improvements to oversight of governmentwide records management and to the agencies that address improvements to e-mail records management policies, training, and oversight.

In comments on a draft of our report, officials from NARA, the Environmental Protection Agency, the Federal Trade Commission, and the Departments of Homeland Security and of Housing and Urban Development indicated that they were implementing or intended to implement our recommendations. NARA, the Environmental Protection Agency, and the Department of Housing and Urban Development provided written comments (which are reproduced in apps. II to IV), and the Federal Trade Commission and the Department of Homeland Security provided comments via e-mail. We also received technical comments from NARA and the Federal Trade Commission, which we incorporated into our report as appropriate.

Although the Department of Housing and Urban Development agreed to implement our recommendations, it disagreed with certain details of our draft, particularly our conclusion regarding the department's compliance with the requirements we reviewed. According to the department's comments, its e-mail records policies should be considered to comply because they incorporate NARA's regulations by reference. Our draft recognized the reference to NARA regulations in HUD's policy, but we concluded that such a reference was not adequate to comply with NARA regulations. As we stated, the reference in HUD's policy is too general to make clear to HUD staff which practices are prohibited. In addition, HUD did not establish procedures to implement the requirements in question, as the regulations require.

## Background

Advances in information technology and the explosion in computer interconnectivity have had far-reaching effects, including the transformation from a paper-based to an electronic business environment and the capability for rapid communication through e-mail. Although these developments have led to improvements in speed and productivity, they also pose challenges, including the need to manage those e-mail messages that may be federal records.

NARA and Federal Agencies Have Responsibilities for Federal Records Management	Under the Federal Records Act, NARA is given general oversight responsibilities for records management as well as general responsibilities for archiving. This includes the preservation in the National Archives of the United States of permanent records documenting the activities of the government. NARA thus oversees agency management of temporary and permanent records used in everyday operations and ultimately takes control of permanent agency records judged to be of historic value. <sup>6</sup> (Of the total number of federal records, less than 3 percent are designated permanent.)
	In particular, NARA is responsible for issuing records management guidance; working with agencies to implement effective controls over the creation, maintenance, and use of records in the conduct of agency business; providing oversight of agencies' records management programs; approving the disposition (destruction or preservation) of records, and providing storage facilities for agency records. The act also gives NARA the responsibility for conducting inspections or surveys of agency records and records management programs.
	The act <sup>7</sup> requires each federal agency to make and preserve records that (1) document the organization, functions, policies, decisions, procedures, and essential transactions of the agency and (2) provide the information necessary to protect the legal and financial rights of the government and of persons directly affected by the agency's activities. These records, which include e-mail records, must be effectively managed.
Records Management Includes a Range of Activities	To understand the requirements for managing e-mail records, it is useful to consider the broader context of government records management. First, the term record, as mentioned earlier, has a specific meaning in this context (not just the everyday sense of anything written down or

 $<sup>^6\</sup>mathrm{Relevant}$  NARA regulations implementing the Federal Records Act are found at 36 C.F.R. 1220–1238.

<sup>&</sup>lt;sup>7</sup>As relevant here, 44 U.S.C. chapters 21, 29, 31, and 33.

otherwise fixed in some medium). The Federal Records Act includes an extensive definition of a record:<sup>8</sup>

As used in this chapter, "records" includes all books, papers, maps, photographs, machine readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government 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 Government or because of the informational value of data in them. Library and museum material made or acquired and preserved solely for reference or exhibition purposes, extra copies of documents preserved only for convenience of reference, and stocks of publications and of processed documents are not included.

As the definition shows, although government documentary materials (including e-mails) may be "records" in this sense, many are not. For example, not all e-mails document government "organization, functions, policies, decisions, procedures, operations, or other activities" or contain data of informational value.

According to NARA, the activities of an agency records management program include, briefly, the following

- identifying records and sources of records;
- developing a file plan for organizing records, including identifying the classes of records that the agency produces;
- developing records schedules—that is, proposing for each type of content where and how long records need to be retained and their final disposition (destruction or preservation) based on time, or event, or a combination of time and event; and
- providing records management guidance to agency staff, including agency-specific recordkeeping practices that establish what records need to be created in order to conduct agency business.

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Developing record schedules is a cornerstone of the records management process. Scheduling involves not individual documents or file folders, but rather broad categories of records. Traditionally, these were record series: that is, "records arranged according to a filing system or kept together because they relate to a particular subject or function, result from the same activity, document a specific kind of transaction, take a particular

<sup>&</sup>lt;sup>8</sup>44 U.S.C. 3301.

	physical form, or have some other relationship arising out of their creation, receipt, or use, such as restrictions on access and use." More recently, NARA introduced <i>flexible scheduling</i> , which allows so-called "big bucket" or large aggregation schedules for temporary and permanent records. <sup>9</sup> Under this approach, the schedule applies not necessarily to records series, but to all records relating to a work process, group of work processes, or a broad program area to which the same retention time would be applied.
	To develop records schedules, agencies identify and inventory records, and NARA's appraisal archivists work with agencies to appraise their value (which includes informational, evidential, and historical value), determine whether they are temporary or permanent, and determine how long the temporary records should be kept. NARA then approves the necessary records schedules. No record may be destroyed unless it has been scheduled, and for temporary records the schedule is of critical importance because it provides the authority to dispose of the record after a specified time period.
	Records schedules may be of two kinds: an agency-specific schedule or a general records schedule, which covers records common to several or all agencies. According to NARA, general records schedules cover about a third of all federal records. <sup>10</sup> For the other two-thirds, NARA and the agencies must agree upon specific records schedules. Once a schedule has been approved, the agency is to issue it as a management directive, train employees in its use, apply its provisions to temporary and permanent records, and ensure proper implementation.
Records Management Must Address Electronic Records, Including E-Mail	The Federal Records Act covers documentary material regardless of physical form or media, but until the advent of computers, records management and archiving had been largely focused on handling paper documents. As information is increasingly created and stored electronically, records management has had to take into account the
	<sup>9</sup> National Archives and Records Administration, <i>Guidance for Flexible Scheduling</i> , Bulletin 2005-05 (Apr. 20, 2005), www.archives.gov/records-mgmt/bulletins/2005/2005- 05.html.
	<sup>10</sup> General records schedules are posted at NARA's Web site: www.archives.gov/records-

<sup>&</sup>lt;sup>10</sup>General records schedules are posted at NARA's Web site: www.archives.gov/records-mgmt/ardor/records-schedules.html.

creation of records in varieties of electronic formats, including e-mail messages.

NARA has promulgated regulations at 36 C.F.R. Part 1234 that provide guidance to agencies about the management of electronic records. This guidance is supplemented by the issuance of periodic NARA bulletins and other forms of guidance to agencies. To ensure that the management of agency electronic records is consistent with the Federal Records Act, NARA requires each agency to maintain an inventory of all agency information systems that identifies basic facts about each system and the information it contains, and it requires that agencies schedule the electronic records in its systems. Like other records, electronic records must be scheduled either under agency-specific schedules or pursuant to a general records schedule.

According to the regulation,<sup>11</sup> agencies are required to establish policies and procedures that provide for appropriate retention and disposition of electronic records. In addition to including general provisions on electronic records,<sup>12</sup> agency procedures must specifically address e-mail records: that is, the creation, maintenance and use, and disposition of federal records created by individuals using electronic mail systems.<sup>13</sup>

The regulation defines an electronic mail message as

"a document created or received on an electronic mail system including brief notes, more formal or substantive narrative documents, and any attachments, such as word processing and other electronic documents, which may be transmitted with the message."

The regulation requires e-mail records to be managed as are other potential federal records with regard to adequacy of documentation, recordkeeping requirements, agency records management responsibilities, and records disposition. This entails, in particular, ensuring that staff are

<sup>1136</sup> C.F.R. Part 1234.

<sup>&</sup>lt;sup>12</sup>For example, the regulation states that all information in electronic systems (including those operated by contractors) is to be scheduled (either through general or agency-specific records schedules) and that such scheduling shall take place no later than 1 year after the implementation of the system.

<sup>&</sup>lt;sup>13</sup>36 C.F.R. §1234.24.

aware that e-mails are potential records and training them in identifying which e-mails are records.<sup>14</sup>

Specific requirements for e-mail records include, for example, that for each e-mail record, agencies must preserve transmission data, including names of sender and addressees and message date, because these provide context that may be needed for the message to be understood. Further, except for a limited category of "transitory" e-mail records,<sup>15</sup> agencies are not permitted to store the recordkeeping copy of e-mail records in the e-mail system, unless that system has all the features of a recordkeeping system; table 1 lists these required features.

#### Table 1: Required Features of Electronic Recordkeeping Systems That Include E-Mail Records

#### Features

Allow related records to be grouped into classifications according to the business purposes they serve

Permit easy and timely retrieval of both individual records and groupings of related records

Retain records in a usable format for their required retention period as specified by a NARA-approved records schedule

Be accessible by individuals who have a business need for information in the system

Preserve the transmission and receipt data specified in agency instructions

Permit transfer of permanent records to NARA

Source: 36 C.F.R. § 1234.24(b)(1).

If agency e-mail systems do not have the required recordkeeping features, either agencies must copy e-mail records to a separate electronic recordkeeping system, or they must print e-mail messages (including associated transmission information that is needed for purposes of context) and file the copies in traditional paper recordkeeping files.

<sup>&</sup>lt;sup>14</sup>The requirements for informing and training staff on identifying records are given in 36 C.F.R. § 1222.20.

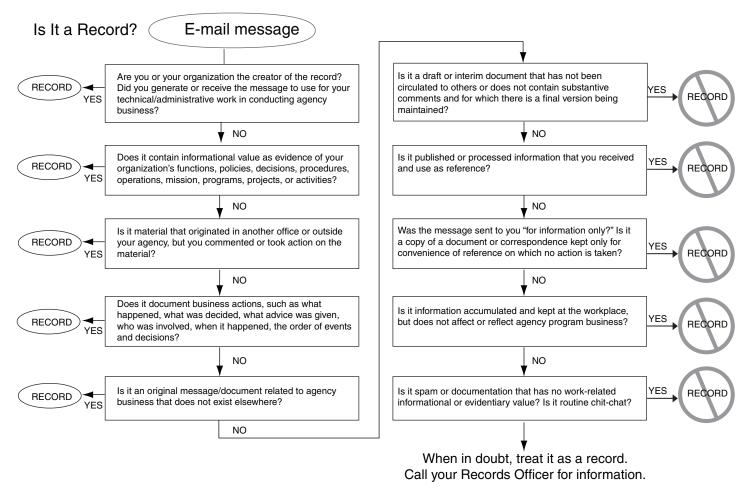
<sup>&</sup>lt;sup>15</sup>These are e-mail records with very short-term (180 days or less) NARA-approved retention periods (under the authority of General Record Schedule 23, Item 7, or a NARA-approved agency records schedule). Agencies may elect to manage such records on the e-mail system itself, without the need to copy the record to a recordkeeping system, provided that (1) users do not delete the messages before the expiration of the NARA-approved retention period, and (2) the system's automatic deletion rules ensure preservation of the records until the expiration of the NARA-approved retention period.

NARA's guidance allows agencies to use either paper or electronic recordkeeping systems for record copies of e-mail messages, depending on the agencies' business needs. Each of the required features listed in table 1 is important because it helps ensure that e-mail records remain both accessible and usable during their useful lives. For example, it is essential to be able to classify records according to their business purpose so that they can be retrieved in case of mission need. Further, if records cannot be retrieved easily and quickly, or they are not retained in a usable format, they do not serve the mission or historical purpose that led to their being preserved. In many cases, e-mail systems do not have the features in the table. If e-mail records are retained in such systems and not in recordkeeping systems, they may be harder to find and use, as well as being at increased risk of loss from inadvertent or automatic deletion. Agencies must also have procedures that specifically address the destruction of e-mail records. In particular, e-mail records may not be deleted or otherwise disposed of without prior authority from NARA.<sup>16</sup> (Recall that not all e-mail is record material. Agencies may destroy nonrecord e-mail.) Agencies can dispose of e-mail records in three situations: First, agencies are authorized to dispose of e-mail records with very short-term (transitory) value that are stored in e-mail systems at the end of their retention periods (as mentioned earlier). Second, for other records in email systems, NARA authorizes agencies to delete the version in the e-mail system after the record has been preserved in a recordkeeping system along with all appropriate transmission data. Finally, agencies are authorized to dispose of e-mail records in the recordkeeping system in accordance with the appropriate records schedule. If the records in the recordkeeping system are not scheduled, the agency must schedule them before they can be disposed of. Management of E-Mail Because of its nature, e-mail can present particular challenges to records management. First, the information contained in e-mail records is not **Records Poses Challenges** uniform. This is in contrast to many information systems, particularly those in computer centers engaged in large-scale data processing, which

<sup>16</sup>44 U.S.C. § 3303a.

contain structured data that generally can be categorized into a relatively limited set of logical groupings. The information in e-mail systems, on the other hand, is not structured in this way: it may concern any subject or function and document various types of transactions. As a result, in many cases, decisions on which e-mail messages are records must be made individually.

The kinds of considerations that may go into determining the record status of an e-mail message are illustrated in figure 1. As shown by the decision tree in the figure (developed at Sandia National Laboratories), agency staff have to be aware of the defining features of a record in order to make these decisions.





Source: NARA Toolkit for Managing Electronic Records. Adapted from Anna W. Nusbaum, Sandia National Laboratories.

Second, the transmission data associated with an e-mail record—including information about the senders and receivers of messages, the date the message was sent, and any attachments to the messages—provide context that may be crucial to understanding the message. Thus, as NARA's e-mail regulations and guidance reflect, transmission data must be retained, and attachments are defined as part of the e-mail record.

