

Report to Congressional Addressees

December 2016

DATA ACT

OMB and Treasury
Have Issued
Additional Guidance
and Have Improved
Pilot Design but
Implementation
Challenges Remain

Highlights of GAO-17-156, a report to congressional addressees

Why GAO Did This Study

Effective implementation of the DATA Act will allow federal funds to be better tracked and greatly increase the types of data made publicly available. OMB and Treasury have taken significant steps to implement the act, but challenges remain as the critical deadline of May 2017 approaches. Consistent with GAO's mandate under the act, this report is one in a series of products GAO will provide to Congress providing oversight of DATA Act implementation. This report examines (1) steps taken to establish a clear data governance structure which is important during the upcoming transition to a new administration, (2) challenges reported by major agencies in their implementation plan updates, (3) the operationalization of government-wide data standards and technical specifications for data reporting, and (4) updated designs for the Section 5 pilot for reducing recipient reporting burden and progress made in its implementation. GAO reviewed key implementation documents, compared the Section 5 Pilot to leading practices, and interviewed staff at OMB, Treasury, and other selected agencies.

What GAO Recommends

GAO is making one new recommendation: that for the Section 5 Pilot, OMB clearly document in its design of the procurement portion how data collected through the centralized certified payroll reporting portal will be applied to other required procurement reporting. Moving forward, additional progress needs to be made to address GAO's 11 previous DATA Act recommendations that remain open. OMB neither agreed nor disagreed with GAO's recommendation.

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OMB and Treasury Have Issued Additional Guidance and Have Improved Pilot Design but Implementation Challenges Remain

What GAO Found

Data governance and the transition to the new administration. Consistent with a July 2015 GAO recommendation to establish clear policies and processes that follow leading practices for data governance under the Digital Accountability and Transparency Act of 2014 (DATA Act), the Office of Management and Budget (OMB) and the Department of the Treasury (Treasury) have taken the initial step of convening a committee to maintain established standards and identify new standards. Although this represents progress, more needs to be done to establish a data governance structure that is consistent with key practices to ensure the integrity of standards over time. The upcoming transition to a new administration presents risks to implementing the DATA Act, potentially including shifted priorities or lost momentum. The lack of a data governance structure for managing efforts going forward jeopardizes the ability to sustain progress as priorities shift over time.

Implementation plan updates. The 24 Chief Financial Officers Act agencies continue to face challenges implementing the DATA Act, according to information in their implementation plan updates. GAO identified four categories of challenges reported by agencies that may impede their ability to implement the act: systems integration issues, lack of resources, evolving and complex reporting requirements, and inadequate guidance. To address these challenges, agencies reported changing internal policies and procedures; leveraging existing resources; and using external resources, and manual and temporary workarounds, among other actions.

Operationalizing data standards and technical specifications for data reporting. OMB issued additional guidance on how agencies should report data involving specific transactions, such as intragovernmental transfers, and how agencies should provide quality assurances for submitted data. However, this guidance does not provide sufficient detail in areas such as the process for providing assurance on data submissions and it does not address others, such as how agencies should operationalize the definitions for data elements (e.g., primary place of performance and award description). Treasury released a new version of the DATA Act Broker—a system that collects and validates agency data—in October 2016 and is making minor adjustments to its functionality. Agencies have reported making progress creating and testing their data submissions, but some report needing to rely on interim solutions for initial reporting while they wait for automated processes to be developed.

Pilot to reduce recipient reporting burden. GAO reviewed the revised design for both the grants and procurement portions of the pilot and found that they partly met each of the leading practices for effective pilot design. Although this represented significant progress since April 2016, GAO identified an area where further improvement is still needed. Specifically, the plan for the procurement portion of the pilot does not clearly document how findings related to the centralized certified payroll reporting portal will be applicable to other types of required procurement reporting. This is a particular concern given the diversity of federal procurement reporting requirements. To date, all six components of the grant portion are underway. Data collection for the procurement portion is delayed and is not expected to begin until January or February 28, 2017.

United States Government Accountability Office

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Abbreviations

ACF Administration for Children and Families
CDER Library Common Data Element Repository Library

CFO chief financial officers

CNCS Corporation for National and Community Service
DATA Act Digital Accountability and Transparency Act of 2014

ERP enterprise resource planning

FAIN Federal Award Identification Number FAR Federal Acquisition Regulation

FFATA Federal Funding Accountability and Transparency

Act of 2006

FFR Federal Financial Report

GSA General Services Administration

HHS Department of Health and Human Services

OFPP Office of Federal Procurement Policy
OMB Office of Management and Budget
PIID Procurement Instrument Identifier

Playbook 2.0 DATA Act Implementation Playbook (Version 2.0)

SAO senior accountable official
SME Subject-matter Expert
Treasury Department of the Treasury

USDA United States Department of Agriculture

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December 8, 2016

Congressional Addressees:

Full and effective implementation of the Digital Accountability and Transparency Act of 2014 (DATA Act) offers the promise of a much more complete and accurate understanding of federal spending by enabling—for the first time— the federal government as a whole to track these funds at multiple points in the federal spending lifecycle, and significantly increasing the types and transparency of data available to agencies, Congress, and the general public. Since the DATA Act became law in May 2014, the Office of Management and Budget (OMB) and the Department of the Treasury (Treasury) have taken significant steps to implement it. However, the transition to a new administration may present risks tom the implementation of the DATA Act, including potential shifting of priorities or a loss of momentum.

OMB, Treasury, and federal agencies need to address a range of evolving and complex policy and technical issues to ensure the DATA Act is effectively implemented. As we have previously reported, agencies have identified several areas of concern including inadequate guidance, tight time frames, competing priorities, a lack of funding, and system integration issues. Our prior work has identified concerns related to standardizing data element definitions and developing a technical schema, concerns that, if not addressed, could lead to agencies inconsistently and inaccurately reporting data and delaying implementation. Finally, we also reported that although OMB appears to be on track with designing its pilot for developing recommendations to reduce recipient reporting burden, much of the work of actually

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.

implementing those plans remains.² Addressing these challenges will require ongoing and focused commitment to maintain progress implementing key provisions of the DATA Act.

This review is part of an ongoing effort to provide interim reports on the progress being made in implementing the DATA Act and meets the reporting requirements mandated by the act. This report addresses the following areas: (1) steps taken to establish a clear data governance structure, which is particularly important for the transition to a new administration, (2) challenges reported by Chief Financial Officers Act of 1990 (CFO Act) agencies in their implementation plan updates,³ (3) the operationalization of government-wide data standards and the technical specifications for data reporting, and (4) updated designs for the pilot for reducing recipient reporting burden and progress made in its implementation.

²For our previous products examining implementation of the DATA Act, see GAO, *DATA Act: Initial Observations on Technical Implementation*, GAO-16-824R (Washington, D.C.: Aug. 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.: Apr. 19, 2016); *DATA Act: Progress Made but Significant Challenges Must Be Addressed to Ensure Full and Effective Implementation*, GAO-16-556T (Washington, D.C.: Apr. 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.: Jan. 29, 2016); *DATA Act: Progress Made in Initial Implementation but Challenges Must be Addressed as Efforts Proceed*, GAO-15-752T (Washington, D.C.: July 29, 2015); and GAO, *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.: Dec. 3, 2014).

