



April 2017

DATA ACT

As Reporting
Deadline Nears,
Challenges Remain
That Will Affect Data
Quality

GAO Highlights

Highlights of [GAO-17-496](#), a report to congressional addressees

Why GAO Did This Study

Across the federal government, agencies are making final preparations to submit the required data by the DATA Act's May 2017 deadline. This represents the culmination of almost 3 years of effort by OMB, Treasury, and federal agencies to address many policy and technical challenges. Moving forward, attention will increasingly focus on another critical goal of the act: improving the quality of the data produced.

Consistent with GAO's mandate under the act, this is the latest in a series of reports reviewing the act's implementation. This report examines (1) risks to data quality related to known material weaknesses and other deficiencies previously identified by GAO, IGs, and external auditors; (2) risks to data quality related to challenges in operationalizing policy and technical guidance; (3) agencies' assurances of the quality of their data submissions; and (4) efforts taken to establish a data governance structure. GAO reviewed DATA Act implementation documents and auditors' reports on known challenges and interviewed staff at OMB, Treasury, and other agencies.

What GAO Recommends

GAO recommends that the Director of OMB ensures that the Data Standards Committee publicly releases information about the topics of its proceedings and any resulting outcomes. OMB generally agreed with GAO's recommendation.

View [GAO-17-496](#). For more information, contact J. Christopher Mihm (202) 512-6806 or MihmJ@gao.gov and Paula M. Rascona (202) 512-9816 or RasconaP@gao.gov

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DATA ACT

As Reporting Deadline Nears, Challenges Remain That Will Affect Data Quality

What GAO Found

Internal control weaknesses and other challenges pose risks to data quality. Material weaknesses and significant deficiencies reported in agencies' financial audits and other challenges reported in Inspectors General (IG) readiness review reports show several widespread and longstanding issues that present risks to agencies' abilities to submit quality data as required by the Digital Accountability and Transparency Act of 2014 (DATA Act). These issues fall into three categories: (1) accounting and financial management, (2) financial management systems, and (3) information technology security and controls. GAO has also reported weaknesses and challenges in government-wide financial management systems used for DATA Act reporting.

Challenges with guidance will impact data quality. Challenges related to how agencies report certain intragovernmental transactions, reconcile recipient address information, and align required DATA Act files with missing data continue to present risks to the quality of data displayed on USASpending.gov. The Office of Management and Budget (OMB) and the Department of the Treasury (Treasury) have stated that they do not expect to resolve these challenges before the May 2017 reporting deadline. Unresolved challenges affecting data quality could lead policymakers and the public to draw inaccurate conclusions from the data. This challenge underscores the need for OMB to address GAO's open recommendation that it provide agencies with additional guidance to address data quality issues. GAO will continue to assess how OMB, Treasury, and agencies address data quality issues moving forward.

Limitations exist with data quality assurance processes. OMB guidance directs senior accountable officials at each agency to rely on existing assurance processes when they certify that their agencies' DATA Act submissions are valid and reliable. However, GAO identified concerns regarding some existing assurance processes. For example, OMB directed agencies to use a General Services Administration assurance statement attesting to the quality of data in two source systems, but the assurance statement focuses on data security rather than data quality, and it is unclear whether it applies to both procurement and financial assistance data. OMB is aware of these issues and expects to finalize the assurance process in time for the May 2017 reporting deadline. Accordingly, GAO is not making a recommendation at this time but will assess the quality of the assurance process in future work.

Efforts to establish a data governance structure are still at an early stage. OMB has taken some actions to improve its data governance framework, but efforts to establish a fully functioning data governance structure are at an early stage with many specifics yet to be worked out. OMB formally chartered the Data Standards Committee as an advisory body in November 2016 to focus on clarifying existing data element definitions and identifying needs for new standards. The charter states that the committee will promote transparency by making the topics and outcomes of its proceedings public, but OMB has not kept records of the committee's meetings nor has the committee produced a work plan for moving forward. Public information about the committee's activities and outcomes would facilitate consultation with stakeholders, as required by the act.

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Abbreviations

ASP	Award Submission Portal
CIGIE	Council of the Inspectors General on Integrity and Efficiency
DAIMS	DATA Act Information Model Schema
DATA Act	Digital Accountability and Transparency Act of 2014
FAR	Federal Acquisition Regulation
FFATA	Federal Funding Accountability and Transparency Act of 2006
FFMIA	Federal Financial Management Improvement Act of 1996
FPDS-NG	Federal Procurement Data System-Next Generation
FSRS	Federal Funding Accountability and Transparency Act Subaward Reporting System
GPRAMA	GPRA Modernization Act of 2010
GSA	General Services Administration
HHS	Department of Health and Human Services
IQA	Information Quality Act
OFPP	Office of Federal Procurement Policy
IG	Office of Inspector General
OMB	Office of Management and Budget
SAO	senior accountable official
SAM	System for Award Management
SBA	Small Business Administration
Treasury	Department of Treasury
USDA	United States Department of Agriculture
USPS	United States Postal Service
USSGL	United States Standard General Ledger
VA	Department of Veterans Affairs

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April 28, 2017

Congressional Addressees:

In the 3 years since the Digital Accountability and Transparency Act of 2014 (DATA Act) became law, the Office of Management and Budget (OMB), the Department of the Treasury (Treasury), and federal agencies have taken significant steps in preparing to make more complete and accurate federal spending data available to the public in May 2017. The DATA Act requires OMB and Treasury to increase the types and transparency of spending data available to agencies, Congress, and the public by establishing standards to enable the reporting and tracking of government-wide spending at multiple points in the spending lifecycle.¹ The DATA Act also requires agencies to report the data in accordance with those standards on USASpending.gov and requires federal inspectors general (IG) to assess how their respective agencies implement and use data standards, as well as the completeness, timeliness, and accuracy of the data their agencies submit.

Consistent with our mandate under the act, this is the latest in a series of GAO reports reviewing DATA Act implementation. Our prior reviews have identified several challenges related to OMB's and Treasury's efforts to standardize data element definitions and develop a technical schema to facilitate agency reporting. If unaddressed, these challenges could increase the risk of inconsistent and incomparable reporting. Our previous work has also identified concerns including inadequate guidance, tight time frames, competing priorities, a lack of funding, and system integration issues reported by agencies that could impede effective and timely implementation as well as the need for OMB to establish a data governance structure to help ensure the integrity of the standards over time.²

This review focuses on what is already known about existing challenges that affect the quality of agency financial data as well as issues that will affect data quality as agencies begin to report under the act. More

¹Pub. L. No. 113-101, 128 Stat. 1146 (May 9, 2014). The DATA Act amended the Federal Funding Accountability and Transparency Act of 2006 (FFATA). Pub. L. No. 109-282, 120 Stat. 1186 (Sept. 26, 2006), *codified at* 31 U.S.C. § 6101 note.

²For a list of related GAO products, see page 45.

specifically, this report addresses the following: (1) risks to data quality related to known material weaknesses and other deficiencies, including internal controls over financial reporting, that have been identified in selected previous audits, reviews, and reports conducted by GAO, IGs and external auditors; (2) risks to data quality related to challenges in operationalizing DATA Act policy and technical guidance; (3) approaches that agencies will use to provide assurances of the quality of their data submissions and any associated limitations; and (4) efforts taken to establish a data governance structure. We also update the status of OMB's and Treasury's efforts to address our previous recommendations related to DATA Act implementation, 9 of which remain open.

To assess potential risks to data quality related to known material weaknesses³ and other significant deficiencies,⁴ including internal controls over financial reporting, that have been identified in selected previous audits, reviews, and reports by us, IGs, and external auditors, we examined: (1) the extent to which agencies' independent auditors have reported material weaknesses, significant deficiencies, and other challenges, and (2) the extent to which we previously reported issues with government-wide financial management systems used to report spending data to USASpending.gov. We reviewed the Chief Financial Officers Act of 1990 (CFO Act) agencies' fiscal year 2016 Performance and Accountability Reports (PAR) and Agency Financial Reports (AFR) to identify material weaknesses, significant deficiencies, and other challenges that could affect the quality of the data submitted by agencies.

We also reviewed these agency reports for any auditor-identified noncompliance with the Federal Financial Management Improvement Act of 1996 (FFMIA) to identify factors that may increase the risk to reporting

³A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis.

⁴A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.⁵Pub. L. No. 104-208, div. A., title VIII, §§ 801-808, 110 Stat. 3009, 3009-389 to 3009-393 (Sept. 30, 1996) *codified at* 31 U.S.C. § 3512 note.

quality data.⁵ We reviewed readiness review reports issued by IGs to identify reported issues and challenges related to DATA Act implementation and to ensure we had a comprehensive understanding of IG-identified issues and challenges that could affect the quality of spending data reported under the DATA Act.⁶ In addition, we reviewed our previous reports to identify reported deficiencies in government-wide systems that could affect the quality of spending data submitted to USASpending.gov. Although the conditions observed in these reports may not be present in all federal agencies and systems, they illustrate conditions that increase the risk and effects to agency data quality.

To assess the potential risks to data quality related to challenges in operationalizing DATA Act policy and technical guidance while implementing the act, we examined (1) the extent to which the two selected agencies have been able to submit, validate, and certify their data submissions to the DATA Act broker and any challenges they reported; and (2) the steps OMB and Treasury have taken to address known reporting challenges. We reviewed technical documentation related to the schema version 1.01 and the broker to understand the reporting structure, broker functionality, and validation processes. We selected two agencies—the Department of Health and Human Services (HHS) and the U.S. Department of Agriculture (USDA)—to examine their experiences reporting data. We selected these agencies based on whether they were in compliance with existing federal requirements for federal financial management systems; the type of federal funding provided (such as grants, loans, or procurements); and their status as federal shared service providers for financial management. Although the agencies' experiences are not generalizable, they illustrate different conditions and challenges under which agencies are implementing the act.

We reviewed our past reports to identify data quality issues related to DATA Act implementation, and we reviewed OMB policy guidance intended to facilitate agency reporting. We interviewed OMB staff and Treasury officials to understand any steps they have taken to respond to previously identified challenges, agency requests for clarification on

⁵Pub. L. No. 104-208, div. A., title VIII, §§ 801-808, 110 Stat. 3009, 3009-389 to 3009-393 (Sept. 30, 1996) *codified at* 31 U.S.C. § 3512 note.

⁶For additional information on our review of inspectors general readiness reviews, see GAO, *DATA Act: Office of Inspector General Reports Help Identify Agencies' Implementation Challenges*, [GAO-17-460](#) (Washington, D.C.: Apr. 26, 2017).

reporting requirements, and any plans for additional guidance. We also met with OMB staff and Treasury officials to obtain information on the status of efforts to address our previous recommendations related to providing policy and technical guidance.