Third, a given message may be part of an exchange of messages between two or more people within or outside an agency, or even of a string (sometimes branching) of many messages sent and received on a given topic. In such cases, agency staff need to decide which message or messages should be considered records and who is responsible for storing them in a recordkeeping system.

Finally, the large number of federal e-mail users and high volume of emails increase the management challenge. According to NARA, the use of e-mail results in more records being created than in the past, as it often replaces phone conversations and face-to-face meetings that might not have been otherwise recorded. E-mail may also replace other types of written communications, such as letters and memorandums.

Whether agencies use paper-based or electronic recordkeeping systems, individual users generally make decisions (based on considerations such as those in the figure) on what messages they judge to be records. In paper-based systems, users then print and file e-mail records—with appropriate transmission data—in the appropriate file structure (generally corresponding to record series or schedule). In electronic systems, the particular steps to file the record would vary depending on the particular type of system and its degree of integration with the agency's other information systems.<sup>17</sup> Although details vary, an electronic recordkeeping system, like a paper-based system, requires that a filing structure has been established by which records can be associated with the appropriate series.

The advantages of using a paper-based system for record copies of e-mails are that this approach takes advantage of the recordkeeping system already in place for the agency's paper files and requires little or no technological investment. The disadvantages are that a paper-based approach depends on manual processes and requires electronic material to be converted to paper, potentially losing some features of the electronic original; these processes may be especially burdensome if the volume of email records is large.

The advantage of using an electronic recordkeeping system, besides avoiding the need to manage paper, is that it can be designed to capture certain required data (such as e-mail transmission data) automatically.

<sup>&</sup>lt;sup>17</sup>For example, the recordkeeping system might be a stand-alone system, it might be integrated into an e-mail application, it might be a component of a more general electronic document management system, or it might be a function of an enterprisewide electronic information management system. NARA, *What is Electronic Recordkeeping?* www.archives.gov/records-mgmt/policy/prod1b.html.

Electronic recordkeeping systems also make searches for records on particular topics much more efficient. In addition, electronic systems that are integrated with other applications may have features that make it easier for the user to identify records and that potentially could provide automatic or partially automatic classification functions.<sup>18</sup> However, as with other information technology investments, acquiring an electronic recordkeeping system requires careful planning and analysis of agency requirements and business processes; in addition, electronic recordkeeping raises the issue of maintaining electronic information in an accessible form throughout its useful life.<sup>19</sup> Finally, like paper-based systems, electronic recordkeeping systems must be used properly by employees to be effective.

These challenges have been recognized by NARA and the records management community in numerous studies and articles.<sup>20</sup> A 2001 survey of federal recordkeeping practices conducted by a contractor—SRA International—for NARA concluded, among other things, that managing email was a major records management problem and that the quality of recordkeeping varied considerably across agencies.<sup>21</sup> The authors also commented on features of agency missions that lead to strong recordkeeping practices: "When agencies have a strong business need for good recordkeeping, such as the threat of litigation or an agency mission

<sup>20</sup>For example, Robert F. Williams and Lori J. Ashley, Cohasset Associates Inc., 2005 Electronic Records Management Survey—A Renewed Call to Action, Cohasset/ARMA/AIIM White Paper (2005); Giovanna Patterson and J. Timothy Sprehe, "Principal Challenges Facing Electronic Records Management in Federal Agencies Today," Government Information Quarterly, Vol. 19 (2002), pp 307–315; available at www.sciencedirect.com; The Sedona Conference® Working Group on Best Practices for Electronic Document Retention & Production, The Sedona Guidelines: Best Practice Guidelines & Commentary for Managing Information & Records in the Electronic Age (2005), www.thesedonaconference.org/content/miscFiles/TSG9\_05.pdf.

<sup>21</sup>SRA International, Inc., *Report on Current Recordkeeping Practices with the Federal Government*, a report sponsored by NARA (Dec. 10, 2001) www.archives.gov/records-mgmt/pdf/report-on-recordkeeping-practices.pdf.

<sup>&</sup>lt;sup>18</sup>According to Gartner Research, "What enterprises really need (and want), is a mechanism that automatically classifies messages by records management type ... without user intervention." However, such technology is "in its infancy," as of August 2007, although Gartner expected it to mature rapidly because of high demand. Gartner Research, *Best Practices in Records Management: FAQs*, G00149526 (Aug. 17, 2007).

<sup>&</sup>lt;sup>19</sup>That is, if the hardware, software, or media required to access the information become obsolete or deteriorate, the information must be migrated to hardware, software, or media that continue to be accessible.

that revolves around maintaining 'case' files, then recordkeeping practices tend to be relatively strong with regard to the records involved." In addition, the study concluded that for many federal employees, the concept of a "record" and what should be scheduled and preserved was not clear.

A 2005 survey of federal agencies' policy and practices for electronic records management, funded in part by NARA, concluded that procedures for managing e-mail were underdeveloped.<sup>22</sup> The study found that most of the surveyed offices had not developed electronic recordkeeping systems, but were instead maintaining recordkeeping copies of e-mail and other electronic documents in paper format. However, all of the offices also maintained electronic records (frequently electronic duplicates of paper records). According to the study team, agencies did not establish electronic recordkeeping systems partly because of a lack of support and resources, and the complexity of implementing such systems increased with the size of the agency. As a result, organizations were maintaining unsynchronized parallel paper and electronic systems, resulting in extra work, confusion regarding which is the recordkeeping copy, and retention of many records beyond their disposition date. The study team also concluded that disposition of electronic records was too cumbersome and uncertain. According to the report, employees delete electronic records, such as e-mails, one at a time, a cumbersome process which may result in retention of too many records for too long or premature disposition that is inconsistent with approved retention schedules. (This is in contrast to records disposition in a record keeping system, in which categories of temporary records may be disposed of at the end of their retention periods.) The report also discussed NARA's role in promoting agencies' adoption of electronic recordkeeping systems.

Commenting on these points, NARA expressed the view that for agencies that maintain paper as the record copy, the early destruction of electronic copies was not a significant problem because such copies generally have very short term retentions, and no information is lost.<sup>23</sup> It considered that

<sup>&</sup>lt;sup>22</sup>Center for Information Policy/College of Information Studies/University of Maryland, Best Practices in Electronic Records Management: A Survey and Report on Federal Government Agency's Recordkeeping Policies and Practices, a report sponsored by NARA (Dec. 19, 2005) www.archives.gov/records-mgmt/initiatives/umd-survey.html.

<sup>&</sup>lt;sup>23</sup>NARA, NARA Review of UMD CIP Report "Best Practices in Electronic Records Management," www.archives.gov/records-mgmt/initiatives/umd-survey-nara-review.pdf.

the overly long retention of electronic copies did raise concerns regarding legal discovery and compliance with requests under the Freedom of Information Act or the Privacy Act. In these circumstances, agencies are required to search for all information, not just information in recordkeeping systems; thus, maintaining large volumes of nonrecord material increases this burden.

Most recently, a NARA study team examined in 2007 the experiences of five federal agencies (including itself) with electronic records management applications, with a particular emphasis on how these organizations used these applications to manage e-mail.<sup>24</sup> The purpose of the study was to gather information on the strategies that organizations are using that may be useful to others. Among the major conclusions from the survey was that implementing an electronic records management application requires considerable effort in planning, testing, and implementation, and that although the functionality of the software product itself is important, other factors are also crucial, such as agency culture and the quality of the records management system in place. With regard to e-mail in particular, the survey concluded that for some agencies, the volume of e-mail messages created and received may be too overwhelming to be managed at the desktop by thousands of employees across many sites using a records management application alone, and that e-mail messages can constitute the most voluminous type of record that is filed into these applications. Finally, further study was recommended of technologies that are being used to manage e-mail and what federal agencies are doing with their record e-mail messages.

NARA is planning to perform such a study in 2008. According to NARA, the study will take a close look at how selected agencies are implementing electronic recordkeeping for their program records, including those e-mail messages that need to be retained and managed as federal records. The study will look at electronic recordkeeping projects that have a records management application in place as well as other solutions that provide recordkeeping functionality. In both cases, NARA plans to explore how e-mail messages in particular are identified and managed as records. According to NARA officials, they have begun planning for the study and identifying agencies to be included; they expect to have the report completed by the end of September 2008.

<sup>&</sup>lt;sup>24</sup>NARA, A Survey of Federal Agency Records Management Applications 2007 (Jan. 22, 2008).

	Such a study could provide useful information to help NARA develop additional guidance to agencies looking for electronic solutions for records management of e-mail and other electronic records. As the earlier studies suggest, implementing such solutions is not a simple or easy process. Although NARA has referred to the decision to move to electronic recordkeeping as inevitable, it emphasizes that the timing of the decision depends on an agency's specific mission and circumstances. <sup>25</sup>
NARA Has Taken Action to Address Management of Electronic Records, Including E-Mail	For the last several years, NARA's records management program has increasingly reflected the importance of electronic records and recordkeeping. For example, NARA has undertaken a redesign of its records management activities, <sup>26</sup> including (among other things) the following three activities, which are significant for management of electronic records, including e-mail:
•	NARA established flexible scheduling (the so-called "big bucket" approach described earlier), under which agencies can schedule records at any level of aggregation that meets their business needs. By simplifying disposition instructions, "big bucket" schedules have advantages for electronic records management; filing e-mail records under a "big bucket" system, for example, is simplified because users can be presented with fewer filing categories. <sup>27</sup>
•	NARA developed e-mail regulations that eliminated the previous requirement to file transitory e-mail dealing with routine matters in a formal agency recordkeeping system. According to NARA, this change would allow agencies to focus their resources on managing e-mail that is important for long-term documentation of agency business. <sup>28</sup> The change
	<sup>25</sup> NARA, "Why Federal Agencies Need to Move Towards Electronic Recordkeeping," www.archives.gov/records-mgmt/policy/prod1afn.html.
	<sup>26</sup> The Archives' redesign framework is presented in <i>NARA's Strategic Directions for Federal Records Management</i> (July 31, 2003), www.archives.gov/records-mgmt/initiatives/strategic-directions.html (accessed Feb. 7, 2008).
	<sup>27</sup> Other advantages are that big bucket schedules simplify managing agency records by synchronizing retentions and dispositions of records in the context of their work processes or business functions rather than by individual records series or electronic systems, and they may reduce the need to resubmit schedules for new and unscheduled records as long as these are included in a previously scheduled business process.
	<sup>28</sup> NARA, <i>NARA's Strategic Directions for Federal Records Management: Status Report</i> (Sept. 20, 2004) www.archives.gov/records-mgmt/initiatives/strategic-directions-status-sept2004.html.

was reflected in a revision to General Records Schedule 23 that explicitly included very short-term temporary e-mail messages.<sup>29</sup> The final rule became effective on March 23, 2006.

NARA developed regulations and guidance to make retention schedules media neutral. According to NARA, its objective was to eliminate routine rescheduling work<sup>30</sup> so that agencies and NARA could focus their resources on high records management priorities. Under its revised regulations, in effect as of December 2007, new records schedules would be media neutral unless otherwise specified. At the same time, NARA revised General Records Schedule 20 (which provides disposition authorities for electronic records) to expand agencies' authority to apply previously approved schedules to electronic records and to dispose of hard copy records that have been converted to an electronic format, among other things.<sup>31</sup>

## Our Prior Work Has Addressed Electronic Records Management

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In July 1999, we reported that NARA and federal agencies were facing the substantial challenge of managing and preserving electronic records in an era of rapidly changing technology.<sup>32</sup> In that report, we stated that in addition to handling the burgeoning volume of electronic records, NARA and the agencies would have to address several hardware and software issues to ensure that electronic records were properly created, maintained, secured, and retrievable in the future. We also noted that NARA did not have governmentwide data on the records management capabilities and programs of all federal agencies. As a result, we recommended that NARA conduct a governmentwide survey of agencies' electronic records management programs and use the information as input to its efforts to reengineer its business processes.

<sup>29</sup>NARA, *GRS Transmittal No. 15* (Sept. 14, 2005) www.archives.gov/records-mgmt/ardor/grs-trs15.html.

<sup>31</sup>NARA, *GRS Transmittal No. 18* (Dec. 14, 2007) www.archives.gov/records-mgmt/ardor/grs-trs18.html.

<sup>32</sup>GAO, National Archives: Preserving Electronic Records in an Era of Rapidly Changing Technology, GGD-99-94 (Washington, D.C.: July 19, 1999).

<sup>&</sup>lt;sup>30</sup>For example, when switching from a paper recordkeeping system to an electronic system, it had generally been necessary to reschedule records; under media neutrality, this requirement would be reduced. Instead, NARA would specify when it would be necessary for agencies to reschedule records when switching from a paper recordkeeping system to an electronic system.

NARA subsequently undertook efforts to assess governmentwide records management practices and study the redesign of its business processes. As mentioned earlier, in 2001 NARA completed an assessment of governmentwide records management practices, as we had recommended. NARA's assessment of the federal recordkeeping environment concluded that although agencies were creating and maintaining records appropriately, most electronic records remained unscheduled, and records of historical value were not being identified and provided to NARA for archiving.

In 2002, we reported that factors contributing to the problems of managing and preserving electronic records included records management guidance that was inadequate in the current technological environment, the low priority often given to records management programs, and the lack of technology tools to manage electronic records.<sup>33</sup> In addition, NARA did not perform systematic inspections of agency records management, so that it did not have comprehensive information on implementation issues and areas where guidance needed strengthening. Although NARA had plans to improve its guidance and address technology issues, these did not address the low priority generally given to records management programs nor the inspection issue.

With regard to inspections, we noted that in 2000, NARA had replaced agency evaluations (inspections) with a new approach—targeted assistance—because it considered that its previous approach to evaluations had been flawed: it reached only a few agencies, it was often perceived negatively, and it resulted in a list of records management problems that agencies then had to resolve on their own. Under targeted assistance, NARA entered into partnerships with federal agencies to provide them with guidance, assistance, or training in any area of records management.<sup>34</sup> Despite the possible benefits of such assistance to the targeted agencies, however, we concluded that it was not a substitute for systematic inspections. Only agencies requesting assistance were evaluated, and the scope and focus of the assistance were determined not by NARA but by the requesting agency. Thus, it did not provide systematic and comprehensive information for assessing progress over time.