³In June 2016, OMB directed the CFO Act 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. (Office of Management and Budget, *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). The 24 CFO Act agencies are the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Homeland Security, Housing and Urban Development, Interior, Justice, Labor, State, Transportation, the Treasury and Veterans Affairs; and the Environmental Protection Agency, General Services Administration, National Aeronautics and Space Administration, National Science Foundation, Office of Personnel Management, Small Business Administration, the Social Security Administration, the U.S. Agency for International Development and Nuclear Regulatory Commission. 31 U.S.C. § 901(b)

To describe the extent to which OMB's and Treasury's efforts to implement a data governance structure for the DATA Act were consistent with key practices, we assessed OMB's and Treasury's efforts against a set of common key practices for establishing effective data governance structures. We identified this common set of key practices from a range of organizations, including domestic and international standard-setting organizations, industry groups or associations, and federal agencies, to ensure we had a comprehensive understanding of data governance key practices across several domains. We also met with OMB staff and Treasury officials to obtain information on the status of their efforts to address our previous recommendation that they establish a data governance structure.

To identify implementation challenges reported by agencies, we reviewed implementation plan updates and supplemental information submitted by federal agencies and assessed it against new OMB guidance and the revised Treasury DATA Act Implementation Playbook. We compared the implementation plan updates we received to the initial implementation plans submitted by the CFO Act agencies in 2015. We also interviewed OMB staff and Treasury officials and reviewed documentation of their processes and controls for reviewing the updated implementation information and monitoring agencies' progress. We met with OMB and Treasury to obtain information on the status of efforts to address our previous recommendations related to agency implementation plans.

To assess the operationalization of data standards and technical specifications for reporting, we reviewed applicable technical guidance and documentation related to DATA Act Information Model Schema (DAIMS), version 1.0, and the DATA Act Broker.⁴ We reviewed various versions of the broker made available by Treasury through open source code posted on a public website. In addition, we observed several demonstrations of how agencies submit their data to a prototype of the broker. We also interviewed knowledgeable officials from OMB, Treasury, and selected federal agencies and staff from their offices of inspector

⁴Hereafter in this report, the DATA Act Information Model Schema (DAIMS), version 1.0, is referred to as the "schema version 1.0." Prior to the release of the DAIMS version 1.0 in April 2016, Treasury released several earlier versions to the public including version 0.2 in May 2015, version 0.5 in July 2015, version 0.6 in October 2015, and version 0.7 in December 2015. The DATA Act Broker is a system that collects agency data and validates it, hereafter referred to as the "broker."

general, as well as enterprise resource planning (ERP) vendors assisting federal agencies with technical implementation.

To obtain additional information on agencies' use of the technical guidance, we selected three agencies—the Department of Health and Human Services (HHS), the Department of Agriculture (USDA), and the Corporation for National and Community Service (CNCS). Although the information obtained from these three agencies is not generalizable to all agencies, they illustrate a range of conditions under which agencies are implementing the act. ⁵ At each agency, we reviewed DATA Act implementation plan updates and interviewed officials responsible for implementing the act, including DATA Act implementation team members. We met with OMB and Treasury to obtain information on the status of efforts to address our previous recommendations related to providing policy and technical guidance.

To assess the design of the pilot for reducing recipient reporting burden (called the Section 5 Pilot), we reviewed Section 5 of the Federal Funding Accountability and Transparency Act of 2006, as amended by the DATA Act; assessed OMB and its partners' draft design documents; and spoke with cognizant staff implementing these pilots at OMB, HHS, and General Services Administration (GSA). We met with OMB to obtain information on the status of efforts to address our previous recommendations related to designing the pilot for reducing recipient reporting burden. Additional details regarding our objectives, scope, and methodology are provided in appendix I.

We conducted this performance audit from May 2016 to December 2016 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.

⁵We selected the same three agencies we selected for our January 2016 report (GAO-16-261). We believe that this allows us to assess progress in DATA Act implementation at these agencies since our last review and that these agencies provide a range of conditions under which federal agencies are implementing the act.

Background

Signed into law on May 9, 2014, the DATA Act expanded on previous federal transparency legislation to link federal agency spending to federal program activities so that taxpayers and policymakers can more effectively track federal spending. The DATA Act requires government-wide reporting on a greater variety of federal funds as well as tracking of these funds at multiple points in the federal spending lifecycle. The act also calls for the federal government to set government-wide data standards, identify ways to reduce reporting burdens for grantees and contractors (Section 5 Pilot), and regularly review data quality to help improve the transparency and accountability of federal spending data.

OMB and Treasury have taken significant steps toward implementing the act's various requirements including standardizing data element definitions, issuing guidance to help agencies develop their implementation plans, and designing a pilot for developing recommendations to reduce recipient reporting burden. We have previously reported on these efforts and others and have identified a number of ongoing challenges that will need to be addressed in order to successfully meet the act's requirements. Throughout our ongoing oversight of OMB's and Treasury's efforts to implement the act, we have coordinated closely with OMB and Treasury to provide timely feedback and have made a number of recommendations that, if addressed, could help ensure the full and effective implementation of the act. OMB and Treasury have made progress implementing 5 of our recommendations related to DATA Act implementation. However, additional effort is needed to address 11 previous GAO recommendations that remain open. See appendix II for a list of our previous recommendations relating to the DATA Act and their implementation status.

⁶Pub. L. No. 113-101, 128 Stat. 1146 (May 9, 2014).

Initial Steps Taken to Develop a Governance Structure but Further Steps Needed to Maintain the Integrity of Data Standards OMB and Treasury are developing a governance structure, but more work will be needed to ensure that this structure is consistent with key practices for developing and maintaining the integrity of data standards over time. In July 2015, we reported that OMB and Treasury took initial steps to develop organizational structures for project governance but had not yet established a formal framework for providing data governance throughout the lifecycle of developing and implementing standards. Such a framework is key for ensuring that the integrity of data standards is maintained over time. Accordingly, we recommended that OMB and Treasury establish a clear set of policies and procedures for developing and maintaining data standards that are consistent with leading practices.⁷

OMB and Treasury generally agreed with our recommendation and, in response, engaged a contractor to interview key stakeholders and develop a set of potential next steps. The first of these steps was to establish a new Data Standards Committee that will be responsible for maintaining established standards and developing new data elements or data definitions that could affect more than one functional community (e.g., financial management, financial assistance, and procurement). According to OMB staff, the Data Standards Committee held its inaugural meeting on September 15, 2016, and will meet on a monthly basis. The committee has also drafted a charter that will delineate the scope of the committee's work, as well as the composition and responsibilities of its members. According to OMB staff, members include representatives from a range of federal communities including the grants, procurement, financial management and human resources communities, as well as representatives of several interagency councils including the Chief Information Officers Council and the Performance Improvement Council. OMB staff told us that the committee will focus on clarifying existing data standard definitions, including the definition of predominant place of performance, and identifying new standards that may be needed going forward. In October 2016, according to OMB staff, the charter was under review by the DATA Act Executive Steering Committee.

Several data governance models exist that could inform OMB's and Treasury's efforts to ensure the integrity of the data standards over time.⁸

⁷GAO-15-752T.

⁸For additional information on how we selected the sources we used to identify key practices for establishing an effective data governance program, see appendix I.

These models define data governance as an institutionalized system of decision rights and accountabilities for planning, overseeing, and controlling data management. Many of these models promote a common set of key practices that include establishing clear policies and procedures for developing, managing, and enforcing data standards. A common set of key practices endorsed by standards setting organizations recommend that data governance structures should include the key practices shown in the text box below. We have shared these key practices with OMB and Treasury.