To assess the approach that agencies will use to assure the quality of their data submissions and any associated limitations we (1) reviewed relevant OMB policy guidance; (2) spoke with HHS and USDA officials, and requested and reviewed documentation—where applicable—to understand any concerns they have or challenges they are facing or expect to face during the assurance process; and (3) interviewed OMB staff and Treasury officials to better understand the assurance process, and asked about plans for additional guidance. To describe OMB's and Treasury's efforts to establish a data governance structure, we reviewed documentation provided by OMB and met with OMB staff and Treasury officials.

We also met with representatives of organizations with expertise in data governance to obtain additional information about how key practices described in our December 2016 report have been implemented in data governance frameworks. Additional details regarding our objectives, scope, and methodology are provided in appendix I.

We conducted this performance audit from January 2017 to April 2017 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.

Background

Signed into law on May 9, 2014, the DATA Act expanded on previous federal transparency legislation by requiring the disclosure of federal agency expenditures and linking agency spending information to federal program activities so that both policymakers and the public can more effectively track federal spending. The DATA Act requires government-wide reporting on a greater variety of federal funds, such as budget and financial information, as well as tracking of these funds at multiple points in the federal spending lifecycle. To improve the quality of these data, the act requires that agency-reported award and financial information comply with new data standards established by OMB and Treasury. These standards specify the items to be reported under the DATA Act and define and describe what is to be included in each element with the aim of

ensuring that information will be consistent and comparable. The act identifies OMB and Treasury as the two agencies responsible for leading government-wide implementation.

Two key components of ensuring the accuracy, completeness, and consistency of federal spending data are OMB releasing policy guidance and Treasury developing technical guidance for the agency submissions and publication of the data required under the act. Toward that end, OMB has taken a number of steps to help agencies meet their reporting requirements, including establishing 57 standardized data element definitions for reporting federal spending information, issuing guidance to operationalize selected standards and clarify agency reporting requirements, and meeting with agencies to assess their readiness to meet the reporting requirements under the act. Specific actions include the following:

- In May 2015, OMB issued initial guidance to federal agencies on reporting requirements pursuant to the Federal Funding Accountability and Transparency Act (FFATA) as well as the new requirements that agencies must employ pursuant to the DATA Act.⁷ The guidance also directs agencies to (1) implement data definition standards for collecting and reporting agency-level and award-level data by May 9, 2017; (2) implement a standard data exchange format for providing data to Treasury to be displayed on USASpending.gov or a successor site; and (3) link agency financial systems with award systems by continuing to use specified unique identification numbers for financial assistance awards and contracts.
- In May 2016, OMB released guidance on reporting financial and award information required under the act.⁸ This guidance addresses (1) reporting financial and award level data, (2) linking agency award and financial systems using a unique award identifier, and (3) assuring that data submitted to Treasury for publication on USASpending.gov are sufficiently valid and reliable.
- In November 2016, OMB issued additional guidance in response to questions and concerns reported by agencies. This guidance

⁷OMB, *Increasing Transparency of Federal Spending by Making Federal Spending Data Accessible, Searchable, and Reliable*, OMB Memorandum M-15-12 (May 8, 2015).

⁸OMB, *Additional Guidance for DATA Act Implementation: Implementing a Data Centric Approach for Reporting Federal Spending Information*, Management Procedures Memorandum No. 2016-03 (Washington, D.C.: May 3, 2016).

specifies DATA Act reporting responsibilities for intragovernmental transactions, explains how to report financial assistance awards with personally identifiable information, and clarifies the senior accountable official (SAO) assurance process over the data submitted to the DATA Act broker, a system to standardize data formatting and assist reporting agencies in validating their data prior to submission.⁹

- The May and November 2016 guidance also directs agency SAOs to leverage existing data quality and management controls established in statute, regulations, or federal policy when submitting their assurance over the data.

In addition to issuing policy guidance to help agencies meet their reporting requirements under the act, OMB's Controller and Treasury's Fiscal Assistant Secretary conducted a series of meetings with CFO Act agencies to obtain information on any challenges that could impede effective implementation and assess agencies' readiness to report required spending data in May 2017.

Treasury also led efforts to develop the technical guidance and reporting systems to facilitate agency reporting. In April 2016, Treasury released the DATA Act Information Model Schema (DAIMS), or schema version 1.0, which provides information on how to standardize the way financial assistance awards, contracts and other financial and non-financial data will be collected and reported under the DATA Act.¹⁰ A key component of the reporting framework laid out in the schema is the DATA Act broker. According to Treasury guidance documents, agencies are expected to submit three files sourced from their financial management systems to the broker. The broker is also expected to extract award and sub-award information from existing award reporting systems that currently supply award data (covering federal assistance including grants and loans, as well as procurements) to USASpending.gov.

These award reporting systems—including the Federal Procurement Data System-Next Generation (FPDS-NG), System for Award Management (SAM), the Award Submission Portal (ASP), and the FFATA Subaward Reporting System (FSRS)—compile information submitted by agencies

⁹Treasury's DATA Act Implementation Playbook requires agencies to identify an SAO who is responsible for their agency's implementation of the DATA Act and who is an executive officer with enough seniority and expertise to manage a project across multiple offices and federal spending communities.

¹⁰Department of the Treasury, *DATA Act Information Model Schema v1.0* (Apr. 29, 2016).

and award recipients to report, among other things, procurement and financial assistance award information required under FFATA.¹¹ A more detailed discussion of the broker and the agency file submission process can be found in our August 2016 correspondence.¹² In addition to developing the schema version 1.0 and the broker, Treasury also issued an implementation playbook that outlines 8 steps and a recommended timeline for agency implementation, and hosted multiple meetings, including weekly office hour calls and monthly technical workshops, to help agencies prepare and test their data for submission to the broker.

To help improve the quality of the data, the act also requires agencies' IGs and GAO to assess and report on the completeness, timeliness, quality, and accuracy of spending data submitted by federal agencies. The first IG reports were due to Congress in November 2016. However, agencies are not required to submit spending data in compliance with the act until May 2017. As a result, the IGs did not report on the spending data in November 2016. The Council of the Inspectors General on Integrity and Efficiency (CIGIE) developed an approach to address what it describes as the IG reporting date anomaly and maintain early IG engagement with the agencies.¹³

CIGIE encouraged but did not require the IGs to undertake assessments of their respective agencies' readiness to submit spending data in accordance with DATA Act requirements and delayed issuance of the mandated audit reports to November 2017. The Federal Audit Executive Council DATA Act Working Group—established by CIGIE to assist the IG community in understanding and meeting its DATA Act oversight requirements—issued the DATA Act Readiness Review Guide (version 2.0) on June 2, 2016, to guide IGs in conducting their readiness reviews.

¹¹The information displayed on USASpending.gov is derived from several sources. Procurement data are imported from FPDS-NG, which collects information on contract actions. SAM is the primary database for information on potential government business partners in which those wishing to do business with the federal government must register. ASP is the platform used by federal agencies to report financial assistance data. FSRS provides data on first-tier sub-awards reported by prime recipients.

¹²[GAO-16-824R](#).

¹³CIGIE is an independent entity established within the executive branch to address integrity, economy, and effectiveness issues that transcend individual government agencies and aid in establishing a professional, well-trained, and highly skilled workforce in Offices of Inspectors General. CIGIE's mission includes identifying, reviewing, and discussing areas of weakness and vulnerability in federal programs with respect to fraud, waste, and abuse.

According to the review guide, the main objectives of the IG readiness reviews are to assess whether an agency's DATA Act implementation plan or process is "on track to meet the requirements of the DATA Act," and to provide, as needed, recommendations or suggestions on how to improve the agency's likelihood of compliance with the requirements of the DATA Act.

Internal Control Material Weaknesses, Significant Deficiencies, and Other Challenges Pose Risks to Federal Spending Data Quality

Financial Audits and Readiness Reviews Indicate That Agencies Face Data Quality Issues in Three Broad Areas

As of February 2017, 22 of the 24 CFO Act agencies had issued annual financial reports for fiscal year 2016 and 19 of the 22 CFO Act agencies' auditors reported material weaknesses and/or significant deficiencies in internal control over financial reporting in their audit reports that may affect the quality of information reported under the DATA Act. In addition, as of February 2017, 20 of the 24 CFO Act agencies' IGs had issued readiness review reports. Of these, 16 IGs identified a range of issues and challenges which may affect agencies' abilities to produce quality data for submission to Treasury as part of the DATA Act reporting requirements.

Further, 9 of the 22 CFO Act agencies' auditors reported agencies' financial management systems did not substantially comply with Section 803(a) of FFMI, which may limit an agency's ability to provide reliable and timely financial information for managing day-to-day operations and to produce reliable financial statements, maintain effective internal control, and comply with legal and regulatory requirements, including the DATA Act.

Our analysis of material weaknesses, significant deficiencies, and other challenges reported in agency annual financial reports and agency IGs' DATA Act readiness reviews identified data quality issues and challenges in three broad areas that increase the risk agencies may not be able to

report complete, timely, and accurate data as required under the DATA Act by May 2017.

Accounting and Financial Management

These issues and challenges relate to internal controls over financial reporting and financial management operations, properly recorded and reconciled accounting balances and transactions, and other issues related to the proper use of accounting practices in accordance with U.S. generally accepted accounting principles. Fourteen of the 22 CFO Act agencies' auditor's reports noted material weaknesses and significant deficiencies, and 14 of the 20 IG readiness reviews reported issues or challenges related to accounting and financial management. See appendix III for a list of agencies that had deficiencies in this area.

According to some of the auditor's reports, issues in this area could result in misstatements in budgetary balances, obligations, and undelivered orders—which are part of the information to be posted on USASpending.gov. Some examples include the following:

- One agency's auditor reported a material weakness in controls over financial management related to the maintenance of accounting records, recording obligations at the transaction level, and accounting and internal controls over obligations and undelivered orders. The auditor also reported a significant deficiency related to ineffective monitoring and reviewing, and inappropriate certification as to the validity of obligation balances, which resulted in invalid obligations remaining open. According to the auditor, these deficiencies restrict the availability of funding authority, and increase the risk of misstating obligation balances as of year-end. These types of issues increase the risk that quarterly obligation amounts reported by agencies under DATA Act requirements may be inaccurate or incomplete.
- Another agency's IG readiness review reported that the various layers of data validation and reconciliation involved in the agency's DATA Act implementation are complex and require coordination with each reporting bureau. According to the agency's IG, the complexities of performing reconciliations of reported data to source systems presents a challenge to the agency's ability to ensure the quality and validity of data reported.

Financial Management Systems

This set of issues included longstanding challenges with disparate or antiquated financial management systems that affect financial reporting. These challenges include system infrastructure and integration issues such as systems that do not consolidate transaction level financial data or do not capture required data elements such as award identifiers used to

link financial and non-financial data. Five of the 22 CFO Act agencies' auditors' reports noted material weaknesses and significant deficiencies, and 14 of the 20 IG readiness reviews reported issues or challenges related to financial management systems. See appendix III for a list of agencies that had deficiencies in this area.