<sup>&</sup>lt;sup>33</sup>GAO, *Information Management: Challenges in Managing and Preserving Electronic Records*, GAO-02-586 (Washington, D.C.: June 17, 2002).

<sup>&</sup>lt;sup>34</sup>Services offered include expedited review of critical schedules, tailored training, and help in records disposition and transfer.

	To address the low priority generally given to records management programs, we recommended that NARA develop a strategy for raising agency senior management awareness of and commitment to records management. To address the inspection issue, we recommended that NARA develop a strategy for conducting systematic inspections of agency records management programs to (1) periodically assess agency progress in improving records management programs and (2) evaluate the efficacy of NARA's governmentwide guidance.
	In response to our recommendations, NARA devised a strategy for raising awareness among senior agency management of the importance of good federal records management, as well as a comprehensive approach to improving agency records management that included inspections and identification of risks and priorities. NARA also took steps to improve federal records management programs by updating its guidance to reflect new types of electronic records. In 2003, we testified that the plan for improving agency records management did not include provisions for using inspections to evaluate the efficacy of its governmentwide guidance, and an implementation plan for the approach had not yet been established. <sup>35</sup> NARA later addressed these shortcomings by developing an implementation plan that included using agency inspections to evaluate the efficacy of its guidance, with such inspections to be undertaken based on a risk-based model, government studies, or media reports. <sup>36</sup> Such an approach, if appropriately implemented, had the potential to help avoid the weaknesses in records management programs that led to the scheduling and disposition problems that we and NARA had described in earlier work.
NARA's Oversight Activities Have Been Limited	To fulfill its responsibility under the Federal Records Act for oversight of agency records management programs, NARA planned to conduct activities including inspections, studies, and reporting. However, despite NARA's plans, in recent years its oversight activities have been primarily limited to performing studies. Although it has performed or sponsored six records management studies since 2003, it has not conducted any
	<ul> <li><sup>35</sup>GAO, Electronic Records: Management and Preservation Pose Challenges, GAO-03-936T (Washington, D.C.: July 8, 2003).</li> <li><sup>36</sup>GAO, Electronic Records Archives: The National Archives and Records Administration's Fiscal Year 2006 Expenditure Plan, GAO-06-906 (Washington, D.C.: Aug. 18, 2006).</li> </ul>

	inspections since 2000. In addition, although NARA's reporting to the Congress and OMB has generally described progress in improving records management at individual agencies and provided an overview of some of its major records management activities, it has not consistently provided evaluations of responses by federal agencies to its recommendations, as required, or details on records management problems or recommended practices that were discovered as a result of inspections, studies, or targeted assistance projects. Without a consistent oversight program that provides it with a governmentwide perspective, NARA has limited assurance that agencies are appropriately managing the records in their custody, thus increasing the risk that important records will be lost.
NARA Has Oversight Responsibilities Regarding Federal Records Management	Oversight is a key activity in governance that addresses whether organizations are carrying out their responsibilities and serves to detect other shortcomings. Our reports emphasize the importance of effective oversight of government operations by individual agency management, by agencies having governmentwide oversight responsibilities, and by the Congress. Various functions and activities may be part of oversight, including monitoring, evaluating, and reporting on the performance of organizations and their management and holding them accountable for results.
	The Federal Records Act gave NARA responsibility for oversight of agency records management programs by, among other functions, making it responsible for conducting inspections or surveys of agencies' records and records management programs and practices; conducting records management studies; and reporting the results of these activities to the Congress and OMB. In particular, the reports are to include evaluations of responses by agencies to any recommendations resulting from inspections or studies that NARA conducts and, to the extent practicable, estimates of costs to the government if agencies do not implement such recommendations. According to NARA, it planned to carry out its oversight responsibilities using inspections, studies, and reporting. Specifically, in 2003, <sup>37</sup> NARA stated that it would

<sup>&</sup>lt;sup>37</sup>NARA, NARA's Strategic Directions for Federal Records Management (July 31, 2003).

	<ul> <li>perform inspections of agency records and records management programs;</li> <li>conduct studies that focus on cross-government issues, analyze and identify best practices, and use the results to develop governmentwide recommendations and guidance; and</li> <li>report to the Congress and OMB on problems and recommended practices discovered as part of inspections, studies, and targeted assistance projects.</li> </ul>
NARA No Longer Performs Inspections of Agency Records Management Programs	Although inspections were included in NARA's oversight plans in 2003, NARA has not conducted any since 2000. <sup>38</sup> NARA laid out a strategy for performing inspections and studies in 2003 as part of its records management redesign efforts. <sup>39</sup> According to this strategy, NARA anticipated undertaking inspections only under what it termed exceptional circumstances: that is, if (1) agencies have high-level records management problems that put at risk federal records that protect rights, assure accountability, or document the national experience, and (2) agencies refuse targeted assistance from NARA and fail to mitigate or otherwise effectively deal with such risks. In other words, NARA considered inspections its tool of last resort: to be used when the risk to records was deemed high and other tools (such as targeted assistance and training) failed to mitigate the risk to records. Under this strategy, NARA planned to determine when to undertake inspections based on its risk-based resource allocation model (or when it learned through other means of a clear and egregious records management problem in an agency or line of business). Using this model, developed in 2003, NARA's Resource Allocation Project performed a governmentwide assessment in 2004 of high-priority federal records and records programs. After reviewing program areas and work processes of
	<sup>38</sup> One inspection, initiated in 1995, remains officially open. An evaluation report on this inspection, which examined the Central Intelligence Agency's records management program, was completed in March 2000. However, not all recommendations from the evaluation have been closed. According to NARA, the agency has addressed all the policy and guidance recommendations, and the open recommendations mainly concern the transfer of the agency's records to NARA. NARA told us that it is working with the agency to close these recommendations.

<sup>&</sup>lt;sup>39</sup>NARA, Strategic Directions: Inspections and Studies of Records Management in Federal Agencies (October 2003).

the government (as opposed to organizational units),<sup>40</sup> the project identified the business processes, subfunctions, and agency activities that were likely to generate the majority of high-priority records. Based on input and assessments from NARA staff with expertise in the subfunctions and associated agencies, the project then rated the subfunctions according to three criteria for establishing resource priorities:

- the risk to records (based on such factors as whether the subfunctions or associated agencies had experienced major scheduling issues or known problems, such as allegations of unauthorized destruction of records<sup>41</sup>),
- the level of significance of the records to rights and accountability, and
- the likelihood that the subfunction would generate permanent records (and if so, their volume and significance).

According to the final report on the project,<sup>42</sup> this assessment showed that the risks to records were being addressed and managed by the Archives' own records management activities and those of the agencies. As a result, the Resource Allocation Project did not lead to the identification of records management risks that met the new inspection criteria.<sup>43</sup> Instead, NARA applied its resources to other activities that it considered more effective and less resource-intensive than the inspections it undertook in the past. These include regular contacts between appraisal archivists and agencies, updated guidance information, and training.

However, the Resource Allocation Project was primarily based on NARA's in-house information sources and expertise. Although this information and expertise may be considerable and collecting and assessing it potentially

<sup>&</sup>lt;sup>40</sup>NARA used as a starting point the Business Reference Model of governmental activity developed by OMB as part of the Federal Enterprise Architecture. The Federal Enterprise Architecture is a comprehensive business-driven blueprint of the entire federal government. It consists of a set of interrelated "reference models" designed to facilitate cross-agency analysis and the identification of duplicative investments, gaps, and opportunities for collaboration within and across agencies.

<sup>&</sup>lt;sup>41</sup>Under 44 U.S.C. Part 3106, federal agencies are required to notify the Archivist of any alleged unauthorized disposition of records. NARA establishes a case to track each allegation and communicates with the agency until the issue is resolved.

<sup>&</sup>lt;sup>42</sup>NARA, Federal Government-wide Resource Allocation Project Core Team Final Project Report (Sept. 17, 2004).

<sup>&</sup>lt;sup>43</sup>According to NARA, the results of the Resource Allocation Project have been used for planning where to focus its scheduling efforts and other records management activities.

valuable, it is not a substitute for examinations of agency programs, surveys of practices, agency self-assessments, or other external sources of information. Further, although the final report on the 2004 project included important lessons learned for improving future assessments, NARA did not set up a process for continuing the effort and applying the lessons learned to updating the assessment or validating its results.

Officials had also stated that targeted assistance was a tool that NARA would use in preference to inspections to solve urgent records management problems and that the results of the Resource Allocation Project were also to be used in determining where to use this tool. However, NARA's use of targeted assistance has declined significantly over the past 5 years. (NARA reported that in 2002, 77 projects were opened and 76 completed;<sup>44</sup> in contrast, 4 were opened and none completed in 2007.) Officials ascribed the reduced emphasis on targeted assistance projects to various factors, including competing demands (such as work on the development of its advanced electronic records archive<sup>45</sup> and on helping agencies to schedule electronic records<sup>46</sup>), the difficulty of getting agencies to devote resources to the projects, and the removal of numerical targets for targeted assistance projects, which occurred when NARA revised performance metrics to emphasize results rather than

<sup>&</sup>lt;sup>44</sup>NARA, Ready Access to Essential Evidence, 2004 Performance and Accountability Report (2004).

<sup>&</sup>lt;sup>45</sup>We have issued several reports on ERA and its development since 2002: GAO, Information Management: Challenges in Managing and Preserving Electronic Records, GAO-02-586 (Washington, D.C.: June 17, 2002); Records Management: National Archives and Records Administration's Acquisition of Major System Faces Risks, GAO-03-880 (Washington, D.C.: Aug. 22, 2003); Records Management: Planning for the Electronic Records Archives Has Improved, GAO-04-927 (Washington, D.C.: September 23, 2004); Information Management: Acquisition of the Electronic Records Archives Is Progressing, GAO-05-802 (Washington, D.C.; July15, 2005); Electronic Records Archives: The National Archives and Records Administration's Fiscal Year 2006 Expenditure Plan, GAO-06-906 (Washington, D.C.: Aug. 18, 2006); Information Management: The National Archives and Records Administration's Fiscal Year 2007 Expenditure Plan, GAO-07-987 (Washington, D.C.: July 27, 2007).

<sup>&</sup>lt;sup>46</sup>NARA Bulletin 2006-02 set deadlines, as required by the E-Government Act of 2002, for agencies to schedule electronic records. Specifically, by September 30, 2009, agencies must have NARA-approved records schedules for all records in existing information systems, and they must ensure that records management and archival functionality are incorporated into the design, development, and implementation of new electronic systems.

	quantity. <sup>47</sup> According to NARA, it also works with agencies to address critical records management issues outside formal targeted assistance arrangements. In addition, it identifies and investigates allegations of unauthorized destruction of federal records.		
	Thus, neither inspections nor targeted assistance have made significant contributions to NARA's oversight of agency records management. Without a more comprehensive method of evaluating agency records management programs, NARA lacks assurance that agencies are effectively managing records throughout their life cycle.		
NARA Has Performed Several Records Management Studies	NARA has performed records management studies in accordance with its 2003 plan. According to the plan, it was to conduct records management studies to focus on cross-government issues, to identify and analyze best practices, and to develop governmentwide recommendations and guidance. <sup>48</sup> In addition, NARA planned to undertake records management studies when it believed an agency or agencies in a specific line of business were using records management practices that could benefit the rest of a specific line of business or the federal government as a whole. <sup>49</sup>		
	Since developing its 2003 plan, NARA has conducted or sponsored six records management studies (see table 2). <sup>50</sup>		

<sup>48</sup>NARA, NARA's Strategic Directions for Federal Records Management (July 31, 2003).

<sup>&</sup>lt;sup>47</sup>An additional factor, according to officials, was the challenge of developing memorandums of understanding with agencies (on each project's requirements and the resources that the agency and NARA would undertake to apply to it), because NARA generally worked with agency records officers, who often did not have the authority to sign such agreements. According to NARA, in 2006, it eased this requirement so that instead of a signed memorandum of understanding, it would suffice that a project have some form of documentation (such as an e-mail) indicating that both sides agreed to the project goals, requirements, and resources.

<sup>&</sup>lt;sup>49</sup>NARA, Strategic Directions: Inspections and Studies of Records Management in Federal Agencies (October 2003).

<sup>&</sup>lt;sup>50</sup>The table does not include the 2001 SRA study described earlier, which was conducted before NARA developed its 2003 plan. NARA did not perform records management studies in 2002 and 2003.

Title	Date	Comments
Research and Development Records: Maintenance, Use and Disposition in Federal Agencies	September 30, 2004	Report prepared to assist in developing and incorporating guidance on the appraisal of research and development (R&D) records
Records Maintenance and Disposition in Headquarters Air Force Offices	January 2005	Study focused on Air Force Headquarters recordkeeping practices; included recommendations to the agency
Environmental Health and Safety Records: Maintenance, Use, and Disposition in Federal Agencies	November 4, 2005	Report prepared to provide the basis for updating and expanding the existing guidance on the appraisal of environmental health and safety records
Best Practices in Electronic Records Management: A Survey and Report on Federal Government Agencies' Recordkeeping Policy and Practices	December 19, 2005	Results of survey data collected from federal and state agencies and one private sector organization regarding their individual policies and practices for electronic records management (study conducted by the University of Maryland Center for Information Policy)
NARA Review of the Department of Energy R&D Schedule and Its Implementation by DOE Laboratories	August 2006	Examination of Energy laboratories' implementation of R&D records schedule, particularly in regard to project records, and to suggest any needed improvements in the schedule; included recommendations to the agency
A Survey of Federal Agency Records Management Applications 2007	January 22, 2008	Results of a survey of five federal agencies that were implementing records management application (software) products to manage their electronic records, with particular attention on e-mail

#### Table 2: NARA Studies Performed in the Last 5 Years

Source: GAO analysis of NARA information.