Key Practices for Data Governance Structures

- i. Developing and approving data standards.
- Managing, controlling, monitoring, and enforcing consistent application of data standards.
- iii. Making decisions about changes to existing data standards and resolving conflicts related to the application of data standards.
- Obtaining input from stakeholders and involving them in key decisions, as appropriate.
- V. Delineating roles and responsibilities for decision-making and accountability, including roles and responsibilities for stakeholder input on key decisions.

Source: GAO analysis of selected data governance frameworks. | GAO-17-156

OMB and Treasury have not yet institutionalized and clearly documented policies and procedures that are consistent with these key practices. For example, processes have not been developed to both approve new standards and ensure that already established standards are consistently applied and enforced across the federal government.

One reason why having a robust, institutionalized data governance structure is important is to provide consistent data management during times of change and transition. The transition to a new administration presents one such situation. We have previously reported that, given the importance of continuity when implementing complex, government-wide initiatives, the potential for gaps in leadership that can occur as administrations change can impact the effectiveness and efficiency of such efforts, potentially resulting in delays and missed deadlines. 9 Such

⁹See GAO, Federal Data Transparency: Opportunities Remain to Incorporate Lessons Learned as Availability of Spending Data Increases, GAO-13-758 (Washington, D.C.: Sept. 12, 2013) and *Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms*, GAO-12-1022 (Washington, D.C.: Sept. 27, 2012).

transitions may disrupt the momentum for meeting implementation timeframes or cause the government to fail to continue to build on previous accomplishments. The absence of a robust and institutionalized data governance structure presents additional potential risks regarding the integrity of data standards over time and the ability of agencies to meet their statutory timelines in the event that priorities shift with the incoming administration or momentum is lost.

Agencies'
Implementation Plan
Updates Indicate
Continuing
Challenges to
Meeting the DATA Act
Reporting Deadline

In June 2016, OMB directed the 24 CFO Act agencies to update their initial DATA Act implementation plans that they submitted in response to OMB's May 2015 request. ¹⁰ Each agency was to (1) update its timeline and milestones and explain the agency's progress to date and the remaining actions it would take to implement the act in accordance with the suggested steps in Treasury's *DATA Act Implementation Playbook (Version 2.0)* (Playbook 2.0), (2) report costs to date and estimated total future costs, and (3) explain any new challenges and mitigation strategies.

In reviewing the 24 CFO Act agencies' implementation plan updates that we obtained from the agencies, we found the following:

- Each of the 24 CFO Act agencies' updates included timelines and milestones and most of the updates included most of the OMB required information. For example, most of the 24 CFO Act agencies included remaining actions the agencies would take to implement the suggested steps in Playbook 2.0.
- Some of the CFO Act agencies did not include information about some of the remaining actions to implement the suggested steps in Playbook 2.0. For example, 5 of the 24 CFO Act agencies did not include information about testing for completeness and accuracy of data elements submitted to Treasury, 11 CFO Act agencies did not include information about workflows for addressing validation errors and revisions needed to agency data submissions, and 13 CFO Act agencies did not include information about testing linkages of program and financial data or possible interim solutions to link such data, if needed.¹¹ Without such information in agencies' updates, it may be

¹⁰Office of Management and Budget, *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).

¹¹Validation is the process of testing the completeness and accuracy of the data elements and linkages between financial and award data.

more difficult for OMB and Treasury to determine where to target their monitoring and assistance efforts to help ensure the DATA Act is successfully implemented.

Our review of the CFO Act agencies' August 2016 implementation plan updates found that 21 of the 24 CFO Act agencies reported costs to date and future estimated costs to implement the DATA Act reporting requirements. 12 One agency reported future estimated costs, but did not report costs to date. Two agencies did not provide any cost estimates. Total cumulative and future estimated costs for full DATA Act implementation that was reported by 22 CFO Act agencies in their implementation plan updates ranged from approximately \$1.0 million to \$59.1 million, for a total of about \$202.4 million. This total estimated cost reported by CFO Act agencies to implement the DATA Act includes costs for systems integration and modernization. It is important to note that the estimated total costs reported by CFO Act agencies to implement the DATA Act requirements is relatively small when compared to the almost \$81 billion spent on information technology by the CFO Act agencies in fiscal year 2016 alone.

See appendix III for more details about the information that OMB required CFO Act agencies to include in their implementation plan updates, remaining actions to implement the suggested steps in Playbook 2.0, and the number of CFO Act agencies that included the information.

In our July 2016 report, we reported on challenges agencies included in their initial implementation plans. The implementation plan updates indicate that 19 of the 24 CFO Act agencies continue to face challenges in their efforts to implement the DATA Act. Based on our review of the 24 CFO Act agency implementation plan updates, we identified four overarching categories of challenges reported by agencies that may impede their ability to effectively and efficiently implement the DATA Act: systems integration issues, lack of resources, evolving and complex reporting requirements, and inadequate guidance. See table 4 in appendix III, which describes the categories of challenges and the number of CFO Act agencies reporting challenges in each category. Some of the challenges reported by the CFO Act agencies in their updates include the following:

¹²For the requirement to report costs to date, most agencies reported estimated costs through fiscal year 2016.

¹³GAO-16-698.

Systems integration. Nineteen of the 24 CFO Act agencies reported challenges related to systems integration, which include concerns with systems limitations, modernization efforts, and timing. For example, one agency reported that validation presents challenges because its financial systems are not properly integrated with procurement and grant systems. Similarly, the agency reported that several of its components are undergoing grant, procurement, or financial system improvements that coincide with implementing the DATA Act, which could pose a risk to timely DATA Act implementation if the improvements are delayed. Another agency reported that, for one of its legacy systems, obtaining the unique identifier to generate award financial data will likely be a manual process. The lack of properly integrated systems increases the risk that agencies may have difficulty compiling and validating the information they are required to report under the DATA Act by the May 2017 reporting deadline for agencies to submit their financial and payment information.

Resources. Fourteen of the 24 CFO Act agencies reported challenges related to staffing issues or funding constraints. For example, one agency reported that expertise related to feeder systems and data will be needed to successfully implement the DATA Act, but such subject matter experts may not be available. Another agency reported that meeting the reporting deadline is highly dependent on receiving requisite funding and resources. The lack of sufficient resources, including staff expertise and proper funding, increases the risk that agencies may have difficulty taking all the actions needed in a timely manner to fully implement the requirements of the DATA Act.

Reporting. Thirteen of the 24 CFO Act agencies reported challenges related to mandatory DATA Act reporting requirements, including concerns with data quality and their ability to report all the required data elements in their initial DATA Act submissions, as well as senior accountable officials (SAO) certification and reporting non-financial data. For example, one agency reported that its SAO may be unable to certify the quality of data if OMB's guidance for the SAO certification cannot be supported by existing processes. Another agency reported

¹⁴See Office of Management and Budget, *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). This memo includes a requirement that agency SAOs certify and provide reasonable assurance that their agencies' internal controls support the reliability and validity of the agency account-level and award-level data they submit to Treasury.

concerns with the burden of reconciling account data with financial and award data. In addition, two agencies reported challenges with reporting beginning balances at the level of detail required by the DATA Act. Two agencies reported concerns with protecting sensitive and classified data. One agency also reported ongoing issues with inconsistent quality of data submitted from their financial systems. Another agency reported that certain data elements are not currently available for all document types, and is considering pulling these data elements from other source systems to the extent possible. A lack of complete and accurate agency data increases the risk that agencies may not be able to meet the DATA Act reporting requirements within the mandated timeframes.