According to the auditors' reports, issues in this area may cause ineffective application of controls used to identify and resolve differences in financial information with source systems to help ensure complete, accurate, and timely financial information for DATA Act reporting. Also, according to the IG readiness reviews, issues with agency financial management systems resulted in test file submissions being rejected by the DATA Act broker due to validation errors. Only data that have passed the broker validation and been approved by the SAO is included in USASpending.gov. Data that have not passed the broker validation will not be included, therefore increasing the risk of incomplete or misleading information. Some examples include the following:

- One agency's annual financial audit report stated that the agency had not enabled the full functionality of its accounting systems to capture all budgetary accounting events and to automate budgetary reporting procedures. As a result, the agency made numerous manual adjustments related to budgetary resources amounts that were not supported and not properly recorded to the correct general ledger accounts. According to the auditor, manual adjustments increase the risk (1) that budgetary adjustments were unsupported or inconsistently recorded, and (2) of the likelihood of errors in the financial statements. These deficiencies increase the risk that budgetary information that will be submitted to USASpending.gov may be incomplete and inaccurate.
- Another agency's IG readiness review reported that the agency faced challenges due to legacy and current financial systems using different technologies and data elements. Limited resources, such as lack of financial resources and human capital necessary to implement the act's requirements, was also cited as a challenge. The IG also reported that the agency had been unable to resolve data quality issues that have impeded the complete and accurate reporting of departmental contract, grant, loan, and other financial assistance awards in USASpending.gov.

Finally, according to the auditor's reports, 9 of the 22 CFO Act agencies' auditors reported agencies' financial management systems did not substantially comply with 1 or more of the 3 requirements found in section

803(a) of FFMIA. Section 803(a) of FFMIA requires: (1) federal financial management systems requirements; (2) applicable federal accounting standards; and (3) the U.S. Standard General Ledger (USSGL) at the transaction level.¹⁴

Eight of 22 agencies did not comply with federal financial management system requirements, which consist of reliable financial reporting; effective, efficient, and cost effective financial operations; safeguarding resources; and internal controls over financial reporting and financial system security. Four of 22 agencies did not comply with federal accounting standards, which provide guidance to improve federal financial reporting and are essential for public accountability and the effective and efficient functioning of government. Five of 22 agencies did not comply with the USSGL at the transaction level which means that each time an approved transaction is recorded in the financial management system it will generate the appropriate general ledger accounts for posting the transaction in accordance with the rules defined in USSGL guidance. By not implementing effective internal controls over financial management systems and not adequately implementing requirements in section 803(a) of FFMIA, agencies will be challenged to provide consistent financial and non-financial information across component entities and functions, which increases the risk that agencies may not be able to submit quality data for DATA Act reporting.

Information Technology Security and Controls

The third area consists of issues involving security over information technology (IT) systems; improper access controls to limit users to systems and functions needed for their work; and system configurations such as outdated system software, patch management, and lack of compliance with internal policies. Issues involving IT security and ineffective controls could limit management's ability to provide assurance over the completeness and accuracy of recorded transactions. Eighteen of the 22 CFO Act agencies' auditors' reports noted material weaknesses and significant deficiencies related to IT security and controls. See appendix III for a list of agencies that had deficiencies in this area. The IG readiness reviews, which primarily focused on other steps taken by

¹⁴In the agency's PAR or AFR, the auditor also reports on the agency's compliance with Section 803(a) of FFMIA. FFMIA builds on the CFO Act by emphasizing the need for agencies to have financial management systems that can generate timely, accurate, and useful information with which to make informed decisions and to ensure accountability on an ongoing basis.

agencies to implement the DATA Act, did not specifically mention challenges or issues related to IT security and controls.

According to the auditors' reports, issues in this area increase the risk that unauthorized and/or inappropriate changes made either accidentally or intentionally to financial IT systems may go undetected by management, increasing the risk of misstatement due to fraud and disruption of critical financial operations, as well as increasing the risk that the reliability and integrity of agencies' data could be compromised and adversely affect the agencies' ability to provide complete, accurate, and timely information for DATA Act reporting. One example is the following:

- One agency's annual financial audit report stated that controls over access to programs and data and audit logs were not designed properly, consistently implemented, or fully effective. The auditor found that database and operating system patches were not documented, authorized or tested prior to implementation into the production environment, a complete and accurate listing of operating system patches could not be generated, and a feeder system was configured incorrectly to assign incorrect invoice acceptance date data, among other things. According to the auditor, these deficiencies increase the risk that unscrupulous, unauthorized, or inappropriate activity could be performed and not detected, which could lead to a compromise and/or security risk to the confidentiality, integrity, and availability of the data and systems. These issues also increase the risk that financial and non-financial information that will be submitted to USASpending.gov may be incomplete, inaccurate, and untimely.

Our Previous Work Has Identified Data Limitations in the Award Systems That Provide Data to USASpending.gov

We have previously reported weaknesses, issues, and other challenges in key DATA Act award systems which increase the risk that the data that will be submitted to USASpending.gov may not be complete, accurate, and timely. The DATA Act broker is expected to extract award and sub-award information related to federal spending, such as federal assistance—including grants, loans, and procurements—directly from four award systems. The four award systems and related issues that we have previously identified are described below. Unlike the data submitted by agencies directly from their financial systems to the DATA Act broker, the award and sub-award information extracted from these four systems are not subject to any validations in the broker.

Federal Procurement Data
System-Next Generation
(FPDS-NG)

Since 1978, FPDS-NG has been the primary government-wide central repository for procurement data, and feeds certain data to USASpending.gov—a searchable database of information on federal contracts and other government assistance such as grants and cooperative agreements. Individuals and entities awarded contracts over the micro-purchase threshold must submit detailed contract information to FPDS-NG. FPDS-NG includes information about the product or service, agency and vendor information, contract start and expiration dates, and location of contract performance, among other elements. According to Treasury officials, the DATA Act broker will extract procurement award and awardee information such as award description, amount, and awardee unique identifier from FPDS-NG to be reported on USASpending.gov.

In our past work, we found that FPDS-NG often contains inaccurate or incomplete data as agencies do not always input or document required information. For example, in September 2016, our review of the Department of Veterans Affairs (VA) contracting policies and procedures found that total obligations balances reflected in VA's subsidiary accounting records did not match what was recorded in FPDS-NG.¹⁵ We also identified inaccurate data in FPDS-NG such as misclassified 8(a)¹⁶ firms and incorrect obligations balances in our March 2016 review of the Small Business Administration's (SBA) 8(a) Business Development Program.¹⁷

Further, our prior work on FPDS-NG also found data limitations with the system's inability to identify more than one type of service purchased for each contract action.¹⁸ According to some of the IG reports we reviewed, these data quality issues were the result of human error, the lack of departmental internal controls to reasonably assure required procurement

¹⁵GAO, *Veterans Affairs Contracting: Improvements in Policies and Processes Could Yield Cost Savings and Efficiency*, [GAO-16-810](#) (Washington, D.C.: Sept. 16, 2016).

¹⁶The Small Business Administration (SBA) helps socially and economically disadvantaged small businesses gain access to federal contracting opportunities through its 8(a) program.

¹⁷GAO, *Alaska Native Corporations: Oversight Weaknesses Continue to Limit SBA's Ability to Monitor Compliance with 8(a) Program Requirements*, [GAO-16-113](#) (Washington, D.C.: Mar. 21, 2016).

¹⁸GAO, *Defense Acquisitions: Continued Management Attention Needed to Enhance Use and Review of DOD's Inventory of Contracted Services*, [GAO-13-491](#) (Washington, D.C.: May 23, 2013).

System for Award
Management (SAM)

information is properly recorded in departmental systems and FPDS-NG, and limitations with the FPDS-NG functionality such as the inability to change incorrect data identified in FPDS-NG. These issues increase the risk that data reported from FPDS-NG to the Treasury data store will not be complete, accurate, and timely.

SAM is the primary U.S. government repository for prospective federal awardee and federal awardee information, and the centralized Government system for certain contracts and grants. All entities that wish to do business with the government are to maintain an active registration in SAM unless exempt. As part of this registration, awardees register a name, unique identifier, address, and executive compensation information—all of which are required DATA Act standardized data elements. SAM also populates the entity name and address (street, city, state, congressional district, ZIP Code, and country) in FPDS-NG and certain executive compensation and other sub-awardee information is repopulated from SAM to FSRS prior to the prime awardee's reporting.

We have previously identified data limitations with SAM that may affect DATA Act reporting. For example, in January 2017, we found that SAM did not contain information on lessors that listed physical or mailing addresses in China. Our work also found that certain information disclosed in SAM is not validated. If the addresses for foreign awardees are not recorded in SAM, then they will not be displayed in USASpending.gov for access by the public, resulting in incomplete and inaccurate awardee data for DATA Act reporting. We further noted that prior to November 1, 2014, the General Services Administration (GSA) was not required to collect certain information from lessors through SAM, such as the parent, subsidiary, or successor entities to the lessor.¹⁹

In addition, our June 2014 review of USASpending.gov found that ZIP Code information for awardees—which is provided by SAM—was one of the data elements that were significantly inconsistent with information in agency records.²⁰ In that report, we recommended clarified guidance on agency maintenance of authoritative records adequate to verify the accuracy of required data reported for use by USASpending.gov to

¹⁹GAO, *Federal Real Property: GSA Should Inform Tenant Agencies When Leasing High-Security Space from Foreign Owners*, [GAO-17-195](#) (Washington, D.C.: Jan. 3, 2017).

²⁰GAO, *Data Transparency: Oversight Needed to Address Underreporting and Inconsistencies on Federal Award Website*, [GAO-14-476](#) (Washington, D.C.: June 30, 2014).

improve the completeness and accuracy of data submissions. Although some progress has been made by the related agencies, the recommendations related to this report remain unresolved. These data limitations increase the risk that federal agencies may not submit quality awardee data for DATA Act reporting.

Award Submission Portal (ASP)

ASP is the system used by federal agencies to report financial assistance data (e.g., grants) to USASpending.gov. According to Treasury, the DATA Act broker will extract financial assistance award information from the ASP—including awardee unique identifier, award characteristics, awards amount, awardee legal identify name, and address for financial assistance—all of which are required by the DATA Act to be reported.

In December 2016, we reported that the DATA Act broker will not validate the accuracy of data extracted from the ASP and that according to Treasury officials ASP does apply some validation checks to the data submitted by federal agencies.²¹ In addition, ASP rejects individual records that fail 10 percent of the validation requirements. ASP also rejects entire file submissions if more than 10 percent of the records in the file submission fail validation checks. However, ASP partially accepts the file submission if less than 10 percent of the records in a file submission fail validation checks. The effectiveness of this validation process to prevent the submission of erroneous records raises concerns regarding the quality of awardee data that can be submitted for DATA Act reporting.