Most of these studies were focused on records management issues with wide application.<sup>51</sup> For example, two were related to helping NARA improve its guidance on particular types of records—health and safety records, and research and development (R&D) records. Another two were limited in scope to components of a single agency, but they addressed issues with potentially broad application and included conclusions

<sup>&</sup>lt;sup>51</sup>Although two were limited in scope to components of a single agency, they addressed issues with potentially broad application and included conclusions regarding factors that needed to be considered in the appraisal of given types of records.

regarding factors that needed to be considered in the appraisal of given types of records.

NARA Has Not Reported on Its Oversight Activities as Required	Under the Federal Records Act, NARA is responsible for reporting the results of its records management activities to the Congress and OMB, including evaluations of responses by agencies to any recommendations resulting from its inspections or studies and (where practicable) estimates of costs if its recommendations are not implemented. Further, NARA's plan for carrying out its oversight responsibilities states that it will report to the Congress and OMB on problems and recommended practices discovered as part of inspections, studies, and targeted assistance projects. <sup>52</sup> According to NARA, it fulfills its statutory reporting requirement through annual Performance and Accountability Reports, <sup>53</sup> which include sections on "Federal Records Management Evaluations."
	However, although NARA has issued reports on its records management studies, the Federal Records Management Evaluations sections of the Performance and Accountability Reports have not included the studies' results or evaluations of responses by agencies to its recommendations. Instead, the reports have generally provided an overview of NARA's major records management activities, as well as describing noteworthy records management progress at individual agencies. For example, the report for fiscal year 2007 provided statistics on the appraisal and scheduling of electronic records systems and listed agencies that had scheduled electronic records or transferred permanent electronic records to NARA during the fiscal year.
	Elsewhere in the reports, NARA mentioned four of the six records management studies as part of its reporting on records management goals. However, it included few details on the results of these studies regarding the records management problems or recommended practices that they uncovered. For example, in the fiscal year 2005 Performance and Accountability Report, NARA reported that it had completed a January 2005 study on Air Force Headquarters offices (see table 2), but NARA did not discuss the results, and later reports did not discuss actions taken in

 $<sup>^{52}</sup>$ NARA, NARA's Strategic Directions for Federal Records Management (July 31, 2003).

<sup>&</sup>lt;sup>53</sup>Since fiscal year 2004, NARA has prepared annual Performance and Accountability Reports. In fiscal year 2003 and earlier, it produced separate Performance Reports and Annual Reports.

response to its recommendations. Similarly, the fiscal year 2007 Performance and Accountability Report did not describe any actions that the Department of Energy had taken in response to an August 2006 study.<sup>54</sup>

Also, in 2007, NARA stopped reporting on its targeted assistance projects. In prior years, its Performance and Accountability Reports generally provided statistics on targeted assistance projects and described their general goals, although the reports did not generally discuss problems or recommended practices resulting from them. In the fiscal year 2007 report, NARA stated that the strategies described in its Strategic Directions, including targeted assistance, had become part of its standard business practices and would no longer be highlighted individually. However, as mentioned earlier, the number of targeted assistance projects had declined significantly by that time.

The Director and senior officials from NARA's Modern Records Program agreed that the annual reports did not specify the problems and recommended practices discovered as part of inspections, studies, and targeted assistance projects. According to these officials, the annual Performance and Accountability Reports have been focused on positive news, and NARA has struggled with developing an objective way to report negative news about agencies' records management. The officials attributed this difficulty to the agency's conservatism in this regard.

NARA's limited use of oversight tools and incomplete reporting on the specific results of its oversight activities can be attributed to an organizational preference for using persuasion and cooperation when working with agencies. This preferred approach is consistent with NARA's reasons (as we noted in 2003) for replacing agency evaluations (inspections) with targeted assistance: among these reasons was that inspections were perceived negatively by agencies. NARA officials have said that they prefer to use "carrots, rather than sticks." NARA officials added that full-scale inspections were resource intensive and took several years to complete, and that agencies took years to address NARA's recommendations.

Although, as described earlier, NARA regularly works with agencies on scheduling and disposition of records (activities related to the end of the

<sup>&</sup>lt;sup>54</sup>NARA, Preserving the Past to Protect the Future: 2007 Performance and Accountability Report (2007).

records life cycle), officials agreed that these activities provide limited insight into records management at earlier stages—that is, creation, maintenance, and use. The officials also agreed that their work with agencies on scheduling records does not fulfill the Archivist's responsibility under the Federal Records Act to conduct inspections or surveys of agency records and records management programs and practices. Further, by giving the Archivist the responsibility to report to the Congress and OMB on records management issues, the Federal Records Act provides NARA with a tool for holding agencies accountable, a key aspect of oversight. However, NARA has been reluctant to use this tool, limiting its ability to determine whether federal agencies are carrying out their records management responsibilities. Without more specific and comprehensive information about how agencies are managing their records and without the means to hold agencies accountable for shortcomings, NARA's ability to identify and address common records management problems is impaired. As a result, there is reduced assurance that records are adequately managed and that important records are not being lost.

Agencies Reviewed Generally Used Paper Processes for E-Mail Records Management, but Three Are Moving Toward Electronic Recordkeeping The four agencies reviewed—the Department of Homeland Security (DHS); the Environmental Protection Agency (EPA); the Federal Trade Commission (FTC); and the Department of Housing and Urban Development (HUD)—generally preserved e-mail records through paperbased processes, although one agency—EPA—is in the process of deploying an electronic content management system that is to be used for managing e-mail messages that are agency records;<sup>55</sup> two others have long-term plans to develop electronic recordkeeping. Three of the four agencies also used electronic systems to manage documents, correspondence, and so on,<sup>56</sup> but these systems generally did not have recordkeeping features. Each of the business units that we reviewed (one at each agency) maintained "case" files to fulfill its mission that were used for recordkeeping. The practice at the units was to include e-mail printouts in

<sup>&</sup>lt;sup>55</sup>At the time of our review, use of the electronic system was voluntary and not yet widespread.

<sup>&</sup>lt;sup>56</sup>Various types of nonrecordkeeping electronic systems offer computerized management of electronic and paper-based documents. For example, electronic document management systems may be used to track and store electronic documents and/or images of paper documents. Such systems may include a system to convert paper documents to electronic form, a mechanism to capture documents from authoring tools, a database to organize storage, and a search mechanism to locate the documents.

the case files if they contained information necessary to document the case—that is, record material. These printouts included transmission data and distribution lists, as required.

*DHS*: DHS primarily uses "print and file" recordkeeping for all records. None of the department's e-mail systems is a recordkeeping system; accordingly, they may be used to store only transitory e-mail records. Officials from the Office of the DHS Chief Information Officer (CIO) told us that DHS e-mail systems house transitory e-mails and retain them for at least 90 days. In addition, according to the CIO office, although employees can currently access Web-based and Internet-accessible private e-mail systems, the department is taking steps to restrict or remove this access.

Although its current recordkeeping is generally paper-based, DHS has begun planning for an enterprisewide Electronic Records Management System. According to the business case submitted by DHS to OMB to justify the proposed investment, the proposed system is to allow electronic storage and retrieval of records by authorized staff throughout DHS and permit the elimination of paper file copies. According to the department's senior records officer, DHS's current records schedules are now media neutral. DHS's records management handbook also provides instructions for both electronic and paper e-mail recordkeeping.

In addition, DHS CIO officials told us that the department has implemented several electronic knowledge and document management systems, at least two of which have recordkeeping features but are not used for e-mail recordkeeping.

E-mail records were maintained in paper at the DHS business unit reviewed, the Washington Regional Office of Detention and Removal Operations under Immigration and Customs Enforcement (ICE). The primary responsibility of the Office of Detention and Removal Operations is to identify, apprehend, and remove illegal aliens from the United States. To fulfill its mission, the business unit maintained paper-based case files, and these files were used for recordkeeping.

To store deportation case information, the unit uses the so-called "alien files" or "A-files." These files are created by DHS's Citizenship and Immigration Services for certain noncitizens, such as immigrants, to serve as the one central file for all of the noncitizen's immigration-related applications and related documents that pertain to that person's activities.<sup>57</sup> The A-files are managed by Citizenship and Immigration Services and shared among DHS components as necessary. Because A-files are paper-based, they require physical transfer from one location to another. To track these files, DHS uses the National File Tracking System, an automated file-tracking system developed to enable all DHS staff at numerous DHS locations around the country to locate, request, receive, and transfer A-files. Each A-file has a National File Tracking System number.<sup>58</sup>

According to business unit officials, e-mails would not usually be found in the A-files because the primary use of e-mail was to share information within the business unit, and so it would rarely rise to the level of a record. The A-files mainly contain other kinds of information, including forms from agency information systems, investigation results, charging documents, conviction documents, photos, fingerprints, and memos. A deportation officer provided 10 active open case files for inspection (each officer is usually responsible for 40 to 60 active open immigration cases). The 10 case files contained a total of 18 e-mail records, which included transmittal data and distribution lists.

*EPA:* EPA's current recordkeeping is largely print and file, but the agency is undergoing a transition to electronic recordkeeping, beginning with email records. According to EPA officials, the commitment to establish its Enterprise Content Management System (ECMS), which has recordkeeping features, was a result of an agency decision to develop a long-term solution to manage hurricane records electronically in the wake of Hurricanes Katrina and Rita. According to a memorandum sent to all EPA employees, the goal was to ensure that these records be placed in a recordkeeping system that met both EPA and NARA requirements, while allowing easy access to the records when needed. At the same time, the

<sup>&</sup>lt;sup>57</sup>Over 55 million A-files are managed by Citizenship and Immigration Services, which relies on an alien's historical A-file to determine eligibility for immigration benefits. Other DHS components, including Immigration and Customs Enforcement, use A-files during criminal investigations and to determine, for example, whether an alien should be removed from or allowed to stay in the United States. Information and documents from A-files may also be shared with other law enforcement agencies, such as the Federal Bureau of Investigation, to investigate individuals suspected of being involved in terrorist activities.

<sup>&</sup>lt;sup>58</sup>We have previously reported on difficulties finding A-files: GAO, *Immigration Benefits* Additional Efforts Needed to Help Ensure Alien Files Are Located when Needed, GAO-07-85 (Washington, D.C.: Oct. 27, 2006).

agency ordered that the automatic delete function in the agency's e-mail system be deactivated so that no hurricane records could be deleted accidentally.

According to agency officials, the e-mail capability of ECMS was available in fiscal year 2007, and the agency expects that by the end of fiscal year 2009, 50 percent of EPA staff and contractors will be using the system. The ECMS repository is an electronic recordkeeping system that uses commercial software that complies with a standard endorsed by NARA. According to officials, as part of its preparations for the transition, EPA recently updated its record schedules so that its treatment of records would be media neutral; this is to facilitate uploading records into ECMS.<sup>59</sup> It has also developed materials, such as a brochure and a user guide, to support its transition.

The agency's e-mail systems are not currently used as recordkeeping systems and will not be under ECMS. Accordingly, they can be used to store only transitory e-mail records. Officials also told us that employees could access Web-based e-mail systems for limited personal use, but that they were not permitted to use these for official business.

E-mail records were maintained in paper at the EPA business unit reviewed, the Assessment and Remediation Division of the Office of Superfund Remediation and Technology Innovation (part of EPA's Office of Solid Waste and Emergency Response). Among other things, this division processes claims related to Superfund cleanup settlements.

Officials from the Office of Superfund Remediation and Technology Innovation told us that recordkeeping for this office was print and file, but that employees were also directed to include all records (including e-mail records) into the office's electronic Superfund Document Management System. This was not a recordkeeping system, but the plan was to integrate it with ECMS for long-term stewardship of Superfund files. According to these officials, they expect to be able to capture Superfund email records in ECMS by fall 2008.

<sup>&</sup>lt;sup>59</sup>ECMS allows the user to access the recordkeeping system to save a record and associate it with the appropriate records schedule, as well as to search through records within the user's organization.

Officials of the Assessment and Remediation Division stated that few email messages would be considered records, because most official business regarding claims was conducted through correspondence on letterhead with an original signature. Although copies of these might be sent as e-mail attachments, these officials said, they would not be the official recordkeeping copy. However, division officials stated that e-mail records were more likely to be included in case files regarding "mixed funding" claims related to Superfund cleanup settlements, because these involved communication between regional offices and parties involved in the claims. (Mixed funding refers to the government assuming some proportion of cleanup expenses, with other parties assuming the rest.)<sup>60</sup> According to officials, mixed funding documentation could include e-mail records documenting information to justify claims and facilitate payment. Officials provided a mixed funding case file for inspection, in which they had identified 10 e-mail records. All these records included transmission data and distribution lists, as required.

*FTC:* FTC recordkeeping for e-mail and other records is print and file. The commission's e-mail system is not a recordkeeping system, and the commission has not implemented the option allowed by NARA's guidance to use the e-mail system for storing transitory e-mail records. The agency has no current plans to institute electronic recordkeeping. According to FTC officials, the commission's processes are largely paper based. The commission's records management guidance states that few e-mails are expected to rise to the level of a record. For example, agency officials explained that official decisions of the commission are generally reached jointly by the commissioners and recorded in documents such as memorandums, letters, and meeting minutes. According to officials, FTC uses a case management system to track work products (such as depositions, filings, and briefs), but this is not a document management or recordkeeping system. According to officials, about 80 percent of all FTC files are case files.