Guidance. Eleven of the 24 CFO Act agencies reported ongoing challenges related to the timely issuance of, and ongoing changes to, OMB policy and Treasury guidance. Eight agencies reported that if policy or technical guidance continues to evolve or be delayed, the agencies' ability to comply with the May 2017 reporting deadline could be affected. Some agencies also reported concerns about the requirement for SAOs to certify the data reported quarterly. For example, one agency reported that if guidance clarifying certification procedures is delayed, it may not have time to implement appropriate validation steps needed to give assurance over the data. Because of the lack of timely and consistent guidance, agencies may need to continuously update or change their processes, which could adversely affect their ability to meet the DATA Act requirements.

As noted above, the information reported by the CFO Act agencies in their implementation plan updates indicates that some agencies are at increased risk of not meeting the May 2017 reporting deadline because of these challenges. In addition, inspectors general for some agencies, such as the Departments of Labor and Housing and Urban Development, have issued readiness review reports that also indicate their respective agencies are at risk of not meeting the reporting deadline. ¹⁵ As discussed further below, the technical software requirements for agency reporting are still evolving, so any changes to the technical requirements over the

¹⁵Department of Labor, Office of Inspector General, *The Department Needs to Ensure It Is on Track to Implement DATA Act Requirements*, 17-16-002-13-001 (Washington, D.C.: September 2016) and Department of Housing and Urban Development, Office of Inspector General, *Independent Attestation Review: U.S. Department of Housing and Urban Development, DATA Act Implementation Efforts*, Memorandum No. 2016-FO-0802 (Washington, D.C.: August 2016).

next few months could also affect agencies' abilities to meet the reporting deadline.

In August 2016, in response to our prior recommendation, OMB established procedures for reviewing and using agency implementation plan updates that include procedures for identifying ongoing challenges. 16 In its procedures document, OMB states that it has received input from a significant number of agency staff via office hours, emails, regular meetings, agency visits, and other methods regarding the challenges agencies are experiencing as they work toward implementation since the submission of their original plans. OMB's document also states that it has worked to address these challenges and provide both policy and technical guidance as needed. Further, the document stated that requiring agencies to update plans will allow OMB to address challenges that agencies are not directly reaching out to OMB about or that numerous agencies are experiencing. According to the procedures document, OMB will also be monitoring progress toward the statutory deadline and setting up meetings with any of the 24 CFO Act agencies that OMB identifies as being at risk of not meeting the implementation deadline. OMB will schedule these visits by reviewing the implementation plan updates and discerning which agencies appear to be experiencing the most challenges to implementation.

To help address their challenges, 16 of the 24 CFO Act agencies reported that they use certain mitigating strategies in their implementation plan updates. Based on our review, we identified seven overarching categories of mitigating strategies reported by these agencies to address DATA Act implementation challenges: making changes to internal policies and procedures, leveraging existing resources, using external resources, continuing communications, employing manual and temporary workarounds, monitoring and developing guidance, and enhancing existing systems. These strategies, as a whole, were similar to the mitigating strategies reported by agencies in their initial implementation plans. The most commonly reported categories of mitigating strategies were changing internal policies and procedures and leveraging existing resources. See table 5 in appendix III for descriptions of the categories of mitigating strategies and the number of CFO Act agencies that report using strategies from each category.

¹⁶GAO-16-698.

Progress Made in
Data Standards and
Technical Framework,
but Uncertainties
Persist as
Implementation
Proceeds

OMB Released Additional Policy Guidance to Clarify Agency Reporting Requirements

In May 2016, in response to our prior recommendation, OMB released additional guidance on reporting financial and award information required under the act to address potential clarity, consistency, and quality issues with the definitions of standardized data elements. ¹⁷ In January 2016 we reported that ensuring that data definitions are generally consistent with leading practices is important because limitations with the definitions could lead to inconsistent or inaccurate reporting, among other issues. ¹⁸ We also reported that although the standardized data element definitions issued by OMB largely adhered to leading practices for establishing data definitions, several definitions had limitations that could lead to inconsistent reporting. While OMB's additional guidance addresses some of the limitations we identified, it does not address all the clarity issues we identified.

Specifically, OMB's additional guidance addresses (1) reporting financial and award level data, (2) establishing linkage between agency award and financial systems using a unique award identifier, and (3) providing assurances that data submitted to Treasury for publication on USASpending.gov is sufficiently valid and reliable. For example, OMB's Management Procedures Memorandum No. 2016-03 directs agencies to leverage existing procedures for providing assurances of the quality of their DATA Act data submissions and directs agency SAOs to provide reasonable assurance that their internal controls support the reliability and validity of the data submitted to Treasury for publication on USASpending.gov. OMB's memorandum notes that assurance means

¹⁷Office of Management and Budget, *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).

¹⁸GAO-16-261.

that, at a minimum, the data reported are based on appropriate internal control and risk management strategies identified in OMB Circular A-123. 19 OMB expects SAO assurance of the data through this process would mean that data submitted to Treasury by May 2017 complies with existing controls for ensuring the data quality.

However, our prior work has shown that relying on these quality assurance processes is not sufficient to address the accuracy and completeness challenges that we have previously identified.²⁰ Additionally, as we reported in August 2016, Offices of Inspector General, which are required to assess the completeness, timeliness, quality, and accuracy of data submitted under the act, have expressed concerns about agencies' abilities to provide assurances of the quality of their data.²¹ The inspectors general are particularly concerned about their agencies' ability to provide quality assurances for data that are not directly provided by the agency, such as data submitted by non-federal entities who receive federal awards.

To address these concerns, OMB released draft guidance in August 2016 that specifies DATA Act reporting responsibilities when an intragovernmental transfer (both allocation transfers and buy/sell transfers) is involved, explains how to report financial assistance awards with personally identifiable information (PII), and clarifies the SAO assurance process over the data submitted to the broker. ²² OMB staff told us that this most recent policy guidance was drafted in response to questions and concerns reported by agencies in their implementation plan

¹⁹OMB Circular No. A-123 defines management's responsibility for internal control in federal agencies. This circular provides guidance to federal managers for making federal programs and operations more accountable and effective by establishing, assessing, correcting, and reporting on internal control. [https://www.whitehouse.gov/omb/circulars a123 rev/].

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

²¹GAO-16-824R.

²²Specifically, when a funding agency transfers its authority to obligate budgetary authority and outlay funds to the awarding agency, it is the responsibility of the funding agency to report appropriations information, program activity and object class, and award financial information for display on USASpending.gov. For buy/sell transfers, when a funding agency funds a service through an awarding agency, both the awarding and funding agency are responsible for submitting appropriations data and program activity and object class data.

updates, as well in meetings with senior OMB and Treasury officials intended to assess agency implementation status. Among other challenges, agencies indicated the need for additional guidance on reporting intergovernmental transfers, providing assurances over their data, and reporting insurance information. For example, officials from USDA, one of our case example agencies, told us that they are waiting for guidance on insurance and indemnity reporting, but no guidance has been issued. Absent any new guidance, they plan to report insurance as they have under the Federal Funding and Accountability and Transparency Act of 2006 (FFATA). OMB staff told us that they received feedback from 30 different agencies and reviewed over 200 comments on the draft guidance. The final guidance, OMB M-17-04, was issued on November 4, 2016.²³

Although OMB has made some progress with these efforts, other data definitions lack clarity—including *primary place of performance* and *award description*—which still needs to be addressed to ensure agencies report consistent and comparable data. These challenges, as well as the challenges identified by agencies, underscore the need for OMB and Treasury to fully address our prior recommendation to provide agencies with additional guidance to address potential clarity issues. OMB staff told us that the newly established Data Standards Committee will be responsible for developing guidance to provide additional operational clarity regarding these data definitions; however, they were unable to provide a specific timeframe for when this would be done.