FFATA Subaward Reporting System (FSRS)

FSRS allows prime grant award and prime contract recipients to report sub-award activity including executive compensation, and provides data on first-tier sub-awards reported by prime recipients. FSRS was created as a result of FFATA and became active in July 2010. Prime awardees must register and report sub-award information for first-tier sub-awardees, including award and entity information, such as Data Universal Numbering System (DUNS) identification numbers. FSRS contains the small business status of some subcontractors, but only for limited types of small businesses. The sub-awardee provides all of the information required for reporting to the prime awardee. This includes sub-awardee entity information, sub-awardee unique identifier, and relevant executive

²¹GAO, *Data Act: OMB and Treasury Have Issued Additional Guidance and Have Improved Pilot Design but Implementation Challenges Remain*, [GAO-17-156](#) (Washington, D.C.: Dec. 8, 2016).

compensation data, if applicable. These are also DATA Act standardized data elements required to be reported.

In June 2014, we reported that we could not verify the subcontract data in FSRS as agencies frequently do not maintain the records necessary to verify the information reported by the awardees.²² We also found inconsistencies in the reporting of 20 of 21 data elements caused by errors in data entry, missing data, or lack of clear guidance. In our report, we recommended clarified guidance on agency maintenance of authoritative records adequate to verify the accuracy of required data reported for use by USASpending.gov. Our recommendation on this issue remains unresolved. These issues increase the risk that federal agencies may not submit complete, accurate, and timely sub-award data for DATA Act reporting.

Reporting Challenges Related to Implementing DATA Act Guidance Will Affect Data Quality

OMB Issued Guidance on Reporting Intragovernmental Transactions

As agencies prepare to submit required financial and award information in May 2017, they have identified a number of reporting challenges that will affect the quality of data posted on USASpending.gov. Both OMB and Treasury acknowledged that these challenges are unlikely to be resolved before the first statutory deadline when data are collected in compliance with the act. Included in these challenges is how agencies are to report certain intragovernmental transactions that result from financial activities between federal government agencies. Specifically, in order to properly present the financial balances and activities of the federal government,

²² [GAO-14-476](#)

the reciprocating balances and activities between the agencies should be offset and result in a zero balance.²³

Reconciling intragovernmental transactions for financial reporting purposes is a longstanding and government-wide challenge. Federal accounting standards, laws, regulations, and policies govern the accounting, reporting, and business rules for each of the categories and subcategories of intragovernmental transactions. Our annual audits of the U.S. government's consolidated financial statements have identified the federal government's inability to adequately account for and reconcile intragovernmental activity and balances between federal entities as an impediment that has prevented us from rendering an opinion on the federal government's accrual-based consolidated financial statements for many years. Our most recent audit found that the amount of unmatched funds from intragovernmental transactions amounted to hundreds of billions of dollars. In response to our previous recommendations, Treasury has continued to actively work with federal agencies and improve its processes to resolve intragovernmental transactions.²⁴

However, the guidance OMB developed on how agencies are to report intragovernmental transactions does not appear to leverage the existing processes that Treasury has put in place to resolve on a quarterly basis the differences in intragovernmental transactions between federal agencies.²⁵ Treasury has implemented a new initiative for identifying and monitoring systemic root causes of intragovernmental differences, in addition to other enhancements to its processes for reporting various aspects of agencies intragovernmental differences between agencies, including the composition of the differences by agency and category of intragovernmental transaction.

USDA officials (one of our case example agencies) expressed concern about OMB's guidance on intragovernmental transactions. Specifically, they told us that without a standard approach for reporting

²³For example, when one agency purchases goods or services (buyer) from another agency (seller), the reciprocating accounts payable (buyer) and the accounts receivable (seller) should eliminate or net to zero. See U.S. Department of the Treasury, *Agency Reporting Requirements for the Financial Report of the United States Government*, Treasury Financial Manual, Chapter 4700 (July 2016).

²⁴[GAO-17-283R](#).

²⁵OMB, *Additional Guidance for DATA Act Implementation: Further Requirements for Reporting and Assuring Data Reliability*, M-17-04 (Washington, D.C.: Nov. 4, 2016).

intragovernmental transactions—meaning whether the funding or awarding agency reports them—it is not appropriate for a funding agency to certify award data maintained in an awarding agency’s systems, a DATA Act reporting method allowed after the first data submission. HHS officials (our other case example agency) also expressed concern, and told us that although they will be prepared to report in a manner consistent with the current OMB guidance, they believe that OMB should revisit the guidance because it differs from other reporting requirements.

Treasury officials told us that they are aware of these challenges, but they do not expect that these issues will be resolved before the May 2017 reporting deadline. These officials also told us that efforts to address longstanding challenges related to reporting intragovernmental transactions are under way, and that they plan to communicate data quality limitations to the public on USASpending.gov. The officials could not provide us with specifics on how they would communicate the limitations but indicated that it would likely be part of the SAO assurance process. OMB officials told us in January 2017 that they are unaware of any outstanding issues on this topic that would require an OMB policy response, and therefore OMB has no plans to issue additional implementation guidance at this time.

Missing or Incorrect ZIP+4 Information Will Lead to Inconsistent Reporting

Another reporting challenge identified by agencies involves missing or incorrect ZIP+4 information.²⁶ OMB guidance requires agencies to validate federal assistance recipient information, including the recipient’s address and ZIP code, against the information in the System for Award Management (SAM) before they submit it to the DATA Act broker.²⁷ This guidance requires agencies to ensure that award-level data in their systems for financial assistance recipients matches the recipients’ information in SAM. Consistent with OMB guidance, financial assistance recipients are required to register in SAM prior to submitting an application for an award, and OMB staff told us recipients are also required to provide accurate information as part of the terms and conditions of their award agreements.²⁸ However, according to agency

²⁶ZIP+4 refers to the 9-digit ZIP code system used by the United States Postal Service (USPS).

²⁷OMB, *Additional Guidance for DATA Act Implementation: Implementing Data-Centric Approach for Reporting Federal Spending Information*, Management Procedures Memorandum (MPM) No. 2016-03 (Washington, D.C.: May 3, 2016).

²⁸MPM No. 2016-03.

officials, because SAM does not enforce the use of ZIP+4 and agencies' eligibility procedures may not flag incorrect or missing ZIP+4 information, some recipient records are incomplete or incorrect. In addition, some rural communities do not have ZIP+4 because the U.S. Postal Service (USPS) only assigns 5-digit ZIP codes in those areas.

As a result of the requirement that ZIP+4 information be consistent with the USPS address database, Treasury officials told us some agencies are unable to validate their financial assistance award information in the DATA Act broker. For example, USDA officials told us in January 2017 that instituting the ZIP+4 validation rule in the broker as a fatal error rather than just a warning would cause a large number of their financial assistance records to fail and ultimately not be included in data that are displayed on USASpending.gov. In February 2017, Treasury implemented the ZIP+4 validation rule as a fatal error. Treasury officials told us that this was done in an effort to enforce existing requirements and improve data quality.

Treasury officials said that they examined the scope and seriousness of the problem and determined that it is not significant enough at this time to warrant the policy change that would be required to address it prior to May 2017. According to a Treasury analysis, SAM records that are missing ZIP+4 information represent about 1 percent of the total dollar value of all the awards in SAM. In addition, according to Treasury, SAM records that are missing ZIP+4 because the address has not been assigned a ZIP+4 by USPS represent less than 0.5 percent of the total dollar value of all the awards in SAM.

Treasury officials acknowledged that missing or invalid ZIP+4 information is a longstanding data quality issue with agency records, but believe that it is one best addressed at the agency level. In March 2017, Treasury officials told us that although they planned to continue to enforce the ZIP+4 requirement through the DATA Act broker, they were developing a workaround for agencies encountering problems.

Challenges Exist Linking Financial and Award Data

Agencies have also reported challenges linking their financial and award data using the unique award identifier. OMB guidance requires agencies to link their agency financial and award data using the unique award

identifier.²⁹ As our work in 2016 showed, agencies continue to report challenges related to integrating their financial and award systems to report under the DATA Act.³⁰ Some agencies, according to OMB staff, are unable to record unique award identifiers in their financial systems, and may not be able to link financial and award data. This linkage should help policymakers and the public track spending more effectively—one of the objectives of the DATA Act.

HHS and USDA officials reported in their DATA Act implementation plan updates and confirmed with us that they are using short-term solutions to link their financial and award data to generate and submit a required file by May 2017.³¹ They both confirmed they will link their financial and award systems with the unique award identifier when they implement long-term system solutions.

OMB staff told us that five agencies—the Departments of Defense, Housing and Urban Development, the Interior, and Veterans Affairs, and the Environmental Protection Agency—indicated that they will not fully meet the May 2017 reporting requirements, in part because some of their components have been unable to record unique award identifiers in their financial systems. OMB staff told us that these agencies would be able to report some data, but not all of the award financial information required for agency submissions. Treasury officials told us that they are aware of this issue and have structured the broker so that after providing a warning it will accept agency data submissions, even if they contain significant gaps.

OMB staff and Treasury officials told us they are creating a mechanism in the broker that will allow agencies to explain reporting anomalies in their

²⁹Specifically, OMB M-15-12 requires all federal agencies to carry the unique award identifier (Award ID) so that award-level and financial data may be linked for each federal award. In order to begin displaying linked data beginning May 2017, agencies should have the Award ID linkage in their financial and management systems no later than January 1, 2017.

³⁰[GAO-17-156](#).

³¹In June 2016, OMB directed agencies to update information in the DATA Act implementation plans that they submitted to OMB in 2015. The agencies were directed to update information on timelines and costs to implement the DATA Act, as well as challenges the agencies face in meeting DATA Act requirements and mitigation strategies. (OMB, *Request for Updated DATA Act Implementation Plans by August 12, 2016*, OMB Memo to All CFO Act Agencies DATA Act Senior Accountable Officials (Washington, D.C.: June 15, 2016).

data displayed on USASpending.gov. According to Treasury officials, the broker will include a text box for agencies to explain any reporting anomalies related to the data they are submitting and certifying before it is displayed on USASpending.gov. In addition, OMB staff told us they plan to provide agencies with standard language to explain certain reporting discrepancies, such as data that are not aligned as a result of the time it takes between when an agency completes a transaction and when it is recorded in its financial system. OMB staff explained that the purpose of the text boxes is not to provide qualifications about data quality, but to communicate what they believe are legitimate data discrepancies that could be perceived as data quality issues by the public.

One of the purposes of the DATA Act is to provide consistent, reliable, and searchable government-wide spending data that are displayed accurately for taxpayers and policymakers on USASpending.gov (or a successor system). Longstanding issues related to agency financial information, systems and internal controls, and reporting challenges related to agency DATA Act report submissions underscore the need for OMB to address our open recommendation to provide additional guidance to address potential clarity, consistency, or data quality issues and for OMB to implement a process for communicating data quality limitations to the public.³² Information Quality Act (IQA) standards specify that data should have full, accurate, and transparent documentation where appropriate and should identify and disclose data quality issues.³³

Similarly, OMB's *Policies for Federal Agency Public Websites and Digital Services* requires that agencies be transparent about the quality of the information that they disseminate and take reasonable steps where practicable to inform users about the quality of disseminated content.³⁴

³² GAO, *DATA Act: Data Standards Established, but More Complete and Timely Guidance Is Needed to Ensure Effective Implementation*, [GAO-16-261](#) (Washington, D.C.: January 29, 2016).