The records manager said that the records schedules for FTC programs currently include instructions for e-mail disposition, but that the office is in the process of conducting a records inventory and reassessing records scheduling, with the next step being to do "big bucket" media-neutral scheduling. According to this official, this approach will provide flexibility

<sup>&</sup>lt;sup>60</sup>Generally, the term refers to "pre-authorized" mixed funding, in which the settling parties agree to do the cleanup and EPA agrees to finance a portion of the costs.

in the event that FTC adopts electronic business processes in the future. According to FTC officials, the commission is currently assessing its needs for electronic document management tools, including an electronic recordkeeping system.

The CIO told us that agency staff cannot directly access external Webbased e-mail through the agency's Web browsers, and agency employees have been instructed not to use such systems for official FTC business. However, this official said that agency employees may use the commission's remote application delivery environment<sup>61</sup> to obtain limited access to external Web-based e-mail as a convenience.

The business unit reviewed at FTC was the Division of Marketing Practices within the Consumer Protection Bureau, which responds to problems of consumer fraud in the marketplace, such as deceptive marketing schemes that use false and misleading information. The division enforces federal consumer protection laws by, among other things, developing rules to protect consumers and filing actions in federal district court for immediate and permanent orders to stop scams and get compensation for scam victims.

The business unit follows the FTC's print and file approach to recordkeeping, saving e-mails and other communications if they are related to a case. At this unit, cases are investigations of Internet fraud and marketing practices, each of which is assigned to a lead attorney. Officials provided one closed case file for inspection, consisting of four boxes of records. The case file provided contained about 65 e-mails, all of which included transmittal data and distribution lists.

*HUD:* HUD currently uses a print and file approach to e-mail recordkeeping. The department's e-mail system is not a recordkeeping system, and according to officials, they have not implemented the option allowed by NARA's guidance to use the e-mail system for storing transitory e-mail records. However, as part of an overall modernization plan, HUD is undertaking an enterprise office system modernization project for its records and document management. According to the business case submitted by HUD to OMB to justify the modernization investment, the HUD Electronic Record System (HERS) will replace eight legacy systems and support the full life cycle of document management activities and

<sup>&</sup>lt;sup>61</sup>FTC uses the Citrix remote application delivery environment.

records, record disposition, and retrieval of historical archived information. HUD plans to implement HERS by the fourth quarter of 2010. In the first phase of the plan, HUD is implementing modernized systems for tracking correspondence and Freedom of Information Act requests. Although the correspondence system is used for tracking e-mail correspondence, it is not a recordkeeping system for e-mail. The business unit reviewed at HUD was the Office of Healthy Homes and Lead Hazard Control. Among other things, this office manages grants related to lead hazard and conducts investigations to determine compliance with HUD's Lead Disclosure Rule.<sup>62</sup> HUD records management officials stated that each program area has a file plan, and that the Office of Healthy Homes and Lead Hazard Control has its own records schedule. According to officials from the office, most of their business is transacted via certified mail, so that relatively few e-mail messages would be record material. Two units provided active open files for inspection: nine grant files from six Government Technical Representatives in the Program Management and Assurance Division, and four lead hazard investigation case files from one inspector in the Compliance Assistance and Enforcement Division. The nine grant files included 120 e-mail messages, and the four investigation files included 5 e-mail messages, all in the same case file. All 125 of the e-mail records included transmittal data and distribution lists, as required. At three of the four agencies reviewed, the policies in place generally E-mail Record addressed the requirements for e-mail records management that we Policies at Three of identified, but each was missing one of the nine requirements. At the fourth agency (HUD), the policies in place did not cover three of eight the Four Agencies applicable requirements.<sup>63</sup> **Generally Addressed** According to NARA's regulations on records management, agencies are NARA Guidance required to establish policies and procedures that provide for appropriate retention and disposition of electronic records. In addition to including

correspondence management, including the creation and processing of

<sup>&</sup>lt;sup>62</sup>24 C.F.R. 35, subpart A. This rule requires homeowners to disclose all known lead paint and lead paint hazards when selling or leasing a residential property built before 1978.

<sup>&</sup>lt;sup>63</sup>One of the requirements was not applicable because of the configuration of HUD's network.

general provisions on electronic records, agency procedures must address specific requirements for e-mail records.<sup>64</sup> The regulations provide minimum requirements, which allow agencies flexibility to establish processes for managing e-mail records that are appropriate to their business, size, and resources.

According to the regulations, certain aspects of e-mail must be addressed in the instructions that agencies provide staff on identifying and preserving electronic mail messages, such as the need to preserve transmission data. Agencies are also required to address the use of external e-mail systems that are not controlled by the agency (such as private e-mail accounts on commercial systems such as Gmail, Hotmail, .Mac, etc.). Where agency staff have access to external systems, agencies must ensure that federal records sent or received on such systems are preserved in the appropriate recordkeeping system and that reasonable steps are taken to capture available transmission and receipt data needed by the agency for recordkeeping purposes. One of the four agencies (HUD) had its systems configured so that staff could not access external email applications; thus, this requirement was not applicable for HUD.

In summary, we extracted nine key requirements from the regulation. Agency records management policy and guidance with regard to e-mail must address these requirements, which are shown in table 3.

#### Table 3: E-Mail Policy and Guidance Required by Regulation

# Requirements Agency policies and guidance must— inform staff that e-mails are potential records ensure that staff is capable of identifying federal records require the preservation of e-mail transmission data and distribution lists state that draft documents circulated on e-mail systems are potential federal records require that e-mail records are stored in an appropriate recordkeeping system and instruct staff on how these records are maintained in that recordkeeping system regardless of format provide instructions on how to copy e-mails identified as federal records from an e-mail system not identified as a recordkeeping system to a recordkeeping system state that e-mail systems must not be used to store recordkeeping copies of e-mail messages identified as federal records<sup>a</sup>

<sup>&</sup>lt;sup>64</sup>36 C.F.R. § 1234.24.

#### Requirements

prohibit the use of e-mail system backup tapes for recordkeeping purposes

instruct staff on the management and preservation of e-mail records sent or received from nongovernmental e-mail systems

Source: GAO analysis of NARA Regulations.

<sup>a</sup>Unless the e-mail system has the features of a recordkeeping system described in table 1. An exception to the prohibition against storage in the e-mail system may be made for transitory records with NARA-approved short term retention periods of 180 days or less.

The policies and guidance at three of the four agencies (DHS, FTC, and EPA) each omitted one applicable requirement.

- At DHS, the policies and guidance did not state that draft documents circulated on e-mail systems are potential federal records. Department officials told us that they recognized that their policies did not specifically address the need to assess the records status of draft documents, and said they planned to address the omission during an ongoing effort to revise the policies.
- At EPA and FTC, the e-mail management policy did not instruct staff on the management and preservation of e-mail messages sent or received from nongovernmental e-mail systems. According to officials at both agencies, such instructions were not included because agency employees were instructed not to use such accounts for agency business. However, whenever access to such external systems is available at an agency, the agency should provide these instructions.<sup>65</sup>

If agency records management policies and guidance are not complete, agency e-mail records may be at increased risk of loss. If agencies do not state that draft documents circulated on e-mail systems are potential records, agency officials may not preserve such record materials. If agencies do not instruct staff on the management and preservation of email messages sent or received from nongovernmental e-mail systems, officials may create or receive e-mail records in external systems that may not be preserved in recordkeeping systems.

In the course of our review at EPA, officials told us that this situation may have arisen: they had discovered that certain e-mail messages for a

<sup>&</sup>lt;sup>65</sup>In comments on a draft of this report, an FTC official indicated that on May 28, 2008, the commission's Records and Filing Office sent a notice to FTC staff reminding them of the existing policy on limited use of outside e-mail accounts and instructing them on how to handle e-mail records received through such accounts.

previous Administrator, possibly including records, had not been saved. According to these officials, they had discovered an e-mail message from a former Acting Administrator instructing a private consultant not to use the Administrator's EPA e-mail account to discuss a sensitive government issue (World Trade Center issues) but to use a personal e-mail account. EPA officials reported this incident to NARA on April 11, 2008, in a letter that also described the agency's response to the incident and planned safeguards to avoid such incidents in the future; these safeguards included the release of a policy statement prohibiting the use of non-EPA messaging systems for the conduct of agency business and a review of e-mail account auto-delete settings. NARA replied on April 30 that the safeguards EPA planned appeared appropriate.

Finally, HUD's policies and guidance did not include, or did not implement, three of eight applicable e-mail records management requirements. For one requirement, HUD's policy was inconsistent with NARA's regulations, and it was silent on two of the requirements.

HUD did not fully implement the requirement to ensure that staff are capable of identifying federal records because its e-mail policy states that only the sender is responsible for reviewing the record status of an e-mail. However, NARA's regulation defines e-mail messages as material either created or received on electronic mail systems.<sup>66</sup> HUD officials acknowledged that the department's policy omits the recipient's responsibility for determining the record status of e-mail messages and stated that the e-mail policy fell short of fully implementing NARA regulations in this regard because the department's practice is not to use e-mail for business matters in which official records would need to be created. However, this practice does not remove the requirement for agency employees to assess e-mail received for its record status, because the agency cannot know that employees will not receive e-mail with record status; the determination of record status depends on the content of the information, not its medium.

In addition, two other requirements were missing from HUD's policy: it did not state, as required, that recordkeeping copies of e-mail should not be

<sup>&</sup>lt;sup>66</sup>HUD's Electronic Mail Policy also states that "Records created or received on electronic mail systems must be managed in accordance with the provision of 36 C.F.R. 1220, 1222 and 1228." Thus, HUD's guidance is contradictory on this point. (The statement appears in the policy under Electronic Mail Database Management, Record Retention Responsibilities.)

stored in e-mail systems or that backup tapes should not be used for recordkeeping purposes. HUD officials stated that they considered that these requirements were met by a reference in their policy to the NARA regulations in which these requirements appear. However, this reference is too general to make clear to staff that e-mail systems and backup tapes are not to be used for recordkeeping.

Table 4 summarizes the results for the four agencies.

		Agen	су	
Requirement	DHS	EPA	FTC	HUD
Inform staff that e-mails are potential records	✓	√	✓	✓
Ensure that staff is capable of identifying federal records	$\checkmark$	✓	✓	×
Preserve e-mail transmission data and distribution lists	$\checkmark$	✓	✓	✓
State that draft documents circulated on e-mail systems are potential federal records	×	√	√	√
Require that e-mail records are stored in an appropriate recordkeeping system and instruct staff on how these records are maintained in that recordkeeping system regardless of format	~	√	✓	•
Provide instructions on how to copy e-mails identified as federal records from e-mail system not identified as recordkeeping system to a recordkeeping system	√	√	~	✓
State that e-mail systems must not be used to store recordkeeping copies of e-mail messages identified as federal records <sup>a</sup>	$\checkmark$	√	~	x
State that e-mail system backup tapes should not be used for recordkeeping purposes	√	√	√	×
Instruct staff on the management and preservation of e- mail messages sent or received from nongovernmental e-mail systems	✓	x	×	NA⁵

#### Table 4: Agencies' Conformance to Required Policy and Guidance on Managing E-Mail Records

Source: GAO analysis.

Key:

 $\checkmark$  = policy covered requirement

x = policy omitted or was inconsistent with requirement

<sup>a</sup>Unless the system has the features described in table 1. An exception to the prohibition against storage in the e-mail system may be made for transitory records with NARA-approved short term retention periods of 180 days or less.

<sup>b</sup>One requirement was not applicable because of the configuration of the agency's network.

	If requirements for e-mail management are not included in agency records management policies and guidance, agency e-mail records may be at increased risk of loss. The loss of records that are important for documenting government functions, activities, decisions, and other important transactions could potentially impair agencies' ability to carry out their missions.
E-Mail Records Management Practices of Senior Officials Did Not Fully Comply with Key Requirements	E-mail messages that qualified as records were not being appropriately identified and preserved for 8 of the 15 senior officials we reviewed. Senior officials at three agencies did not consistently conform to key requirements in NARA's regulations for e-mail records; only at FTC did the four senior officials fully follow these requirements. The other three agencies showed varying compliance: three officials at DHS, two officials at EPA, and three officials at HUD were not following required e-mail recordkeeping practices. Factors contributing to the inconsistent e-mail recordkeeping practices include inadequate training and oversight. Other factors included the difficulty of managing large volumes of e-mail in paper-based recordkeeping systems and the stated practice at one agency that e-mail would not be used for record material.
	As described, the four agencies primarily used "print and file" recordkeeping systems, which require agency staff to print out e-mail messages for filing as the official recordkeeping copies in designated filing systems. Each agency's policy also required the preservation of e-mail transmission data, distribution lists, and acknowledgments.
	<i>DHS</i> . At DHS, our review covered three senior officials because, according to DHS officials, the Secretary of Homeland Security did not use e-mail: these officials told us that the Secretary did not have a DHS e-mail account, and that he did not conduct any official communications using external nongovernmental e-mail systems.
	For the remaining three officials, the e-mail management practices did not fully comply with the requirements. None of the e-mails of the senior officials were reviewed for their status as a record or filed in an appropriate recordkeeping system. Instead, the officials were using their e-mail accounts to store all e-mails. <sup>67</sup> Two of the three officials personally

 $<sup>^{67}</sup>$  The inboxes of the three officials contained 583, 8,097, and 30,745 e-mail messages, respectively, and their sent folders contained 6,565, 5,236, and 4,498 e-mails.

managed their e-mail accounts; the third shared this responsibility with a member of his staff. The staff of one of the officials who managed his own e-mail had access to the official's e-mail account, but the staff reviewed or accessed these only if instructed to do so by the official. The department said that the third official's office administrator had access to calendar functions only.

According to one of these senior officials, storing e-mails on the computer is convenient for searching and retrieving. It was this official's opinion that this approach was safe from a legal standpoint because no e-mails were deleted. Nonetheless, using an e-mail system to retain all e-mails indefinitely increases the difficulty of performing searches based on categories of records; in contrast, such searches are facilitated by a true recordkeeping system. Further, if e-mail records are not stored in an appropriate recordkeeping system (paper or electronic), there is reduced assurance that they are useful and accessible to the agency as needed, or that they will be retained for the appropriate period.