Late Release of the Schema Version 1.0 May Pose Risks for Implementation Delays at Some Agencies

Treasury released the schema version 1.0 on April 29, 2016—4 months later than planned and approximately a year before reporting is required to begin under the act.²⁴ The schema version 1.0 is intended to standardize the way financial assistance awards, contracts, and other financial data will be collected and reported under the DATA Act. Treasury expects the guidance provided in the schema version 1.0 will provide a stable base for agencies to develop the necessary data submission procedures. We have previously reported that a significant delay in releasing version 1.0 of the schema would likely have

²³We plan to review this guidance and monitor the extent to which it is responsive to agency questions and reported challenges in a future review.

²⁴GAO-16-824R.

consequences for timely implementation of the act.²⁵ Agencies are using schema version 1.0 to plan what changes are needed to systems and business processes to be able to capture and submit the required data. Under the act, agencies must report data in compliance with established standards by May 2017. Toward that end, OMB and Treasury have directed agencies to begin submitting data by the beginning of the second quarter of fiscal year 2017 (January 2017) with the intention of publically reporting that data by May 2017.

OMB's summary of agencies' implementation plan updates acknowledged that the delay in the release of schema version 1.0 delayed agency timelines for implementation. This document also recognized that the iterative approach being used to develop and release guidance has posed challenges for some agencies as changes in the guidance may require them to re-work some of their implementation project plans. Our analysis of the implementation plan updates submitted by the agencies to OMB confirms this. We found that 11 of the 24 CFO Act agencies highlighted challenges related to the guidance provided by OMB and Treasury in their implementation plan updates. One of the commonly cited challenges concerned complications arising due to the iterative nature or late release of the guidance. For example, one agency reported that developing its implementation plan was highly dependent upon the concurrent development of the schema version 1.0 and technical guidance being developed by Treasury. This agency stated that any delays or changes to these components will significantly affect its solution design, development and testing schedule, and cost estimate.

Treasury Continues to Test and Revise the DATA Act Broker

A key component of the reporting framework laid out in the schema version 1.0 is the DATA Act Broker, a system to standardize data formatting and assist reporting agencies in validating their data prior to submitting it to Treasury. See figure 1 for a depiction of how Treasury expects the broker to operate.

²⁵GAO-16-261 and GAO-16-824R.

DATA Act Broker File A: File D1: File D2: File E: **Additional** File D1 will be **Procurement Appropriations Financial** awardee extracted from the Account assistance attributes Federal Procurement Data System (FPDS-NG) File B: File F: **Object Class** Sub-award File D2 from the Award and program attributes Submissions Portal (ASP) activity File E from the System for Award File C: Management (SAM) **Award** File F from the Federal Funding financial Accountability and Transparency Act Subrecipient Reporting System (FSRS) Checks include field length Validation of data Files D1, D2, E and F will not be and data type to ensure data in Files A, B, C validated in the broker is consistent and comparable Senior Accountable Officials (SAO) Agency document their assurance of data certification reliability and accuracy Storage architecture designed to hold data extracted from transactional **Treasury** systems, operational data stores, and data store external sources **USASpending.gov** (or successor system) Data submission from agencies Data extracted from existing award data system SPENDING.GOV

Figure 1: Operation of the DATA Act Broker

Source: GAO analysis of Department of Treasury technical documents. | GAO-17-156

Treasury's software development team has been iteratively testing and developing the broker using what Treasury describes as an agile development process. ²⁶ Treasury released the first version of the broker in spring 2016 and it continues to develop the system's capabilities through 2-week software development cycles, called sprints. On September 30, 2016, Treasury released a version of the broker, which it stated was fully capable of performing the key functions of extracting and validating agency data. Treasury officials told us that although they plan to continue to refine the broker to improve its functionality and overall user experience, they have no plans to alter these key functions.

According to Treasury guidance documents, agencies are expected to use the broker to upload three files containing data pulled from the agencies' internal financial and award management systems. These files will undergo two types of validation checks in the broker before being submitted to Treasury: data element validations and complex validations. Data element validations check whether data elements comply with specific format requirements such as field type and character length. Complex validations perform tasks such as checking data against other sources or using calculation rules to verify whether certain data elements sum up to each other. Treasury has configured these complex validation rules so that if a rule is not met, the broker can either produce a warning message while still accepting the data for submission or produce a fatal error, which prevents submission of the data altogether. As of September 30, 2016, data uploaded to the broker needs to successfully meet less than a quarter of these complex validation checks in order to be accepted for submission to Treasury. Treasury officials said that this choice was made in order to allow agencies more flexibility to test the broker, and that the data submissions will be required to pass more of these validation rules at a later date.²⁷ According to Treasury documents, in a future release of the broker, data uploaded to the broker will need to successfully meet about half of the complex validation checks in order to be accepted for submission to Treasury. Treasury officials said that having about half of the validation rules produce warnings rather than fatal errors would provide agency officials with the flexibility to correct

²⁶Treasury describes agile software development as a process that emphasizes frequent user feedback so that changes can be incorporated into the prototype early and often.

²⁷As of the time this review was prepared, Treasury had not provided a specific date for when data would be required to pass these validation checks or whether such checks would be in place before initial reporting of data using the new standards established by the act in May 2017.

issues flagged by the broker or not to do so, depending on their knowledge of the context and situation of specific data elements. For example, for some of the programs, grants award-level information may not be reported for security reasons.

In addition to assisting agencies in collecting and validating agency-generated data, the broker also extracts award and sub-award information from existing government-wide award reporting systems and helps ensure these files are in the standard format. This function was added during software development efforts in late September and early October 2016. Unlike the files submitted by agencies, these extracted files with award and sub-award information are not subject to any validations in the broker. However, Treasury implemented additional validation checks on the file containing agency financial assistance award information through its source system, the Award Submission Portal. These checks include verifying that required information is present and formatted correctly.

Treasury officials told us that the responsibility for ensuring the accuracy of these files lies with the DATA Act SAO at each agency. For example, OMB Management Procedures Memorandum 2016-03 specifies that SAOs must provide reasonable assurance that their internal controls support the reliability and validity of the agency account-level and awardlevel data submitted to Treasury for publication. Before final submission of the data files in the broker, the SAO is responsible for assuring that, at a minimum, the data reported are based on appropriate internal control and risk management strategies identified in OMB Circular A-123. Treasury officials said that if SAOs are not able to provide this assurance, their agency will be prevented from submitting the files and their data will not be included in the data reporting based on the current broker design. Currently, the broker does not allow agencies to submit their data with qualifications, such as known quality limitations, so data that does not completely meet the criteria for SAO assurance will not be reported, even with qualifications. OMB staff and Treasury officials said that they are reconsidering this position and are exploring ways that agencies can

²⁸Existing award reporting systems include the Federal Procurement Data System-Next Generation (FPDS-NG), which collects information on contract actions; the System for Award Management (SAM), a registration system for those wishing to do business with the federal government; the Award Submission Portal (ASP), the platform used by federal agencies to report financial assistance data; and the FFATA Sub-award Reporting System (FSRS), which provides data on first-tier sub-awards reported by prime recipients.

submit data with qualifications and how these qualifications can be conveyed to the public.