³³ [GAO-16-261](#). The statutory provisions commonly known as IQA require agencies to adopt standards for information quality and to review information disseminated to ensure that it meets those standards. Consolidated Appropriations Act, 2001, Pub. L. No. 106-554, app. C, § 515, 114 Stat. 2763A-153 to 2763A-154 (Dec. 21, 2000) *codified at* 44 U.S.C. § 3516 note. For more on this, see GAO, *Information Quality Act: Actions Needed to Improve Transparency and Reporting of Correction Requests*, [GAO-16-110](#) (Washington, D.C.: Dec. 21, 2015).

³⁴ See Office of Management and Budget, *Policies for Federal Agency Public Websites and Digital Services*, M-17-06 (Washington, D.C.: Nov. 8, 2016).

We will continue to monitor the implementation of the DATA Act and how OMB, Treasury, and agencies communicate reporting anomalies and data quality limitations.

OMB Guidance Directs Agencies to Leverage Existing Assurance Processes Despite Known Limitations

Another area of risk to data quality is the agency senior accountable official (SAO) assurance process that leverages assurance processes of existing source systems with known data quality challenges. OMB guidance directs agency SAOs to leverage existing processes when providing assurances over required data submissions. However, during this review we have identified a number of concerns related to the effectiveness of some of these processes.

OMB guidance directs agencies to match the procurement award data generated in the broker with data in the agency procurement award systems.³⁵ The guidance also directs agencies to leverage the assurances provided in their annual Federal Procurement Data System-Next Generation (FPDS-NG) Data Verification and Validation reports submitted to OMB.³⁶ Despite the requirement for agencies to conduct annual verification and validation reviews of the data contained in FPDS-NG, our prior work found that some award data reported on USASpending.gov contained information that was not fully consistent with agency records or was unverifiable due to gaps in agency records.³⁷

OMB guidance also directs agencies to match financial assistance award data generated in the broker against data in their financial assistance

³⁵D1 files are generated in the broker from data extracted from USASpending.gov. Contract data displayed on USASpending.gov are imported from the Federal Procurement Data System-Next Generation (FPDS-NG), which collects information on contract actions.

³⁶Pursuant to Federal Acquisition Regulation (FAR) Part 4.604 and OMB guidance, *Improving Federal Procurement Data Quality - Guidance for Annual Verification and Validation* (Washington, D.C.: May 31, 2011), Agency Senior Procurement Executives are required to certify the completeness, timeliness, and accuracy of agency data in FPDS. Completeness and timeliness are measured by the percent of agency contract actions captured by the required deadline. Accuracy is measured by reviewing a random sample of records for a selected number of data elements. Since 2011, agencies have also been required to verify that they have the policies, procedures, and internal controls to address qualitative and contractor provided procurement data. See *Federal Government Procurement Data Quality Summary: Fiscal Year 2015 For Agency Data in the Federal Procurement Data System*, available at <https://www.usaspending.gov/about/Pages/TheData.aspx>.

³⁷[GAO-14-476](#).

award management systems for all award-level data and in SAM for prime awardee information (i.e., subrecipient executive compensation data).³⁸ Although OMB guidance directs agencies to leverage existing assurance processes for other file submissions, there is no certification or assurance processes for the financial data submitted to the ASP. OMB guidance specifies that OMB is reviewing opportunities to enhance assurances over these data. However, as of March 2017, OMB has not established a timetable for this activity, so it is unclear whether new procedures will be in place in time for agencies to leverage these assurances for their May 2017 report submissions.

GSA has posted on its website an assurance statement that provides assurance that the risk to federal agency operations, data, and assets resulting from the operation of the common controls of SAM and FSRS information systems are acceptable and meet all the security controls required for DATA Act reporting. According to OMB staff, agencies can rely on data from SAM and FSRS for DATA Act reporting. However, our review of the assurance statement posted on GSA's website found that the statement focuses on security controls rather than data quality and appears to apply specifically to procurement management. The extent to which this assurance statement will be used by SAOs to provide assurances over the quality of the data for both procurement and financial assistance award information is uncertain. We will continue to monitor this issue moving forward.

HHS officials told us they are still assessing the GSA assurance statement and its alignment to HHS's overarching SAO certification. Since the requirements for SAM and FSRS are driven by both the FAR and Title 2 of the Code of Federal Regulations, officials said that HHS is interested in having GSA confirm that the assurance statement covers both procurement and financial assistance. OMB staff told us that agencies should leverage this assurance when certifying their data from these source systems. OMB staff also noted that the agencies are ultimately responsible for the quality of their data submissions. Furthermore, these staff stated that the quality of the information reported directly by awardees to SAM and FSRS is the responsibility of the awardee in accordance with the terms and conditions of their award agreements. The extent to which the GSA assurance statement regarding

³⁸The D2 files are generated in the broker by extracting financial assistance award data from the Award System Portal.

data integrity in SAM and FSRS will be used by agency SAOs when assuring the quality of their data submissions for May 2017 is unclear since some SAOs were still in the process of making that determination in March 2017. We will revisit this issue after May 2017 once agencies have made their determinations and will examine potential effects for data quality.

OMB staff explained that the intent of OMB guidance on the SAO assurance process is to hold agency SAOs accountable for the reliability and validity of the data they submit. As discussed in OMB guidance, the SAO assurance process is also intended to leverage existing controls, processes, and procedures outlined in existing policies, regulations, and statutes, such as the internal control requirements outlined in OMB Circular A-123.³⁹ However, questions regarding these assurance processes raise concerns about whether they will be effective in preventing or detecting data quality issues. They also increase the risk that SAO assurances over agency data quality will be unreliable. OMB staff told us that they are aware of these issues and are still finalizing the SAO assurance process, which they expect to do in time for the May 2017 reporting deadline. Accordingly, we are not making a recommendation at this time but will assess the quality of the assurance process in our future work.

Efforts to Establish Data Governance Structure Are Still at an Early Stage

OMB has taken some actions to improve its data governance framework, but efforts to establish a fully functioning data governance structure are at an early stage with many specifics yet to be worked out. In July 2015, we reported that OMB and Treasury had begun standardizing data elements, but had not established a clear set of institutionalized policies and processes for enforcing data standards or adjudicating necessary changes to existing standards.⁴⁰ Establishing a formal framework for providing data governance throughout the lifecycle of developing and implementing standards is key for ensuring that the integrity of data standards is maintained over time. In that report, we recommended that OMB, in collaboration with Treasury, establish a set of clear policies and procedures for developing and maintaining data standards that are consistent with leading practices. OMB and Treasury generally agreed with our recommendation. However, the recommendation remains open.

³⁹See MPM 2016-03 and M-17-04.

⁴⁰[GAO-15-752T](#).

In September 2016, OMB established a Data Standards Committee to focus on clarifying existing data element definitions and identifying the need for new standards. OMB approved a charter for this committee in November 2016. According to the charter, the committee will make recommendations on these topics to OMB, the DATA Act Executive Steering Committee, and federal communities such as the Chief Acquisition Officers Council and the Chief Information Officers Council. The charter states that the committee is an advisory body that is not responsible for approving or operationalizing the data standards. The committee's membership includes representatives of OMB, Treasury, GSA's Integrated Award Environment Program Management Office, and federal communities and councils representing various areas of responsibility and expertise.⁴¹ OMB staff told us that the Data Standards Committee will be solely focused on maintaining and updating data standards, including standards used by federal communities but not specifically required under the DATA Act.

According to OMB staff, the Data Standards Committee has held several meetings and plans to produce operating procedures to guide its work but has not yet done so. OMB staff told us that although the committee has reviewed specific data standards, the committee has not made any recommendations regarding these standards, nor has it produced a work plan or timetable for addressing known challenges related to any data standards. While these staff also said that the committee has begun to develop processes and procedures to guide its reviews of data standards, no details or documentation were available beyond the six-page charter.

Although the charter states that the committee will seek to promote transparency by making information on the topics of its proceedings and resulting outcomes available to the public, it has not yet done so. As we have previously reported, one component of good data governance involves establishing a process for consulting with and obtaining agreement from stakeholders, including non-federal stakeholders potentially affected by changes in data standards.⁴² Moreover, standards

⁴¹According to the charter, the committee's membership consists of representatives from OMB, Treasury, GSA's Integrated Award Environment Program Management Office, the Chief Acquisition Officers Council, the Council on Financial Assistance Reform, the Budget Officers Advisory Council, the Chief Financial Officers Council, the Chief Information Officers Council, the human resources community, and the performance improvement community.

⁴²[GAO-15-752T](#).

for internal control in the federal government state that management should communicate quality information to external parties so that these parties can help the entity achieve its objectives and address related risks.⁴³ The DATA Act requires that OMB and Treasury consult with public and private stakeholders in establishing data standards. The charter states that the committee is to make publicly available both the topics of its proceedings and the resulting outcomes. Doing so could allow public and private stakeholders not represented on the committee to provide better informed opinions on new data standards or revisions. Without publicly available information about the committee, these stakeholders may not be able to direct their input toward standards that are under review. OMB staff told us that the committee has not kept records and therefore has no information about its proceedings available to release.

Keeping records of the Data Standards Committee's activities and releasing them publicly could facilitate consultation with stakeholders. Actions beyond recordkeeping and public release of information about the committee are needed to address our 2015 recommendation that OMB and Treasury establish a data governance structure consistent with leading practices. The Data Standards Committee may provide a useful forum for collecting stakeholder input. However, additional steps need to be taken to build a data governance structure that fully reflects leading practices.

Conclusions

Across the federal government, agencies are making final preparations to submit the data required by the DATA Act's May 2017 deadline. This represents the culmination of almost 3 years of effort by OMB, Treasury, and federal agencies to address the many policy and technical challenges presented by the act's requirements including the need to standardize data elements across the entire federal government, link data contained in agencies' financial and award management systems, and expand the type and amount of data to be reported. Their submissions will provide an important initial test of the efficacy of this endeavor.

Looking forward, attention will increasingly focus on another critical goal of the act—improving the quality of the data being produced and the mechanisms and assurances needed to communicate such information to users. An important component of this will be the first round of mandated

⁴³GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 10, 2014).

reviews agency IGs will conduct later this year, which will include sampling and testing of data quality. However, prior audits and reviews have already identified much about the challenges agencies face in producing quality data. These reviews have identified material weaknesses and significant deficiencies reported in agencies' financial audits and identified several widespread and longstanding issues that present risks to agencies' ability to submit quality data for DATA Act reporting. In addition, specific challenges related to the operationalization of the act's requirements also represent potential risks to data quality. Because of this, it is especially important for the quality assurance and data governance frameworks established by OMB to be robust, transparent, and effective. Users will need such mechanisms to make informed decisions about the nature and limitations of the data being reported. This is essential to the full implementation of the DATA Act and its promise of improving the usefulness of those financial data to Congress, federal managers, and the American people.