*EPA:* At EPA, the e-mail records of two of the four senior officials were being managed in accordance with key requirements reviewed. For these two senior officials, one of whom was the agency head, e-mail records were stored in paper-based recordkeeping systems.

The EPA Administrator had two EPA e-mail accounts, one intended for messages from the public and one for communicating with select senior EPA officials (not intended for use by the public). In the paper-based recordkeeping system, of 25 e-mail records inspected, all included transmission data and distribution lists, as required. For the nonpublic account, staff provided eight e-mail records for inspection, all of which also included transmission data and distribution lists. According to EPA officials, the nonpublic account generated few records because the Administrator receives most of his information from other sources, including face-to-face briefings and meetings.

For the second senior official, administrative staff told us that the official reviewed e-mail personally and forwarded records to the staff for printing and filing in a paper-based recordkeeping system that followed the agency's records schedules. We selected 20 e-mails from the official's files for examination. These files were associated with four EPA records schedules. All of the e-mails included transmission data and distribution lists as required.

The e-mail records of two other senior officials were not being managed in compliance with requirements, because e-mail records were not being stored in appropriate recordkeeping systems, but rather in the e-mail system:

- One of these officials was in the process of migrating e-mail records from the e-mail system to ECMS. This official had been storing e-mail records in e-mail system folders since January 2006, in anticipation of the rollout of the ECMS, and had not been using a paper-based recordkeeping system in the interim. The e-mail system's folders were organized according to the agency's records schedules to facilitate the transfer, which was ongoing. Because this senior official did not store e-mail records in a paper-based recordkeeping system during this transition, the official's e-mail account was being used as a recordkeeping system, which is contrary to regulation. However, when the transition to the electronic recordkeeping system is complete, the new system should provide the opportunity for this official's recordkeeping practices to be brought into compliance with requirements.
- The second official was also saving all e-mail in the e-mail system. EPA officials stated that most of the senior official's e-mail was sent to an administrative assistant, who was responsible for identifying and maintaining the records received and filing them accordingly. However, the administrative assistant for this official stated that although she had been briefed on maintaining and preserving the senior official's calendar in a recordkeeping system, she had not received guidance or training in how to preserve or categorize the official's e-mail for recordkeeping purposes. In addition, the assistant stated that all e-mails remained stored in the e-mail system where they could be retrieved if necessary.

*FTC:* The four senior officials at FTC were managing e-mail in compliance with key requirements reviewed. These officials were the Chairman<sup>68</sup> and three Commissioners. <sup>69</sup> According to an FTC official, the Commissioners do not discuss substantive issues in e-mails to one another because of the possibility that such group e-mails could be construed as meetings subject to the Sunshine Act,<sup>70</sup> which must be open to the public. FTC staff told us

<sup>70</sup>5 U.S.C. § 552b.

<sup>&</sup>lt;sup>68</sup>The Chairman whose records were reviewed resigned effective March 28, 2008. A new Chairman was designated effective March 31, 2008. The new Chairman is one of the three Commissioners covered in this assessment.

<sup>&</sup>lt;sup>69</sup>At the time there were five Commissioners in all, including the Chairman. Currently, there are four.

that the then-Chairman and two Commissioners delegated part or all of the responsibility for e-mail management; the remaining Commissioner personally managed e-mails. E-mails with record status were to be printed and filed in the commission's paper-based recordkeeping systems. The FTC recordkeeping systems contained e-mail records of the four officials; of the 155 e-mail records inspected, all included the required distribution lists and transmission data.

*HUD:* One of the four senior officials at HUD was managing e-mail in compliance with key requirements, but for the other three officials, e-mail records were not stored in appropriate recordkeeping systems.

The e-mail records for the agency head were being managed in accordance with key requirements. According to HUD officials, management of e-mails for the agency head was delegated to staff: that is, the agency head's emails were forwarded by his administrative assistant to the Office of the Executive Secretariat, where they were reviewed for record status and preserved as necessary in paper files. Staff from the Office of the Executive Secretariat flagged 10 e-mail records using the department's correspondence tracking system, which were then retrieved from the paper-based recordkeeping system for inspection; all of these files included the required distribution lists and transmission data.

The practices of the three other senior officials varied, except that for all three, they or their staff stated that the officials retained e-mail messages in the e-mail system.<sup>71</sup> One senior official told us that he read his own e-mail and forwarded messages to staff to determine record status. Another official's staff stated that the staff was responsible for managing e-mail, but that the official would determine what should be printed and filed. The third official's staff stated that the official did not review e-mails for record status but forwarded all program-related e-mails to staff, who would decide which e-mails should be included in the program files as records. Neither the three senior officials nor several of their staff had received records management training.

HUD provided copies of e-mail messages from one senior official for review, but there was no evidence that the messages were stored in an

<sup>&</sup>lt;sup>71</sup>According to CIO officials, e-mail more than 60 days old is automatically archived, with archives maintained for 3 years and sometimes longer; employees are not allowed to delete anything from the archive.

appropriate recordkeeping system, and HUD officials stated that the provided e-mails were not records. They offered to provide similar nonrecord messages for the two other officials, but we declined to review them because the messages would not have addressed the question of whether the officials were storing e-mail records in appropriate recordkeeping systems. Thus, for these three officials the department did not provide examples of printed e-mail records that had been stored in appropriate recordkeeping files.

According to department officials, this situation is explained by HUD's practice of not using e-mail for business matters that would produce records. According to department officials, official business is conducted through paper processes, some electronic processes (such as Web-based systems), but rarely through e-mail.

Nonetheless, although e-mail may rarely rise to the level of a record under paper-based processes, it does not follow that no e-mail records are ever created or received, as shown by the e-mail records maintained by the department's Executive Secretariat and the Office of Healthy Homes and Lead Hazard Control. The weakness in HUD's policy regarding responsibility for determining which e-mails are records, combined with the lack of training in e-mail records management, reduces the department's assurance that those e-mail messages that are records are being appropriately identified.

Factors contributing to the inconsistent practices at the three agencies include inadequate training and oversight, as well as the difficulties of managing large volumes of e-mail with the tools and resources available, which in most cases do not include electronic recordkeeping systems.

• The regulations require agencies to develop adequate training to ensure that staff implement agency policies. All four agencies have issued guidance and developed training materials, and all state that they performed records management training. For example, according to DHS officials, all three senior officials and staff had received records management training as new employees. However, DHS and HUD had no documentation to indicate that employees had received such training,<sup>72</sup> and our review of practices found instances in which staff did not

<sup>&</sup>lt;sup>72</sup>EPA did track records management training, which agency officials stated was mandatory. However, not all employees had been trained.

understand their recordkeeping responsibilities for e-mail and stated that they had not been informed of them or received training. For example, three senior HUD officials had not received training on records management. Staff explained that formal briefings had last taken place at that time.

Agencies must also periodically evaluate their records management programs, including periodic monitoring of staff determinations of the record status of materials. However, the three agencies have not fully developed and implemented oversight mechanisms, and do not determine the extent to which senior officials or other staff are following applicable requirements for e-mail records.<sup>73</sup> According to DHS, it has initiated oversight and review activities, but these are not yet at the pilot stage because of other demands on records management staff, such as completion of records scheduling. EPA has developed an oversight plan and has pilot-tested a records management survey tool, but it has not yet begun agencywide reviews. It plans to fully deploy this tool when ECMS is fully implemented. HUD had not initiated oversight and review activities, according to officials, because of its practice of not using e-mail for matters that would necessitate the creation of official records. These officials stated that when the department's modernized system for records and document management is in place, the department's e-mail policies will be updated and appropriate oversight and review activities put in place.

Unless agencies train staff adequately in records management and perform periodic evaluations or establish other controls to ensure that staff receive training and are carrying out their responsibilities, agencies have little assurance that e-mail records are appropriately identified, stored, and preserved. Further, keeping large numbers of record and nonrecord messages in e-mail systems potentially increases the time and effort needed to search for information in response to a business need or an outside inquiry, such as a Freedom of Information Act request.

The volume of e-mail is also described as contributing to e-mail records management shortcomings. Agency officials and staff referred to the

<sup>&</sup>lt;sup>73</sup>FTC officials state that the commission's records management program is currently conducting an agencywide records inventory that includes assessing the adequacy of documentation of official actions (including e-mail records) through a review of file samples. According to these officials, they expect to implement more comprehensive oversight and review as this and other activities are completed, which would include questionnaires, interviews, and selected file reviews.

difficulty of managing large volumes of e-mail, suggesting that limited resources contributed to their inability to fully comply with records management and preservation policies. To help ensure that e-mail records are managed appropriately, it is helpful to incorporate recordkeeping into the process by which agency staff create and respond to mission-related email. Because this process is electronic, the most straightforward approach is to perform e-mail recordkeeping electronically. All four agencies, however, still rely either entirely or primarily on paper for their recordkeeping systems, even for "born digital" records like e-mail.

Weaknesses in the processes in place at three of the four agencies reviewed raise questions about the appropriateness of paper recordkeeping processes for their e-mail records. Simply devoting more resources to paper records management may be neither efficient nor costeffective, and the agencies have recognized that this is not a tenable longterm solution. EPA is beginning a transition to electronic recordkeeping, and HUD and DHS have plans focused on future enterprisewide transitions.

Managing electronic documents, including e-mail, in electronic recordkeeping systems would potentially provide the efficiencies of automation and avoid the expenditure of resources on duplicative manual processes and storage. It is important to recognize, however, that moving to electronic recordkeeping has proved not to be a simple or easy process and that projects at large agencies have presented the most significant challenges. For projects of all sizes, agencies must balance the potential benefits of electronic recordkeeping against the costs of redesigning business processes and investing in technology. NARA has called the decision to move to electronic recordkeeping inevitable.<sup>74</sup> Nonetheless, like other information technology investments, such a move requires careful planning in the context of the specific agency's circumstances, in addition to well-managed implementation.

### Conclusions

NARA's limited performance of its oversight responsibilities leaves it with little assurance that agencies are effectively managing records, including email records, throughout their life cycle. NARA has an organizational preference for partnering with and supporting agencies' records

<sup>&</sup>lt;sup>74</sup>NARA, "Why Federal Agencies Need to Move Towards Electronic Recordkeeping," www.archives.gov/records-mgmt/policy/prod1afn.html.

	management activities, which is appropriate for many of its guidance and assistance responsibilities. However, this preference has led NARA to avoid performing oversight activities that it judged to be perceived negatively—the full-scale inspections/evaluations that it performed in previous years. Although it has performed studies that provide it with insights into records management issues and it has taken action in response to the findings, it has not developed means to evaluate the state of federal records management programs and practices. As a result, NARA's oversight of federal records management programs, including management of e-mail, has been limited. Further, NARA's limited reporting on problems and solutions identified at individual agencies reduces its own ability to hold agencies accountable for addressing identified problems, as well as reducing the ability of agencies to learn from the experience of others.
	At the four agencies reviewed, e-mail records management policies were generally compliant with NARA regulations, with some exceptions. If policies do not fully conform to regulatory requirements, it increases the likelihood that those requirements will not be met in practice.
	Senior officials at three of the four agencies stored e-mail records in e-mail systems, rather than in recordkeeping systems, which is not in accordance with NARA's regulations. Factors contributing to this noncompliance generally included insufficient training and oversight regarding recordkeeping practices, as well as the onerousness of handling large volumes of e-mail. Providing adequate training and oversight is a prerequisite for improvement, but real improvements in e-mail recordkeeping may require replacing the paper-based recordkeeping processes currently in place. Properly implemented, the transition to electronic recordkeeping of e-mail has the potential not only to reduce the burden of e-mail management but also to provide positive benefits in improving the usefulness and accessibility of records.
Recommendations for Executive Action	To better ensure that federal records, including those that originated as e- mail messages, are appropriately identified, retained, and archived, we recommend that the Archivist of the United States
	• develop and implement an approach to oversight of agency records management programs that provides adequate assurance that agencies are following NARA guidance, including

- developing various types of inspections, surveys, and other means to evaluate the state of agency records and records management programs;
- developing criteria for using these means of assessment that ensure that they are regularly performed; and
- regularly report to the Congress and OMB on the findings, recommendations, and agency responses to its oversight activities, as required by law.

In addition, we recommend that the Administrator of the Environmental Protection Agency

- revise the agency's policies to ensure that they appropriately reflect NARA's requirement on instructing staff on the management and preservation of e-mail messages sent or received from nongovernmental e-mail systems and
- develop and apply oversight practices, such as reviews and monitoring of records management training and practices, that are adequate to ensure that policies are effective and that staff are adequately trained and are implementing policies appropriately.

We further recommend that the Chairman of the Federal Trade Commission revise the commission's policies to ensure that they appropriately reflect NARA's requirement to instruct staff on the management and preservation of e-mail messages sent or received from nongovernmental e-mail systems.

We further recommend that the Secretary of Homeland Security

- revise the department's policies to ensure that they appropriately reflect NARA's requirement to state that draft documents circulated on e-mail systems are potential federal records and
- develop and apply oversight practices, such as reviews and monitoring of records management training and practices, that are adequate to ensure that policies are effective and that staff are adequately trained and are implementing policies appropriately.