Agency Data Submissions are Under Development

Agencies have made progress toward creating their data submissions and testing them in the broker, but work remains to be done before actual reporting can begin. Treasury has made empty sample files available to agencies so they can begin testing their data files in the broker without having completed building all of them. As of October 2016, 21 of 24 CFO Act agencies reported that they had begun testing their data files in the broker, but only the National Aeronautics and Space Administration had completed testing the broker and revised its data files accordingly. Treasury also collects data from the four shared service providers that are helping to manage data submissions for their agency clients. As of October 2016, two of these shared service providers reported to Treasury that they had finished building the data files for submission to the broker.

In August 2016, we reported that agencies we reviewed are relying on a series of software patches from their enterprise resource planning (ERP) vendors to facilitate their data submissions.²⁹ ERP vendors are developing patches that will extract data to help their clients develop files that comply with DATA Act requirements. According to vendors, these patches will help link an agency's financial and award systems, create additional fields in existing systems to report new data elements, and extract data files formatted for submission to Treasury. Patches that will facilitate the generation of agency file submissions were planned to be completed between August 2016 and February 2017. As of September 2016, the release of one of these patches has been delayed. Oracle, one of the ERP vendors developing these patches, had planned to release a patch that would allow award attributes to be captured in their clients' core purchasing systems and general ledger journals in August 2016, but the release was delayed until September 13, 2016. Representatives from SAP, another such ERP vendor, said that they were able to deliver one of the needed patches to their clients in August 2016 and an additional patch in October. But, they also said that changes and adjustments to the

²⁹ERP vendors are companies that supply commercial off-the-shelf (COTS) software consisting of multiple, integrated functional modules that perform a variety of business-related tasks such as payroll, general ledger accounting, and supply chain management. A patch is a piece of software code that is inserted into a program to temporarily fix a defect. Patches are often developed and released by software vendors when vulnerabilities are discovered. See GAO-16-824R.

broker had delayed their progress towards creating a patch that can format their clients' data files for submission.

It will be more difficult for agencies that are relying on ERP vendor patches to test their data files in the broker until the patches have been implemented since the patches will enable them to construct and format their files for submission to the broker. Two agencies reported in their implementation plan updates that a delay in the release of the patches could jeopardize complete and timely data submission for May 2017. Treasury officials told us that agencies should still be able to create and submit the required files to the broker without these patches. These officials said that when designing the schema and broker, they chose to use a simple file format for data submissions so that agencies would be able to create these files without a specialized software solution. Treasury officials acknowledged that patches will make the submission process easier, but also pointed out that not every agency is able to take advantage of software patches. Some agencies reported in their implementation plan updates that they developed plans for interim solutions to construct these files until the patches can be developed, tested, and configured. However, some of these interim solutions rely on manual processing, which can be burdensome and increase the risk for errors. For example, USDA officials said that the effort to create an interim solution has been very resource intensive. This process involved surveying USDA's bureaus to identify how their systems are configured and using that information to modify the financial system. HHS has also developed an interim reporting solution that can generate the required files without depending on a patch. However, HHS officials said this interim solution is complex and their processes cannot be fully automated until the Oracle patch is released. Furthermore, since these processes are not fully automated, they carry a risk of errors being introduced though human error. Agencies that are developing interim solutions will only have until May 2017 to test the data before the reporting deadline. An OMB document commended these agencies for developing robust contingency plans since this will better position them for timely implementation, but acknowledged that that long-term reporting solutions are still needed.

Updated Design of Section 5 Pilot Meets DATA Act Requirements and Mostly Reflects Leading Practices, but the Procurement Portion Does Not Clearly Document How its Focus on Certified Payroll Reporting Will Apply to Other Reporting Requirements

Revised Pilot Design Meets DATA Act Requirements

As required by the DATA Act, OMB is conducting a pilot program, known as the Section 5 Pilot, aimed at developing recommendations for reducing reporting burden for grantees and contractors. The Section 5 Pilot has two primary focus areas—federal grants and federal contracts (procurements). OMB partnered with HHS to design and implement the grants portion of the pilot and with the General Services Administration (GSA) to implement the procurement portion. As the executing agent for the grants portion of the pilot, HHS developed six "test models" to evaluate different approaches to potentially reducing grantee reporting burden. On the procurement portion of the pilot, OMB's Office of Federal Procurement Policy (OFPP) worked with GSA's 18F³⁰ to develop and test a proof of concept reporting portal for reports required by the Federal Acquisition Regulation (FAR) and is piloting it with the centralized reporting of certified payroll by contractors working construction projects

³⁰18F is an organization within GSA whose mission is to transform the way the government builds and buys information technology, with an emphasis on public-facing digital services. 18F is fee-driven, largely operating through interagency agreements to provide services including consultation and design/build for digital services.

in the United States.³¹ In March 2016, a revised plan describing the design of the grants portion of the pilot was released, which updated the November 2015 version we previously reviewed. This was followed, in July 2016, by a revised version of the design for the procurement portion. See table 1 for a summary of the test models components that comprise the grants and procurement portions of the Section 5 Pilot.

Table 1: Test Models Comprising the Section 5 Pilot for Federal Grants and Contracts

	Stakeholders	Methodological approach(es) used	Implementation status
	Gr	ants Portion	
Common Data Elements Repository (CDER) 1 An online repository for grant data elements and definitions that is intended to be an authoritative source for data elements and definitions, called the CDER Library.	Federal grant recipients.	 Quantitative Data^a Survey and/or Knowledge Tests^b 	Surveys and other data collection instruments are in the process of being finalized. The Department of Health and Human Services (HHS) has begun testing in November 2016.
CDER 2 A federal agency-only version of the CDER Library containing more than 9,000 grants data elements that identify which specific grant forms these data elements come from, so that users can see how many forms require the same data elements and which agencies request that information.	Federal agency staff that create and use grant forms to manage programs.	Review and Comparison of Grant Forms	HHS has a contract with DS Federal to implement this test model. Data collection and analysis is ongoing.

³¹The Davis-Bacon Act requires contractors and subcontractors working on federally funded contracts in excess of \$2,000 to pay at least locally prevailing wages to laborers and mechanics. The act covers both new construction and the alteration or repair of existing public buildings and works. The Department of Labor sets prevailing wage rates for various job categories in a local area on the basis of periodic surveys it conducts of contractors, unions, public officials, and other interested parties. In addition to paying no less than locally prevailing wages, contractors for construction projects that are subject to the Davis-Bacon Act must pay their workers weekly and submit weekly certified payroll records. According to OMB's updated design for the procurement portion of the pilot, the Davis-Bacon reporting requirement applied to approximately 10 percent of federal contract obligations (about \$39 billion) to over 7 percent of federal contractors (10,800) in fiscal year 2015.