Recommendation for Executive Action

To promote transparency in the development and management of data standards for reporting federal spending, the Director of the Office of Management and Budget should ensure that the Data Standards Committee makes information about the topics of the committee's proceedings and any resulting outcomes available to the public.

Agency Comments and Our Evaluation

We provided a draft of this report to the Secretaries of the Departments of Agriculture, Health and Human Services, and Treasury, and the Director of the Office of Management and Budget for review and comment. OMB generally agreed with our recommendation. In addition, OMB, USDA, and Treasury provided technical comments which we incorporated as appropriate. HHS had no comments on the draft report.

We are sending copies of this report to the Secretaries of the Departments of Agriculture, Health and Human Services, and Treasury, and the Director of the Office of Management and Budget, as well as interested congressional committees and other interested parties. This report will be available at no charge on our website at <http://www.gao.gov>.

If you or your staff has any questions about this report, please contact J. Christopher Mihm at (202) 512-6806 or Mihmj@gao.gov or Paula M. Rascona at (202) 512-9816 or Rasconap@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of our report. Key contributors to this report are listed in appendix IV.

A handwritten signature in black ink that reads "J. Christopher Mihm". The signature is fluid and cursive, with the first name "J." being particularly prominent.

J. Christopher Mihm
Managing Director, Strategic Issues

A handwritten signature in black ink that reads "Paula M. Rascona". The signature is cursive and elegant, with the first name "Paula" being the most prominent part.

Paula M. Rascona
Director, Financial Management and Assurance

List of Congressional Addressees

The Honorable Ron Johnson
Chairman
The Honorable Claire McCaskill
Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Jason Chaffetz
Chairman
The Honorable Elijah E. Cummings
Ranking Member
Committee on Oversight and Government Reform
House of Representatives

The Honorable Mark Meadows
Chairman
The Honorable Gerald E. Connolly
Ranking Member
Subcommittee on Government Operations
Committee on Oversight and Government Reform
House of Representatives

The Honorable Will Hurd
Chairman
The Honorable Robin Kelly
Ranking Member
Subcommittee on Information Technology
Committee on Oversight and Government Reform
House of Representatives

The Honorable Thomas R. Carper
United States Senate

The Honorable Mark R. Warner
United States Senate

Appendix I: Objectives, Scope, and Methodology

This review is part of our ongoing effort to provide reports on the progress being made in implementing the Digital Accountability and Transparency Act of 2014 (DATA Act).¹ This review focuses on what is already known about existing challenges that affect the quality of agency financial data as well as issues that will affect data quality as agencies begin to report under the act. More specifically, it addresses the following: (1) risks to data quality related to known material weaknesses and other deficiencies, including internal controls over financial reporting, that have been identified in selected previous audits, reviews, and reports conducted by GAO, inspectors general (IG), and external auditors; (2) risks to data quality related to challenges in operationalizing DATA Act policy and technical guidance; (3) approaches that agencies will use to assure the quality of their data submissions and any associated limitations; and (4) efforts taken to establish a data governance structure. We also update the current status of the Office of Management and Budget's (OMB) and the Department of the Treasury's (Treasury) efforts to address our open recommendations related to DATA Act implementation in appendix II.

To assess potential risks to data quality related to known material weaknesses² and other significant deficiencies,³ including internal controls over financial reporting, that have been identified in selected previous audits, reviews, and reports conducted by us, IGs, and external auditors, we examined: (1) the extent to which agencies' independent auditors have reported material weaknesses, significant deficiencies, and other challenges, and (2) the extent to which we previously reported issues with government-wide systems.

To describe the extent to which agencies' independent auditors have disclosed material weaknesses, significant deficiencies, and other

¹Pub. L. No. 113-101, § 3, 128 Stat. 1146, 1151–1152 (May 9, 2014). The DATA Act amended the Federal Funding Accountability and Transparency Act of 2006 (FFATA). Pub. L. No. 109-282, 120 Stat. 1186 (Sept. 26, 2006), *codified at* 31 U.S.C. § 6101 note.

²A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis.

³A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

challenges, we reviewed 22 of the 24 Chief Financial Officers Act of 1990 (CFO Act) agencies' Performance and Accountability Reports (PAR) or Agency Financial Reports (AFR) for fiscal year 2016 to identify material weaknesses and significant deficiencies reported by independent auditors. Two agencies had not issued a PAR or AFR prior to our cutoff date of February 28, 2017, and therefore were not included in our review. We categorized the material weaknesses and significant deficiencies reported by the independent auditors that could affect the quality of the data submitted by agencies under the DATA Act. We also reviewed these agency reports for any auditor-identified noncompliance with the Federal Financial Management Improvement Act of 1996 (FFMIA) to identify factors that may increase the risk to reporting quality data.⁴ In addition, because the DATA Act requires IGs and GAO to assess and report on the completeness, timeliness, quality, and accuracy of data submitted by federal agencies, we reviewed readiness reviews issued by IGs to identify reported issues and challenges that could affect the quality of spending data reported under the DATA Act. Four agency IGs did not conduct a readiness review or their reports were not issued prior to our cutoff date of February 28, 2017, and therefore were not included in our review. To ensure we had a comprehensive understanding of these material weaknesses, significant deficiencies, and other challenges, we analyzed these reported issues to determine the extent to which they may hinder the entities' abilities to submit complete and accurate spending data and categorized them.

In our analysis of agencies' material weaknesses, significant deficiencies, and other challenges reported by independent auditors, we identified three overall categories that could affect data quality: (1) Accounting and Financial Management, (2) Financial Management Systems, and (3) Information Technology (IT) Security and Controls. We reviewed the auditor reports, PARs, AFRs, and readiness reviews using a data collection instrument to document our assessment of the extent to which the issues identified in these reports fit into the aforementioned categories.

To describe the extent to which independent auditors have reported issues with government-wide systems, we reviewed our previous reports to identify reported deficiencies in government-wide systems that could

⁴Pub. L. No. 104-208, div. A., title VIII, §§ 801-808, 110 Stat. 3009, 3009-389 to 3009-393 (Sept. 30, 1996) *codified at* 31 U.S.C. § 3512 note.

affect the quality of spending data submitted to USASpending.gov. According to Treasury, the source systems include: (1) the Federal Procurement Data System-Next Generation, (2) System for Award Management, (3) the Award Submission Portal, and (4) the Federal Funding Accountability and Transparency Act Subaward Reporting System. Although the conditions observed in these reports may not be present in all federal agencies and systems, they illustrate conditions that increase the risks and effects to agency data quality.

To assess the risks to data quality related challenges in operationalizing DATA Act policy and technical guidance during implementation of the act we examined (1) the extent to which selected agencies have been able to submit, validate, and certify their data submissions to the DATA Act broker and any challenges they reported, and the (2) the steps OMB and Treasury have taken to address known reporting challenges.

To understand the extent to which agencies have been able to submit, validate, and certify their data submissions we reviewed technical documentation; reviewed experiences at two agencies; interviewed knowledgeable officials from OMB, Treasury, and selected federal agencies; and reviewed past GAO reports to identify data quality issues related to DATA Act implementation. The review of technical documentation included material related to the schema version 1.01 to understand reporting structure, and the broker to understand its functionality and validation processes. We obtained technical documentation from the Federal Spending Transparency public website.

For the examination of experiences at agencies, we selected two agencies based on whether they were in compliance with existing federal requirements for federal financial management systems; the type of federal funding provided (such as grants, loans, or procurements); and their status as federal shared service providers for financial management. Based on these selection factors, we chose the U.S. Department of Health and Human Services (HHS), and the U.S. Department of Agriculture (USDA). Although the agencies' experiences are not generalizable, they illustrate different conditions and challenges under which agencies are implementing the act. These two agencies were also selected for our January and December 2016 reports.

To understand the steps OMB and Treasury have taken to address known reporting challenges, we reviewed OMB policy guidance intended to facilitate agency reporting. We also interviewed OMB staff and Treasury officials to obtain information about steps they have taken to

respond to previously identified challenges, agency requests for clarification on reporting requirements, and any plans for additional guidance. We also met with OMB staff and Treasury officials to obtain information on the status of efforts to address our previous recommendations related to providing policy and technical guidance.⁵

To assess the approach that agencies will use to assure the quality of their data submissions and any associated limitations we (1) reviewed relevant OMB policy guidance; (2) spoke with relevant agency officials; and (3) examined experiences at our two case study agencies, HHS and USDA. We reviewed OMB policy guidance to understand the assurance process agency senior accountable officials (SAO) should follow, including the authoritative sources for each file to be submitted in the DATA Act reporting process. We spoke with OMB staff and Treasury officials to understand the purpose and rationale of parts of the assurance process, and asked about plans for additional guidance. We spoke with HHS and USDA officials, and requested and reviewed documentation where applicable, to understand any concerns they have or challenges they are facing or expect to face during the assurance process.

To determine the current status of OMB's and Treasury's efforts to implement a data governance structure for the DATA Act, we met with OMB staff and Treasury officials to obtain information on the status of their efforts to address our previous recommendation that they establish such a structure.⁶ We reviewed documents provided by OMB, including policy memorandums and the charter of the Data Standards Committee, an advisory body established by OMB as part of its data governance efforts. We also met with representatives of organizations with expertise in data governance to review the key practices we described in our

⁵GAO, *DATA Act: OMB and Treasury Have Issued Additional Guidance and Have Improved Pilot Design but Implementation Challenges Remain*, [GAO-17-156](#) (Washington, D.C.: Dec. 8, 2016); *DATA Act: Data Standards Established, but More Complete and Timely Guidance is Needed to Ensure Effective Implementation*, [GAO-16-261](#) (Washington, D.C.: Jan. 29, 2016) and *DATA Act: Progress Made in Initial Implementation but Challenges Must be Addressed as Efforts Proceed*, [GAO-15-752T](#) (Washington, D.C.: July 29, 2015).

⁶ [GAO-15-752T](#).

December 2016 report and obtain additional information about how these key practices have been implemented in data governance frameworks.⁷

We conducted this performance audit from January 2017 to April 2017 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.

⁷GAO, *DATA Act: OMB and Treasury Have Issued Additional Guidance and Have Improved Pilot Design but Implementation Challenges Remain*, [GAO-17-156](#) (Washington, D.C.: Dec. 08, 2016).