Finally, we recommend that the Secretary of Housing and Urban Development

• revise the department's policies to ensure that they appropriately reflect NARA's requirements to ensure that staff is capable of identifying federal records and to state that e-mail systems must not be used to store recordkeeping copies of e-mail records (other than those

	exceptions provided in the regulation) and that e-mail system backup tapes should not be used for recordkeeping purposes, and
	<ul> <li>develop and apply oversight practices, such as reviews and monitoring of records management training and practices, that are adequate to ensure that policies are effective and that staff are adequately trained and are implementing policies appropriately.</li> </ul>
Agency Comments and Our Evaluation	We provided a draft of this report to NARA, DHS, EPA, FTC, and HUD for review and comment. Three agencies provided written comments (which are reproduced in apps. II to IV), and two provided comments via e-mail. All five agencies indicated that they were implementing or intended to implement our recommendations. Three of the five agencies generally agreed with our findings and recommendations. One agency provided information about its use of outside e-mail accounts, and one agency agreed to implement our recommendations but questioned aspects of our report.
	In written comments, the Archivist of the United States stated that NARA generally agreed with our draft report and would develop an action plan to implement our recommendation. The Archivist also provided technical comments, and we clarified our report to address each of them. (see app. II).
	In e-mail comments, the Director, Records, Publications, and Mail Management at DHS, stated that the department agreed with our draft report and that it correctly represented the condition at the time of the review. The Director also said that future DHS records management policy documents would be revised to reflect our recommendations.
	In written comments, the Chief Information Officer of EPA stated that the agency accepted our two recommendations. In addition, she provided additional information on the EPA records management program. Finally, this official provided technical comments, which we addressed as appropriate; our assessment of these comments is contained in appendix III.
	In e-mail comments, an official from FTC's Office of the General Counsel stated that FTC had instructed staff not to use outside e-mail accounts for official business, but it was nonetheless taking action to implement our recommendation by issuing a notice to staff regarding policies and procedures for e-mail records, which included a statement that work-

related e-mails inadvertently sent or received from non-FTC accounts must be handled in accordance with the agency's records preservation policies and procedures. Our draft recognized FTC's instruction not to use outside accounts for official business, but also noted that that FTC did not totally prohibit access to such accounts. Because access to outside accounts was available, FTC was required by NARA regulations to provide staff with guidance on the proper handling of e-mail records sent or received through such accounts. FTC also provided technical comments, which we incorporated as appropriate.

In written comments, HUD's Acting Chief Information Officer stated that HUD planned to implement our recommendations, but also stated that our draft was inaccurate in three areas:

- The Acting CIO questioned the clarity of a figure we included to illustrate a decision process that could be used to decide if an e-mail message is a record. As noted in our draft, the illustration is provided as an example to illustrate the kinds of factors that may be considered when deciding whether an e-mail message is a record.
- The Acting CIO disagreed with our conclusions regarding HUD's compliance with the requirements we reviewed, stating that the department's records policies comply with all these requirements because they incorporate NARA's regulations by reference. While our draft recognized the reference to NARA regulations in HUD's policy, we concluded that such a reference was not adequate to comply with NARA regulations. As we stated in our draft, the reference in HUD's policy is too general to make clear to HUD staff which practices are prohibited. In addition, HUD did not establish procedures to implement the requirements in question, as the regulations require.
- The Acting CIO questioned the accuracy of a statement on the number of senior officials whose files were reviewed. Our evidence shows that our statement was accurate, but we revised it to include further clarifying detail.

We provide more detailed responses to these points in appendix IV.

As agreed with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this report. At that time, we will send copies of this report to the Archivist of the United States, the Administrator of the Environmental Protection Agency, the Chairman of the Federal Trade Commission, the Secretary of Homeland Security, and the Secretary of Housing and Urban Development. Copies will be made available to others on request. In addition, this report will be available at no charge on our Web site at www.gao.gov.

If you have questions about this report, please contact me at (202) 512-6240 or koontzl@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix V.

Linda & Koontz

Linda D. Koontz Director, Information Management Issues

# Appendix I: Objectives, Scope, and Methodology

Our objectives were to

- assess to what extent the National Archives and Records Administration (NARA) provides oversight of federal records management programs and practices, particularly with regard to e-mail,
- describe processes followed by selected federal agencies to manage e-mail records,
- assess to what extent the selected agencies' e-mail records management policies comply with federal requirements, and
- assess compliance of selected senior officials with key e-mail recordkeeping requirements.

To determine the extent to which NARA provides oversight of federal agencies for managing and preserving federal e-mail records, we analyzed applicable laws, regulations, and guidance; reviewed NARA's oversight activities from 2003 to 2007, including its reports to OMB and the Congress on records management activities; reviewed recent NARA's records management reports; and interviewed NARA officials.

To address our other objectives, we judgmentally selected four agencies for review based upon several factors. First, we identified four general government functions from those functions that NARA identified in a 2004 resource allocation study as having records that had a direct and significant impact on the rights, welfare, and/or well-being of American citizens or foreign nationals: homeland security, health, economic development, and environmental management. (NARA classified these functions as high risk for rights/accountability.) Next, using NARA's analysis, we compiled a list of the federal agencies and their components that performed those high-risk functions. For each identified agency, we further classified it according to agency structure (a department with component bureaus or agencies, a department with an office structure, an independent agency, or an independent commission) and size (a large department over 150,000 employees, a small department less than 11,000 employees, a small independent agency less than 1,100 employees, or a large independent agency over 18,000 employees).

We then judgmentally selected four agencies from the high-risk list that presented various combinations of structure and size. These were as follows:

## Department of Homeland Security (U.S. Immigration and Customs Enforcement)

- Rated by NARA as high on rights and accountability for records in the Homeland Security: Immigrant and Non-Citizen Services function
- Department with component agencies
- Over 162,000 employees

#### Department of Housing and Urban Development (Office of Healthy Homes and Lead Hazard Control)

- Rated by NARA as high on rights and accountability for records in the Health: Illness Prevention function
- Department with offices
- Less than 11,000 employees

#### **Environmental Protection Agency**

- Rated by NARA as high on rights and accountability for records in the Environmental Management: Environmental Remediation function
- Independent agency
- Over 18,000 employees

#### **Federal Trade Commission**

- Rated by NARA as high on rights and accountability for records in the Economic Development: Business, Trade, Trust, and Financial Oversight
- Independent commission
- Less than 1,100 employees

At each of the four selected agencies, we

- assessed e-mail records management policies of the agency;
- described processes followed by agencies to manage e-mail records, specifically reviewing e-mail records management practices of a business unit associated with the high-risk function; and
- assessed compliance of four senior officials with key e-mail recordkeeping requirements.

We selected a business unit from each organization that (1) performed the particular line of business we identified in our agency selection process and (2) had permanent records that NARA rated high on risk to

accountability and citizen rights. Table 5 identifies the business unit we selected at each agency.

#### Table 5: Assessed Business Units

Department	Component	Business unit
DHS	Immigration and Customs Enforcement	Detention and Removal Operation
EPA	Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation	Assessment and Remediation Division
FTC	Bureau of Consumer Protection	Division of Marketing Practices
HUD	_	Office of Healthy Homes and Lead Hazard Control

Source: GAO analysis of agency data.

We also selected four senior officials at each agency. At DHS, EPA, and HUD, we selected the head of the agency, the head of the office responsible for policy, a randomly selected senior official, and the most senior agency official associated with the business unit we inspected. At FTC, we selected the Chairman and three Commissioners. The selected senior officials are listed in table 6.

#### Table 6: Assessed Senior Officials

Department	Title of official
DHS	Secretary
	Assistant Secretary for Policy
	Acting Assistant Secretary for Health Affairs & Chief Medical Officer
	Assistant Secretary for Immigration and Customs Enforcement
EPA	Administrator
	Assistant Administrator for Enforcement and Compliance Assurance
	Assistant Administrator for Environmental Information / Chief Information Officer
	Assistant Administrator for Solid Waste and Emergency Response
FTC	Chairman
	Commissioner
	Commissioner
	Commissioner
HUD	Secretary
	Assistant Secretary for Policy

Department	Title of official
	Assistant Secretary for Housing—Federal Housing Commissioner
	Director, Office of Healthy Homes and Lead Hazard Control

Source: GAO analysis.

To describe the agencies' e-mail records management practices, we analyzed documents, interviewed appropriate officials at the agency (including business unit officials and staff), and performed limited inspections of selected e-mail records.

To assess each agency's e-mail records management policies, we reviewed the agency's published policy documents, including formal policies and operational manuals, as well as agency-provided responses to a data collection instrument on e-mail management, and compared their contents to the e-mail related requirements in NARA's records management regulations.

To assess compliance of senior officials with key e-mail recordkeeping requirements, we analyzed documents, used data collection instruments to gather information from the senior officials, their staffs, or other appropriate officials, and inspected selected e-mail records. We asked each agency to provide examples of senior officials' e-mail messages stored as records to corroborate their responses. We then analyzed the information provided by the agencies and assessed it against the e-mail requirements in NARA's regulations on federal records.

We did not attempt to assess the extent to which the agencies' staff correctly identified e-mail records or the extent to which the agencies' records appropriately included e-mail.

The four data collection instruments we used are briefly described in table 7.

## Table 7: Topics of E-Mail Records Management Data Collection Instruments and Their Associated Respondents

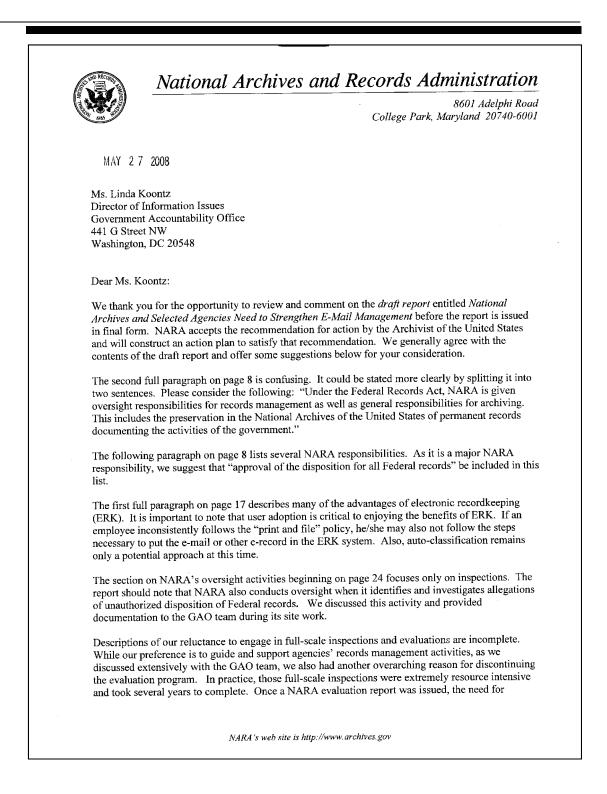
Торіс	Respondents
E-mail records management	Agency's senior records manager
E-mail systems management	Representative from Office of the Chief Information Officer
E-mail management practices of agency business units	Staff familiar with the business process of the agency's program
E-mail management practices of agency senior officials	Four senior officials, their staff, or both; other agency officials

Source: GAO analysis.

We performed our work at agency offices in the Washington, D.C., metropolitan area.

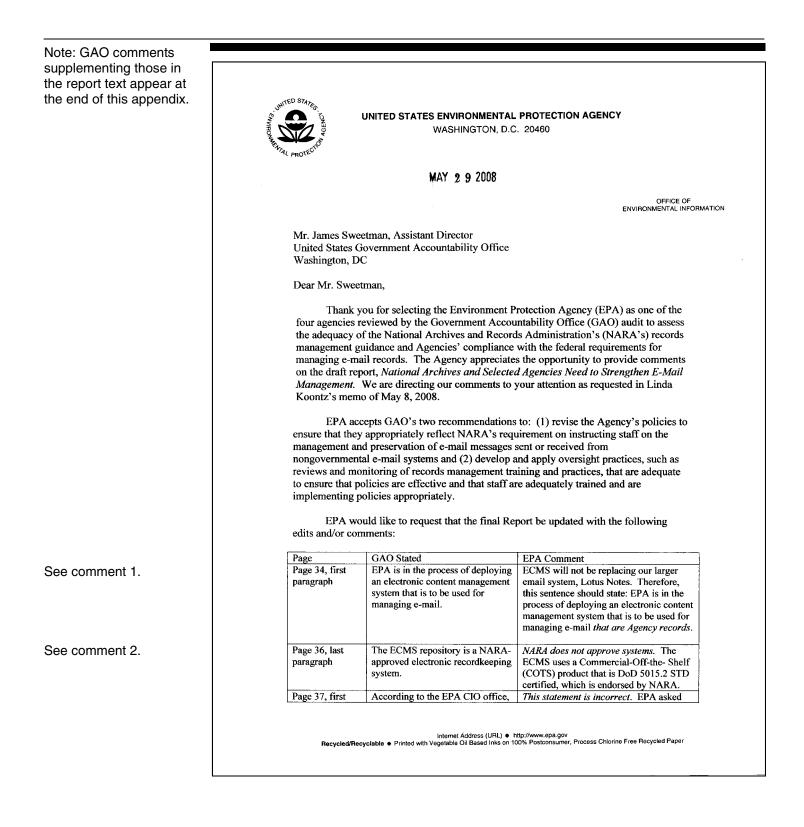
We conducted this performance audit from April 2007 to May 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## Appendix II: Comments from the National Archives and Records Administration



extensive resources shifted to the agency. Agencies often took years to satisfy recommendations made in NARA evaluations, and records management practices in the agencies did not necessarily improve. Finally, the final paragraph on page 36 states that the (EPA) Enterprise Content Management System (ECMS) repository is approved by NARA. NARA does not approve electronic record keeping systems. The ECMS repository uses DoD 5015.2-certified software which NARA has endorsed. Again, thank you for the opportunity to review and comment on this draft report. We look forward to continuing work with you as we strengthen e-mail management processes across the Federal government. Sincerely, Michael J Kuy Archivist of the United States NARA's web site is http://www.archives.gov