	Stakeholders	Methodological approach(es) used	Implementation status			
Grants Portion						
Consolidated Federal Financial Reporting (FFR) A consolidated FFR form to allow grantees to submit information once into one system rather than through multiple entry points.	Recipients of Administration of Children and Families (ACF) grants and ACF staff involved in the federal financial report process.	 Survey and/or Knowledge Tests Participant Focus and/or Discussion Groups^c 	HHS began data collection in June 2016 and will continue to administer focus groups, webinars, and surveys at conferences and other venues.			
Single Audit Combines grants forms related to the Single Audit.	Federal grant recipients that are subject to the Single Audit.	 Survey and/or Knowledge Tests Participant Focus and/or Discussion Groups 	HHS started implementation activities in March 2016 and has since administered facilitated discussions and surveys.			
Notice of Award (NOA) A consolidated NOA cover sheet for Single Audits.	Federal grant recipients.	 Quantitative Data Survey and/or Knowledge Tests Participant Focus and/ or Discussion Groups 	HHS started implementation activities in October 2016 by administering a webinar and facilitated discussion.			
Learn Grants An addition to the Grants.gov website called Learn Grants to make it easier for stakeholders to search for, learn about, and apply for federal grants.	Federal grant recipients.	 Survey and/or Knowledge Tests Participant Focus and/or Discussion Groups 	HHS started data collection in July 2016 and has since given presentations and administered surveys, quizzes, and focus groups at conferences.			
	Proce	urement Portion				
Certified Payroll Centralizing (one point of entry and data submission) the reporting requirements in the Federal Acquisition Regulation (FAR) initially focusing on Davis-Bacon certified payroll reporting data.	Contractors and agency staff that use certified payroll and other FAR reporting data for contract management and oversight.	 Quantitative Data Participant Focus and/or Discussion Groups 	The General Services Administration has selected NuAxis to develop a centralized portal for certified payroll reporting. That work began in September 2016 and data collection will begin no later than February 28, 2017.			

Source: GAO analysis of design documents for the grants and procurement portions of the DATA Act Pilot and supporting documentation and interviews. | GAO-17-156

^a"Quantitative data" indicates that the Office of Management and Budget (OMB) and HHS will use tools or techniques that collect quantitative data, other than from surveys or tests, specific to the grants and procurement portions of the pilot. For example, for the CDER 1 test model, participants will self-report the length of time it took to complete knowledge tests with or without access to the CDER library. Additionally, CDER 2 will review and compare grant forms to determine percentage of duplication.

We determined that the updated design for both portions of the Section 5 Pilot meets the statutory requirements for the pilot established under the DATA Act. Specifically, the DATA Act requires that the pilot program

^b"Surveys and/or knowledge tests" indicate that OMB and HHS will collect data by asking participants opinion and/or fact-based questions specific to the grants and procurement portions of the pilot.

^c"Participant focus and/or discussion groups" indicate that OMB and HHS will administer various small group dialogues with pilot participants to collect data specific to the grants or procurement portions of the pilot.

should include the following design features: (1) collect data during a 12-month reporting cycle; (2) include a diverse group of federal award recipients and, to the extent practicable, recipients that receive federal awards from multiple programs across multiple agencies; and (3) include a combination of federal contracts, grants, and subawards with an aggregate value between \$1 billion and \$2 billion.³² Based on our review of design documents as well as interviews with cognizant agency staff, there has been substantial improvement in this area since our last review, when the design lacked specifics in the procurement portion of the pilot, which made it difficult to determine whether the design of the overall pilot would meet these requirements.

Grants and Procurement Portions of the Pilot Partially Reflect All 5 Leading Practices for Pilot Design

Both the grants and procurement portions of the pilot showed substantial improvements in the extent to which they reflect leading practices for pilot design (shown in the textbox below). 33 We found that HHS's March 2016 revised design for the grants portion of the pilot partly reflects all five of the leading practices for effective pilot design—an improvement from our prior assessment.³⁴ For example, in our April 2016 review we found that the grants design lacked specific details regarding how the data will be analyzed and how conclusions will be reached about integrating the pilot activities into overall grant reporting efforts. Based on our feedback, OMB and HHS developed a plan to analyze survey and other data prior to the start of data analysis. 35 This plan specifies the types of quantitative and qualitative data analysis HHS intends to conduct for each test model and how that assessment links back to the stated hypotheses. HHS also added a sampling plan and information on participant outreach efforts to the design of the grants portion of the pilot which helped it to meet the leading practices for effective pilot design.

³²FFATA, § 5(b)(3), (b)(2)(B), (b)(2)(C), (b)(2)(A).

³³We previously reported an assessment of the pilot designs in April 2016. For more information on these leading practices, see GAO-16-438.

³⁴See Appendix II of GAO-16-438 for our prior assessment.

³⁵According to OMB's Standards and Guidelines for Statistical Surveys, it is important to develop a plan for the analysis of a survey prior to the start of a specific analysis to ensure that statistical tests are used appropriately and that adequate resources are available to complete the analysis.

Leading Practices for Effective Pilot Design

- 1. Establish well-defined, appropriate, clear, and measurable objectives.
- Clearly articulate an assessment methodology and data gathering strategy that addresses all components of the pilot program and includes key features of a sound plan.
- Identify criteria or standards for identifying lessons about the pilot to inform decisions about scalability and whether, how, and when to integrate pilot activities into overall efforts.
- 4. Develop a detailed data-analysis plan to track the pilot program's implementation and performance and evaluate the final results of the project and draw conclusions on whether, how, and when to integrate pilot activities into overall efforts.
- Ensure appropriate two-way stakeholder communication and input at all stages of the pilot project, including design, implementation, data gathering, and assessment.

Source: GAO. For additional information on these practices as well as the methodology used to identify them, see GAO-16-438 | GAO-17-156

OMB's July 2016 revision of the design of the procurement portion of the Section 5 Pilot also showed substantial improvements in reflecting the leading practices for effective pilot design. Compared to the previous version, dated November 2015, we identified progress in several areas. For example, the revised procurement design identified hypotheses for each objective and contained objectives that were linked to metrics that should facilitate OMB's ability to collect appropriate evaluation data. The revised design also provides additional details regarding the procurement portion's intended assessment methodology. It specifies that participants will submit payroll information to the centralized test portal on a weekly basis and that OMB will use focus groups to collect qualitative data from agency staff that use these data for contract management and oversight purposes. Furthermore, the revised design includes a data-analysis plan that describes how OMB will collect, track, and analyze data produced by the pilot. Finally, the revised procurement design provides additional detail about how potential findings could be scalable from the experiences of the individual pilot participants to the larger population of contractors required to submit certified payroll reports in compliance with Davis Bacon requirements. Toward that end, the revised procurement pilot design contains a sampling plan that provides criteria for selecting a diverse group of participants.

Design of the Procurement
Portion of the Pilot Does
Not Clearly Document
How its Focus on Certified
Payroll Reporting Will
Apply to Other
Procurement Reporting
Requirements

We found some areas where the revised procurement design does not fully reflect leading practices for effective pilot design. These largely relate to how OMB intends to broaden the pilot's initial focus on centralizing certified payroll reporting to other types of FAR-required reporting. The procurement design presents a reasonable set of factors for why OMB decided to initially select certified payroll reporting for testing the potential usefulness of a centralized reporting portal to reduce reporting burden.³⁶ However, the plan does not take the next step of clearly describing and documenting how findings related to centralized certified payroll reporting will be more broadly applicable to the many other types of required reporting under the FAR beyond citing general concepts such as data pre-population and system integration. More specifically, the current design lacks a plan for testing the assumption that the experiences contractors have with centralized certified payroll reporting will be similar when they use the system to meet different reporting requirements and other databases. This is of particular concern given the diversity of reporting requirements contained in the FAR. In fact, OMB staff have identified over 100 different types of FAR reporting requirements with different reporting frequencies, mechanisms, and required information.