Appendix II: Status of GAO's Recommendations Related to the DATA Act and Data Transparency

Report	Recommendations	Implementation Status
<p>GAO-14-476 <i>Data Transparency: Oversight Needed to Address Underreporting and Inconsistencies on Federal Award Website</i> (June 2014)</p>	<p>1. To improve the completeness and accuracy of data submissions to the USASpending.gov website, the Director of the Office of Management and Budget (OMB), in collaboration with the Department of the Treasury's (Treasury) Fiscal Service, should clarify guidance on (1) agency responsibilities for reporting awards funded by non-annual appropriations; (2) the applicability of USASpending.gov reporting requirements to non-classified awards associated with intelligence operations; (3) the requirement that award titles describe the award's purpose (consistent with our prior recommendation); and (4) agency maintenance of authoritative records adequate to verify the accuracy of required data reported for use by USASpending.gov.</p>	<p>Open. OMB and Treasury are working to implement the Digital Accountability and Transparency Act of 2014 (DATA Act), which includes several provisions that may address these recommendations once fully implemented.</p> <p>1) OMB staff said they continue to agree with GAO that additional guidance is needed regarding agency responsibilities for reporting awards funded by non-annual appropriations but have not yet developed this guidance.</p> <p>2) OMB staff stated that they believe a memorandum issued in November 2016 (M-17-04) addresses the applicability of USASpending.gov reporting requirements to non-classified awards associated with intelligence operations. We reviewed the memorandum and determined that additional guidance is still needed to ensure complete reporting of unclassified awards as required by FFATA.</p> <p>3) OMB staff have agreed that it will be important to clarify guidance on how agencies can report on award titles to appropriately describe the award's purposes and noted that they are working on providing additional guidance to agencies as part of their larger DATA Act implementation efforts.</p> <p>4) OMB released policy guidance in May 2016 (Management Procedures Memorandum (MPM) No. 2016-03) and November 2016 (M-17-04) that identifies the authoritative sources for reporting procurement and award data. However, our review of this policy guidance determined that it does not address the underlying source that can be used to verify the accuracy of non-financial procurement data or any source for data on assistance awards. This recommendation was included in priority recommendation letters sent to OMB by the Comptroller General in July 2016 and Spring 2017.</p>

**Appendix II: Status of GAO's
Recommendations Related to the DATA Act
and Data Transparency**

Report	Recommendations	Implementation Status
	<p>2. To improve the completeness and accuracy of data submissions to the USASpending.gov website, the Director of OMB, in collaboration with Treasury's Fiscal Service, should develop and implement a government-wide oversight process to regularly assess the consistency of information reported by federal agencies to the website other than the award amount.</p>	<p>Open. As part of their DATA Act implementation efforts, OMB issued policy guidance in May 2016 (MPM 2016-03) and November 2016 (M-17-04) that identifies authoritative systems to validate agency spending information. The guidance also directs the DATA Act senior accountable officials (SAO) to provide quarterly assurance over the data reported to USASpending.gov and specifies that this assurance should leverage data quality and management controls established in statute, regulation, and federal government-wide policy and be aligned with the internal control and risk management strategies in Circular A-123. In addition, the DATA Act broker will provide a set of validation rules to further ensure the proper formatting of data submitted to USASpending.gov. In addition, OMB staff stated that they have reviewed reports from agency inspectors general (IG) on DATA Act implementation and plan to use future IG reports on data quality as part of a government-wide monitoring plan.</p> <p>However, OMB has not documented this monitoring plan. OMB staff noted that OMB and Treasury had prioritized linking financial data to award data as a means of addressing the issue of unreported awards we previously identified. We agree that linking financial and award data can help agencies identify gaps in reporting. However, other than citing agencies' responsibility to certify the accuracy of their data, OMB did not identify any new or revised processes aimed at addressing the accuracy concerns we addressed. This recommendation was included in priority recommendation letters sent to OMB by the Comptroller General in December 2015, July 2016, and Spring 2017.</p>
<p>GAO-15-752T <i>DATA Act: Progress Made in Initial Implementation but Challenges Must be Addressed as Efforts Proceed</i> (July 2015)</p>	<p>1. To ensure that federal program spending data are provided to the public in a transparent, useful, and timely manner, the Director of OMB should accelerate efforts to determine how best to merge DATA Act purposes and requirements with the GPRAMA requirement to produce a federal program inventory.</p>	<p>Open. OMB staff told us that they do not expect to be able to identify programs for the purposes of DATA Act reporting until sometime after May 2017. However, they said that they are studying a program definition and alignment to identify a more consistent framework for defining federal agency programs with the aim of improving government-wide comparability and tying programs to spending. The effort is supported by a working group comprised of representatives from the Chief Financial Officers (CFO) community and other federal communities. OMB staff stated that they are incorporating ongoing feedback from this group into OMB's efforts to identify a framework for defining federal agency programs. This was identified as a high priority recommendation in letters sent from the Comptroller General to the Director of OMB in December 2015, July 2016, and Spring 2017.</p>

**Appendix II: Status of GAO's
Recommendations Related to the DATA Act
and Data Transparency**

Report	Recommendations	Implementation Status
	<p>2. To ensure that the integrity of data standards is maintained over time, the Director of OMB, in collaboration with the Secretary of the Treasury, should establish a set of clear policies and processes for developing and maintaining data standards that are consistent with leading practices for data governance.</p>	<p>Open. OMB and Treasury have taken some initial steps to build a data governance structure including conducting interviews with key stakeholders and developing a set of recommendations for decision-making authority. In September 2016, OMB and Treasury took another step toward establishing a data governance structure by creating a new Data Standards Committee that will be responsible for advising OMB and Treasury on new data elements and revisions to established standards. According to OMB staff, the committee has held several meetings but has not yet provided recommendations to OMB.</p> <p>However, more remains to be done. As part of our ongoing feedback to OMB, we shared five key practices that we believe should inform their plans to develop a data governance framework moving forward. This was identified as a high priority recommendation in letters sent from the Comptroller General to the Director of OMB in December 2015 and to the Director of OMB and the Secretary of the Treasury in July 2016 and Spring 2017.</p>
<p>GAO-16-261 <i>DATA Act: Data Standards Established, but More Complete and Timely Guidance Is Needed to Ensure Effective Implementation</i> (January 2016)</p>	<p>1. To help ensure that agencies report consistent and comparable data on federal spending, we recommend that the Director of OMB, in collaboration with the Secretary of the Treasury, provide agencies with additional guidance to address potential clarity, consistency, or quality issues with the definitions for specific data elements including <i>Award Description</i> and <i>Primary Place of Performance</i> and that they clearly document and communicate these actions to agencies providing this data as well as to end-users.</p>	<p>Open. In May 2016, OMB issued additional guidance for implementing the DATA Act entitled <i>Implementing the Data-Centric Approach for Reporting Federal Spending Information</i> (Management Procedures Memorandum No. 2016-03). This memorandum provided guidance on new federal prime award reporting requirements, agency assurances, and authoritative sources for reporting. In November 2016, OMB followed this with additional guidance intended to provide clarification on how agencies should: (1) report financial information for awards involving Intragovernmental Transfers (IGTs); (2) report financial assistance award records containing personally identifiable information (PII); and (3) provide agency SAO assurance regarding quarterly submissions to USASpending.gov. OMB staff also stated that they sent an email announcement to agency senior accountable officials to clarify that information submitted to USASpending.gov is subject to plain language requirements.</p> <p>Despite these positive steps, additional guidance is needed to facilitate agency implementation of certain data definitions (such as "primary place of performance" and "award description") in order to produce consistent and comparable information. We continue to have concerns about whether the guidance provides sufficient detail in areas such as the process for providing assurance on data submissions. This was identified as a high priority recommendation in letters sent from the Comptroller General to the Director of OMB and the Secretary of the Treasury in July 2016 and Spring 2017.</p>

**Appendix II: Status of GAO's
Recommendations Related to the DATA Act
and Data Transparency**

Report	Recommendations	Implementation Status
	<p>2. To ensure that federal agencies are able to meet their reporting requirements and timelines, we recommend that the Director of OMB, in collaboration with the Secretary of the Treasury, take steps to align the release of finalized technical guidance, including the DATA Act schema and broker, to the implementation time frames specified in the DATA Act Implementation Playbook.</p>	<p>Closed–Implemented. OMB and Treasury issued the finalized technical guidance (DATA Act Information Model Schema, version 1.0) in April 2016 intended to provide a stable base for agencies and enterprise resource planning (ERP) vendors to develop data submission plans. Treasury also released an alpha version of the broker in April 2016 and a beta version of the broker in June 2016. On September 30, 2016, Treasury released its latest version of the broker, which it stated was fully capable of performing the key functions of extracting and validating agency data. Following this release, Treasury continued to release broker updates approximately every 2 weeks. The software patches developed by ERP vendors, intended to help agencies submit required data to the broker, were all released by the end of December 2016. This was identified as a high priority recommendation in letters sent from the Comptroller General to the Director of OMB and the Secretary of the Treasury in July 2016.</p>
<p>GAO-16-438 <i>DATA Act: Section 5 Pilot Design Issues Need to Be Addressed to Meet Goal of Reducing Recipient Reporting Burden</i> (April 2016)</p>	<p>1. To enable the development of effective recommendations for reducing reporting burden for contractors, the Director of OMB should ensure that the procurement portion of the pilot reflects leading practices for pilot design.</p>	<p>Closed-implemented. Our review of the revised design for the procurement portion of the Section 5 Pilot updated in January 2017 found that it largely reflected all 5 leading practices for effective pilot design. For example, in the revised design OMB provides additional details regarding its assessment methodology, includes a data analysis plan to evaluate pilot results, describes a strategy for two-way stakeholder outreach, and includes additional details on scalability of the pilot design. As a result we are closing this recommendation as implemented.</p>

**Appendix II: Status of GAO's
Recommendations Related to the DATA Act
and Data Transparency**

Report	Recommendations	Implementation Status
<p>GAO-16-698 <i>Improvements Needed in Reviewing Agency Implementation Plans and Monitoring Progress</i> (July 2016)</p>	<p>1. To help ensure effective government-wide implementation and that complete and consistent spending data will be reported as required by the DATA Act, the Director of OMB, in collaboration with the Secretary of the Treasury, should establish or leverage existing processes and controls to determine the complete population of agencies that are required to report spending data under the DATA Act and make the results of those determinations publicly available.</p> <p>2. To help ensure effective government-wide implementation and that complete and consistent spending data will be reported as required by the DATA Act, the Director of OMB, in collaboration with the Secretary of the Treasury, should reassess, on a periodic basis, which agencies are required to report spending data under the DATA Act and make appropriate notifications to affected agencies.</p>	<p>Open. As we previously reported, OMB stated that each agency is responsible for determining whether it is subject to the DATA Act. To help agencies make that determination, OMB published guidance in the form of frequently asked questions and stated that the agencies may consult with OMB for additional counsel. In response to our recommendation, OMB staff told us they have reached out to federal agencies to identify which agencies have determined that they are exempt from reporting under the DATA Act and prepared a list of such agencies. However, OMB has not provided us the list or the procedures for reviewing agency determinations and compiling the results. In addition, OMB has not established procedures for ensuring non-exempt agencies are reporting spending data as required. Finally, OMB has not stated whether it will make the results of the determinations publicly available.</p> <p>Further, additional clarification would improve the usefulness of the frequently asked questions. For example, they state “Any Federal agency submitting data that OMB posts on its SF 133 Report on Budget Execution and Budgetary Resources is required to comply with DATA Act reporting.” However, the SF 133 Report for the third quarter of 2016 includes entities such as the Postal Service which are not required by the DATA Act to report financial and payment information. In explaining the frequently asked questions to us, OMB officials clarified that they meant that an entity is required to report if its data appears on the SF 133 and it meets the applicable statutory definition of agency. The frequently asked questions document does not clearly communicate this two-prong approach. Additionally, OMB’s verbal clarification when meeting with us does not account for those entities that meet the statutory definition of agency and are required by the DATA Act to report financial and payment information but do not appear on the SF 133. This was identified as a high priority recommendation in a letter sent from the Comptroller General to the Director of OMB in Spring 2017.</p> <p>Open. OMB does not have plans to reassess, on a periodic basis, which agencies are required to report spending data under the DATA Act. We continue to believe action on this recommendation is important to effectively implement the DATA Act. This was identified as a high priority recommendation in a letter sent from the Comptroller General to the Director of OMB in Spring 2017.</p>