## Appendix III: Comments from the Environmental Protection Agency



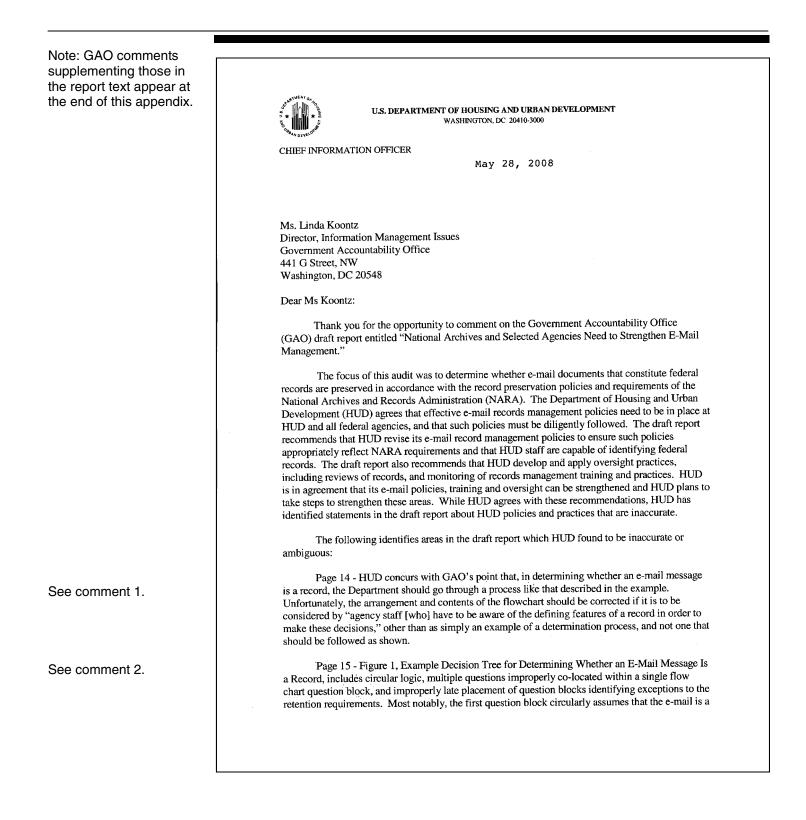
See comment 3.	full paragraph	transitory e-mail is stored on e- mail systems for a maximum of 180 days.	that the statement be replaced with the language on page 36, second paragraph, which states that the Agency ordered that all automatic delete functions be deactivated (disabled).
See comment 4.	Page 42, second bullet and Page 45 table	At EPA, the e-mail management policy did not instruct staff on the management and preservation of e-mail messages sent or received from nongovernmental e-mail systems.	EPA will develop an Agency-wide policy to instruct staff about the use of non-EPA e-mail systems and the management and preservation of e-mail messages sent or received from nongovernmental e-mail systems.
See comment 5.	Page 42, second bullet	At EPA and FTC, the e-mail management policy did not instruct staff on the management and preservation of e-mail messages sent or received from nongovernmental e- mail systems. According to officials at both agencies, such instructions were not included because agency employees were instructed not to use such accounts for agency business.	EPA has not provided formal instructions to staff on the use of secondary accounts to conduct Agency business, rather, EPA has a clear and consistent policy framework against the use of nongovernmental e-mail systems for official EPA business.
See comment 6.	Page 43, first full paragraph	NARA official stated that they would communicate with EPA to determine the sufficiency of the steps taken to respond to the incident and to prevent such incidents from recurring.	EPA received NARA's response dated April 30, 2008, enclosed. NARA agreed that the safeguards that EPA is implementing to mitigate the risk of any further loss of such e-mail, and the forthcoming policy statement prohibiting the use of non-EPA e-mail accounts to conduct agency business, are appropriate and adequate. NARA further states that they consider this case closed and no further reporting is needed.
See comment 7.	Page 47 first full paragraph	The EPA Administrator had two EPA e-mail accounts, one public and one for communicating with select senior EPA officials.	The EPA Administrator has two email accounts, a primary one for communicating with the public and a secondary account for communicating with select EPA officials. EPA does not refer to theses accounts as public and non- public but rather primary and secondary email accounts.
See comment 8.	Page 47, first full paragraph	According to EPA officials, the nonpublic account generated few records because the Administrator did not use e-mail to conduct agency business, receiving most of his information from other sources, including face-to-face	EPA did not say that the secondary email account was not used to conduct Agency business, but rather, it was not the primary tool the EPA Administrator used to exchange information. Therefore this sentence should read: According to EPA officials, the <i>secondary</i> account generated

		briefings and meetings.	few records because the Administrator receives most of his information from other sources, including face-to-face briefings and meetings.
e comment 9.	Page 47, third full paragraph	The e-mail records of two other senior officials were not managed in compliance with requirements, because e-mail records were not being stored in appropriate recordkeeping systems, but rather in the e-mail system.	The Agency Records Officer will follow- up with these senior officials and their administrative staffs to ensure that e-mail records are properly identified and saved in an appropriate recordkeeping system.
e comment 10.	Page 51, middle of first paragraph	EPA has developed an oversight plan and has pilot-tested a records management program review but not yet begun Agency-wide reviews.	EPA developed a comprehensive records management survey tool that will be used to serve the following three purposes: obtain an Agency-wide records management baseline, conduct self- assessments by each program office and region, and conduct program reviews by the National Records Management Program. The survey tool will be implemented after the full implementation of ECMS.
	ensure the Agency government. Hig System ( Commiss improvin an Agency Developi employed Resubmi approval Developi with othe winning p Developi received Requiring Performa with spec	cy's records management program shlights of the steps that the Agency-wie ECMS) deployment; sioning a senior level Task Force t g document and records managen cy-wide workgroup to implement ( ing mandatory on-line records mar es and contractors; tting paper based records schedul (approximately 270 schedules); ing four on-line training modules er training tools such a "Tip of the records management Website; ing a mandatory requirement for al NARA's certification in federal re g the inclusion of records manager ince Appraisal and Recognition Sy cific records responsibilities; and g a session on records management	de Enterprise Content Management o make recommendations for tent Agency-wide, and commissioning the Task Force's recommendations; hagement training, taken by 18,000 les to NARA for media neutral for Agency records contacts, along Week" and enhancing our award- Il Records Liaison Officers (RLOs) to perfords management;

Again, the Agency appreciates the opportunity to obtain an independent perspective of our records management program and receive feedback on areas where improvements can be realized. Should you have any question regarding EPA's response, please contact John Ellis, EPA's Agency Records Officer at 202-566-1643 or ellis.john@epa.gov. Sincerely, Molly A. O'Neill Assistant Administrator and Chief Information Officer Enclosure

		g are GAO's comments on the on the EPA's written response dated to our draft report.
GAO Comments	<b>S</b> 1.	We clarified our discussion of this topic.
	2.	We clarified our discussion of this topic.
	3.	We removed the reference to the 180 day limit.
	4.	In our discussion of the exchange between EPA and NARA on the incident involving possible loss of e-mail records, we included information on EPA's plan to promulgate a policy on the use on non-EPA e-mail systems.
	5.	See comment 4. EPA plans to promulgate a policy prohibiting the use of non-EPA e-mail systems for EPA business.
	6.	We updated our discussion of this topic to reflect NARA's response.
	7.	We do not use EPA's terminology because we do not find "primary" and "secondary" to be useful descriptions. However, we revised our discussion to clarify the references.
	8.	See note 7.
	9.	If EPA implements the oversight mechanism we recommend, it will help ensure that e-mail records are properly identified and protected.
	10	. We updated our discussion to indicate when EPA plans to deploy its survey tool.

## Appendix IV: Comments from the Department of Housing and Urban Development



	2
See comment 3.	"record" as part of the overall matter of "determining whether an e-mail message is a record," thereby pre-empting those portions of the rest of the flowchart that indicate that the e-mail may not be a record. The block also improperly asks two questions, and does not identify whether an overall "yes" answer is obtained when both questions are answered "yes," or when either question is answered "yes." Finally, the relationship between the two apparently unrelated questions (paraphrasing, did "you" create the e-mail? is it for business use?) is unclear. Similar problems arise in many other question blocks and in the arrangement of the blocks.
See comment 4.	Page 40 - The section header (on draft page 40) is incorrectly titled, "Three of the Four Agencies Comply with Most Policy Requirements for E-Mail Management" and begins with an incorrectly low number of agencies with generally conforming policies, "At three of the four agencies reviewed, the policies in place generally addressed the requirements for e-mail records management"; in both cases, "three" should be "four," as described below, and the wording revised accordingly ("The Four Agencies Comply" and "At the four agencies reviewed"), as should the corresponding part of the Table of Contents on draft page 1 ("The Four Agencies Comply"), the Results in Brief on draft page 6 ("Three agencies we reviewed"), and the HUD column of table 4 on draft page 44 (the "X"s should be check marks.
	Page 41 - states, incorrectly that, HUD's "policies in place did not cover three of eight applicable requirements." That sentence should be deleted for the reasons provided in the discussion of statements on page 44.
See comment 5.	Page 44 - correctly states that, "HUD officials stated that they considered that these requirements were met by a reference in their policy to the NARA regulations in which these requirements appear." In particular, HUD's Electronic Mail Policy (Handbook 2400.1, chapter 7, paragraph 7-4.b, Record Retention Responsibilities) says that, "Records created or received on electronic mail systems must be managed in accordance with the provision of 36 CFR 1220, 1222 and 1228," which are NARA regulations. (Note that this HUD policy text has been quoted by GAO in its draft footnote 66.) NARA has incorporated its Electronic Records Management regulation, 36 CFR 1234, as a whole into other NARA regulations. (See 36 CFR §§ 1222.50(b)(7), 1228.154(a), 1228.232(d), and 1228.270(a). Incorporation by reference is a widely used and well-accepted legal device. The text of the referenced document, once incorporated by reference, becomes fully and legally a part of the document into which it is incorporated. It is also sufficient to reference only incorporation of an entire document to incorporate its portions; that is, after incorporating a part of the Code of Federal Regulations (CFR), there is no need to reference each subpart, section, and paragraph. The subcomponents of the part are automatically incorporated as part of the incorporation of the entire CFR part.
	Note: HUD and NARA are not unique in using regulatory incorporation by reference to CFR Parts as a whole; the Office of Management and Budget has also incorporated into its regulations entire CFR Parts issued by NARA and other agencies by reference. See, e.g., 2 CFR 215.5.)
See comment 6.	Page 44 states that, "However, this reference is too general to make clear to staff that e-mail systems and backup tapes are not to be used for recordkeeping." As described above, this is incorrect, and should be deleted.

3 Page 49, the report incorrectly states that, "For these three officials the Department did not See comment 7. provide examples of printed e-mail records that had been stored in appropriate recordkeeping files." On the day GAO staff visited HUD to obtain these examples, the staff visited the office of only one of the three officials. The two other HUD offices for which GAO had made appointments that day were not visited. The sentence should be corrected to read, "The one official's office which was requested to provide examples of printed e-mail records that had been stored in appropriate recordkeeping files provided files of e-mails but the files did not reflect an accepted recordkeeping system." Page 54 and 55 - Recommendations to HUD: - The Department's policies already See comment 8. "appropriately reflect NARA's requirements" on these matters. As described in the discussion above, regarding statements made on pages 41 and 44, HUD has incorporated NARA's e-mail management requirements into its own policies by reference. However, as also noted earlier, HUD will enhance its policies and its implementation as recommended in order to increase their usability by all HUD officials and staff, including HUD's political leadership. In conclusion, HUD reiterates that its e-mail policy already incorporates the NARA See comment 9. regulations and requirements. Accordingly, HUD's policy does not require, revision but HUD acknowledges that implementation of this policy can be and will be enhanced. Additionally, it is not the case that every e-mail is an official record. HUD uses e-mail as a communication tool. HUD's practice is not to use e-mail for official record purposes. However, as also noted earlier, HUD will enhance its policies and its implementation as recommended in order to increase their usability by all HUD officials and staff, including HUD's senior officials. More definitive information with timelines will be provided in HUD's action plan to be developed once the final report has been issued. If you have any questions or require additional information, please contact Shelia Fitzgerald, Acting Director, Office of Investment, Strategy, Policy and Management at (202)-402-2432. Sincerely, For Joseph M. Milazzo Acting Chief Information Officer

	The following are GAO's comments on the on the HUD's written respo dated May 28, 2008, to our draft report.	onse
GAO Comments	1. As noted in our report, the described decision process is an examp one that could be used to determine whether an e-mail message is record. We did not state that the process is a requirement that mus followed by any particular agency.	a
	2. See comment 1.	
	3. See comment 5.	
	4. See comment 5.	
	5. Our draft noted that HUD incorporated Parts 1220, 1222, and 1228 NARA's regulations by reference. However, the policy requirement issue are contained in Part 1234 of NARA's regulations. In its comments, HUD argues that the Parts it cites incorporate Part 123- reference. We do not agree with HUD that this type of indirect reference is a sufficient or effective way of informing HUD staff of their e-mail recordkeeping responsibilities as well as of prohibited practices. In addition, HUD did not fully implement the applicable mail management requirements because it did not establish procedures to implement appropriate procedures that protect e-ma records.	ts at 4 by 5 e-
	6. See comment 5.	
	7. The text suggested by HUD is incorrect in that we requested copie e-mail records from all three selected officials. We revised our report to provide additional detail on this.	
	8. We agree that enhancing HUD's policies on e-mail records as we recommend could increase their usability by all HUD officials and staff; among other things, this could clarify for HUD staff which practices are prohibited.	
	9. We agree that not every e-mail is an official record, and we emphasized this point in our report. However, we also emphasized that the con of a communication, not its form, determines its record status.	

## Appendix V: GAO Contact and Staff Acknowledgments

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Staff Acknowledgments	In addition to the individual named above, Mirko Dolak and James R. Sweetman, Jr. (Assistant Directors); Monica Anatalio; Timothy Case; Barbara Collier; Pamlutricia Greenleaf; Jennifer Franks; Tarunkant N. Mithani; Sushmita Srikanth; and Jennifer Stavros-Turner made key contributions to this report.

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