**Appendix II: Status of GAO's
Recommendations Related to the DATA Act
and Data Transparency**

Report	Recommendations	Implementation Status
	<p>3. To help ensure effective implementation of the DATA Act by the agencies and facilitate the further establishment of overall government-wide governance, the Director of OMB, in collaboration with the Secretary of the Treasury, should request that non-Chief Financial Officers Act of 1990 (CFO Act) agencies required to report federal spending data under the DATA Act submit updated implementation plans, including updated timelines and milestones, cost estimates, and risks, to address new technical requirements.</p>	<p>Open. On June 15, 2016, OMB directed CFO Act agencies to update key components of their implementation plans by August 12, 2016. The requirement did not extend to non-CFO Act agencies. OMB stated that it is monitoring non-CFO Act agencies by providing feedback to non-CFO Act agencies through workshops instead of requesting updated implementation plan information. According to OMB officials, OMB has not followed-up with non-CFO Act agencies or requested updated implementation plan information because they are working with the CFO Act agencies which comprise approximately 90 percent of federal spending. In addition to these outreach efforts, OMB has worked with Treasury to engage with small and independent agencies through weekly phone calls and other forms of communication. However, the DATA Act applies to most federal agencies, and we believe that it is important to monitor smaller agencies' implementation plans as well as large agencies. This was identified as a high priority recommendation in a letter sent from the Comptroller General to the Director of OMB in Spring 2017.</p>
	<p>4. To help ensure effective implementation of the DATA Act by the agencies and facilitate the further establishment of overall government-wide governance, the Director of OMB, in collaboration with the Secretary of the Treasury, should assess whether information or plan elements missing from agency implementation plans are needed and ensure that all key implementation plan elements are included in updated implementation plans.</p>	<p>Closed-Implemented. On December 8, 2016, OMB testified that OMB had reviewed implementation plan updates from the 24 CFO Act agencies, which enabled them to track and assess agency progress toward successful implementation and identify areas where subsequent action was needed. OMB also conducted in-person follow-up meetings with nine agencies that reported significant issues to better understand their challenges. We determined that these actions meet the intent of our recommendation.</p>

**Appendix II: Status of GAO's
Recommendations Related to the DATA Act
and Data Transparency**

Report	Recommendations	Implementation Status
<p>GAO-17-156 <i>DATA Act: OMB and Treasury Have Issued Additional Guidance and Have Improved Pilot Design but Implementation Challenges Remain</i> (December 2016)</p>	<p>1. In order to ensure that the procurement portion of the Section 5 Pilot better reflects leading practices for effective pilot design, the Director of OMB should clearly document in the pilot's design how data collected through the centralized certified payroll reporting portal will be used to test hypotheses related to reducing reporting burden involving other procurement reporting requirements. This should include documenting the extent to which recommendations based on data collected for certified payroll reporting would be scalable to other Federal Acquisition Regulation-required reporting and providing additional details about the methodology that would be used to assess this expanded capability in the future.</p>	<p>Closed–implemented. In response to our recommendation, OMB has made some revisions to the procurement portion of the pilot design including adding additional explanatory language. Our review of the revised design for the procurement portion of the Section 5 Pilot updated in January 2017 found that it largely reflected all 5 leading practices for effective pilot design. As a result we are closing this recommendation as implemented.</p>
<p>GAO-17-460 <i>DATA Act: Office of Inspector General Reports Help Identify Agencies' Implementation Challenges</i> (April 2017)</p>	<p>1. We recommend that the Director of OMB and the Secretary of the Treasury establish mechanisms to assess the results of independent audits and reviews of agencies' compliance with the DATA Act requirements, including those of agency Offices of Inspectors General, to help inform full implementation of the act's requirements across government.</p>	<p>Open. OMB stated that it generally concurred with our recommendation, but noted that OIG readiness reviews are just one of its agency engagement efforts, which also includes reviewing agency implementation plans, holding numerous meetings with the agencies, and requesting regular progress updates on the agencies' implementation efforts. We recognize that OMB's efforts to engage regularly with agencies are helpful for monitoring agencies' implementation. However, it is also important to use information in independent audits and reviews to validate agencies' progress. This was identified as a high priority recommendation in a letter sent from the Comptroller General to the Director of OMB in Spring 2017.</p>

Appendix III: Deficiencies Reported in CFO Act Agencies' Fiscal Year 2016 Financial Reports That May Affect Data Quality

Table 1: Deficiencies Auditors Reported in Chief Financial Officers Act of 1990 (CFO Act) Agencies' Fiscal Year 2016 Financial Reports That May Affect Data Quality

Agency	Deficiency category		
	Accounting and Financial Management	Financial Management Systems	Information Technology Security and Controls
Department of Agriculture ^a	✓	—	✓
Department of Commerce	—	—	✓
Department of Defense ^b	—	—	—
Department of Education	—	—	✓
Department of Energy ^c	—	—	—
Department of Health and Human Services ^a	✓	✓	✓
Department of Homeland Security ^a	✓	✓	✓
Department of Housing and Urban Development ^b	—	—	—
Department of the Interior	✓	—	✓
Department of Justice ^c	—	—	—
Department of Labor	—	—	✓
Department of State ^a	✓	✓	✓
Department of Transportation ^a	✓	—	✓
Department of the Treasury ^a	✓	✓	✓
Department of Veterans Affairs ^a	✓	✓	✓
Environmental Protection Agency	✓	—	✓
General Services Administration	✓	—	✓
National Aeronautics and Space Administration	—	—	✓
National Science Foundation	—	—	✓
Nuclear Regulatory Commission ^c	—	—	—
Office of Personnel Management ^a	✓	—	✓
Small Business Agency	✓	—	✓
Social Security Administration	✓	—	✓
U.S. Agency for International Development ^a	✓	—	—
Total	14	5	18

Legend:

— = not applicable.

✓ = Significant deficiency or material weakness identified in deficiency category.

Source: GAO analysis of CFO Act agencies' performance and accountability reports or agency financial reports for fiscal year 2016. | GAO-17-496

**Appendix III: Deficiencies Reported in CFO Act
Agencies' Fiscal Year 2016 Financial Reports
That May Affect Data Quality**

^aAgency auditor determined noncompliance with Section 803(a) of the Federal Financial Management Improvement Act of 1996 (FFMIA).

^bAgency did not issue its performance and accountability report or agency financial report by February 28, 2017, therefore it was not included in our review.

^cAuditors did not report any material weaknesses or significant deficiencies relevant to Digital Accountability and Transparency Act of 2014 (DATA Act) reporting.

Appendix IV: GAO Contacts and Staff Acknowledgements

GAO Contacts

J. Christopher Mihm, (202) 512-6806 or mihmj@gao.gov and Paula M. Rascona, (202) 512-9816 or rasconap@gao.gov

Staff Acknowledgments

In addition to the above contacts, Peter Del Toro (Assistant Director), Michael LaForge (Assistant Director), Kathleen Drennan (Analyst-in-Charge), Theodore Alexander, Maria C. Belaval, Thomas Hackney, Charles Jones, Kirsten Leikem, Robert L. Gebhart, Carroll M. Warfield, Jr., James Skornicki, Sophie Geyer, Mark Canter, James Sweetman, Jr., Andrew J. Stephens, Carl Ramirez and Jenny Chanley made major contributions to this report. Additional members of GAO's DATA Act Internal Working Group also contributed to the development of this report.

Related GAO Products

DATA Act: Office of Inspector General Reports Help Identify Agencies' Implementation Challenges. [GAO-17-460](#). Washington, D.C.: April 26, 2017.

DATA Act: Implementation Progresses but Challenges Remain. [GAO-17-282T](#). Washington, D.C.: December 8, 2016.

DATA Act: OMB and Treasury Have Issued Additional Guidance and Have Improved Pilot Design but Implementation Challenges Remain. [GAO-17-156](#). Washington, D.C.: December 8, 2016.

DATA Act: Initial Observations on Technical Implementation. [GAO-16-824R](#). Washington, D.C.: August 3, 2016.

DATA ACT: Improvements Needed in Reviewing Agency Implementation Plans and Monitoring Progress. [GAO-16-698](#). Washington, D.C.: July 29, 2016.

DATA Act: Section 5 Pilot Design Issues Need to Be Addressed to Meet Goal of Reducing Recipient Reporting Burden. [GAO-16-438](#). Washington, D.C.: April 19, 2016.

DATA Act: Progress Made but Significant Challenges Must Be Addressed to Ensure Full and Effective Implementation. [GAO-16-556T](#). Washington, D.C.: April 19, 2016.

DATA Act: Data Standards Established, but More Complete and Timely Guidance Is Needed to Ensure Effective Implementation. [GAO-16-261](#). Washington, D.C.: January 29, 2016.

Federal Spending Accountability: Preserving Capabilities of Recovery Operations Center Could Help Sustain Oversight of Federal Expenditures. [GAO-15-814](#). Washington, D.C.: September 14, 2015.

DATA Act: Progress Made in Initial Implementation but Challenges Must be Addressed as Efforts Proceed. [GAO-15-752T](#). Washington, D.C.: July 29, 2015.

Federal Data Transparency: Effective Implementation of the DATA Act Would Help Address Government-wide Management Challenges and Improve Oversight. [GAO-15-241T](#). Washington, D.C.: December 3, 2014.

Government Efficiency and Effectiveness: Inconsistent Definitions and Information Limit the Usefulness of Federal Program Inventories.

[GAO-15-83](#). Washington, D.C.: October 31, 2014.

Data Transparency: Oversight Needed to Address Underreporting and Inconsistencies on Federal Award Website. [GAO-14-476](#). Washington, D.C.: June 30, 2014.

Federal Data Transparency: Opportunities Remain to Incorporate Lessons Learned as Availability of Spending Data Increases.

[GAO-13-758](#). Washington, D.C.: September 12, 2013.

Government Transparency: Efforts to Improve Information on Federal Spending. [GAO-12-913T](#). Washington, D.C.: July 18, 2012.

Electronic Government: Implementation of the Federal Funding Accountability and Transparency Act of 2006. [GAO-10-365](#). Washington, D.C.: March 12, 2010.

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