OMB staff told us that they expect to test the centralized portal on other types of FAR-required reporting and the revised design briefly mentions other FAR requirements such as those for service contracts and affirmative action plans. However, the revised design does not provide any details on how this will be done. The absence of an assessment methodology and an approach to test the scalability of the design when applied to procurement reporting requirements beyond certified payroll reporting is inconsistent with leading practices for pilot design and raises questions about whether the pilot design will meet its stated objective of reducing procurement reporting burden more broadly.

³⁶Among these factors are the relatively complex nature of certified payroll reporting, including the weekly requirement to submit reports, and the multiple data formats that these reports must be submitted in, as well as others.

Implementation of Grants Portion of the Pilot is Underway, but the Procurement Portion is Not Scheduled to Begin Until Early 2017

HHS has taken a number of steps to begin implementing the design of the grants portion of the pilot. For example, they are recruiting participants for all of the test models and have begun administering data collection instruments for all of the test models. HHS has engaged in a number of outreach efforts to recruit participants for its test models. These officials told us that they have attended an estimated 70 events since 2015 to discuss the grants pilot, during which they provided information to interested attendees on how to get involved. Additionally, as of August 2016, HHS officials reported e-mailing almost 8,000 potential participants and plan on emailing additional prospects, if needed, in order to reach an established minimum number of participants for each test model.

GSA's 18F completed a prototype for the procurement portion of the Section 5 Pilot at the end of May 2016 and presented it to OMB in June 2016. 18F's role was to explore how an electronic certified payroll reporting portal could reduce contractor burden for federal Davis-Bacon contracts. In August 2016, GSA's Federal Acquisition Service, the implementation lead for the pilot, awarded NuAxis the contract to build the prototype from information obtained as a result of the 18F prototype process. GSA officials told us that starting in September 2016, NuAxis began developing a web-based reporting interface that will allow users to centrally enter and submit certified payroll data. They plan to make this interface compatible with other existing systems, such as the System for Award Management (SAM) and Wage Determination Online (WDOL) to access relevant data sources.

In late November 2016, OMB staff and GSA officials informed us that they decided to delay launching the portal to conduct the procurement portion of the pilot in order to ensure that security procedures designed to protect personally identifiable information (PII) were in place. GSA officials told us that the centralized reporting portal that would be used to collect data on certified payroll did not receive the required Authority to Operate because it did not include necessary security measures to protect the PII that would be submitted by contractors participating in the pilot.³⁷ Before the

³⁷National Institute of Standards and Technology Special Publication 800-37 defines the authority to operate as the official management decision given by a senior organizational official to authorize operation of an information system and to explicitly accept the risk to organizational operations (including mission, functions, image, or reputation), organizational assets, individuals, other organizations, and the nation based on the implementation of an agreed-upon set of security controls.

portal can be used to collect PII, GSA officials said they needed to issue a System of Records Notice and redesign the certified payroll reporting platform so that it conforms to agency security procedures.³⁸ As a result of these additional steps, GSA officials expect to be able to begin collecting data through the centralized reporting portal sometime between late January 2017 and late February 2017. OMB staff said that despite the security-related delay, they still plan on collecting 12 months of data through the procurement pilot as required by the act.

In order to meet the act's requirement that OMB deliver a report to Congress on ways to reduce recipient reporting burden by August 2017, OMB staff told us that they plan to only include data collected up to June or July 2017 in order to allow for sufficient time to analyze the results and incorporate them into the report's findings. However, these staff said that that they plan to continue to collect data through the procurement portion of the pilot until they obtain a full 12 months of contractors' experiences with centralized payroll reporting. Afterwards, OMB plans to analyze this data, compare it to the smaller data set produced for the August 2017 report to Congress and, if necessary, make any needed revisions to the findings and recommendations contained in the report previously submitted to Congress.

Conclusions

Across the federal government, agencies have efforts under way to implement the DATA Act by the May 2017 deadline and the success of these efforts will depend on, among other things, OMB and Treasury's efforts to address agency-reported challenges and build an infrastructure to effectively support government-wide implementation. OMB and Treasury have made progress but still need to fully address the recommendations we have made in our previous reports. For example, OMB and Treasury can build upon the initial step of establishing a data standards committee responsible for maintaining already established standards and identifying new standards towards the goal of establishing an institutionalized system of data management that follows key practices and ensures the integrity of the data standards over time. In this context,

³⁸The Privacy Act requires that when agencies establish or make changes to a system of records, they must notify the public through a system-of-records notice in the Federal Register that identifies, among other things, the categories of data collected, the categories of individuals about whom information is collected, the intended routine uses of data, and procedures that individuals can use to review and correct personally identifiable information. 5 U.S.C. § 552a(e)(4).

implementing our prior recommendations will be critical to OMB's and Treasury's progress.

Among the areas where progress has been made in setting a foundation for successfully implementing the act is the Section 5 Pilot to reduce reporting burden. In particular, the design of the procurement portion of the pilot has improved substantially, including the extent to which it reflects leading practices of pilot design. However, despite advances in several areas, the current design remains limited by its lack of specifics regarding how a pilot focused on assessing contractors' experiences with a centralized portal designed for certified payroll reporting will be applicable to many other federal procurement reporting requirements. By addressing issues such as this and continuing to focus on implementing the act, the administration greatly increases the likelihood of creating a system that will achieve the goals of the act—to increase the transparency of financial information and improve the usefulness of that data to Congress, federal managers, and the American people.

Recommendation for Executive Action

In order to ensure that the procurement portion of the Section 5 Pilot better reflects leading practices for effective pilot design, we recommend that the Director of OMB 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 FAR-required reporting and providing additional details about the methodology that would be used to assess this expanded capability in the future.

Agency Comments and Our Evaluation

We provided a draft of this report to the Secretaries of Agriculture, Health and Human Services, and the Treasury; the Director of OMB; the Chief Executive Officer of the Corporation of National and Community Service; and the Administrator of the General Services Administration for review and comment. OMB, Treasury, CNCS, HHS, and GSA provided us with technical comments which we incorporated as appropriate. USDA had no comments. OMB and Treasury also provided written comments which are summarized below and reproduced in appendices IV and V, respectively.

In written comments submitted to us, OMB provided an overview of their implementation efforts since the passage of the DATA Act. These efforts include issuing three memoranda providing implementation guidance to

federal agencies; finalizing 57 data standards for use on USASpending.gov; establishing the Data Standards Committee to develop and maintain standards for federal spending; and developing and executing the Section 5 pilot. The OMB response also noted that OMB and Treasury met with each of the 24 CFO Act agencies to discuss their implementation timelines, risks, and mitigation strategies, and took steps to address issues that could affect successful implementation. Through these meetings, OMB staff learned that 19 of the 24 CFO Act agencies expect that they will fully meet the May 2017 deadline for DATA Act implementation. OMB neither agreed nor disagreed with GAO's recommendation.

In their written response, Treasury provided an overview of the steps they have taken to implement the DATA Act's requirements and assist agencies in meeting their requirements under the act including OMB's and Treasury's issuance of uniform data standards, Treasury's DATA Act Implementation Playbook, version 2.0, and the DATA Act Information Model Schema version 1.0. The Treasury response also noted that as a result of the aggressive implementation timelines specified in the act and the complexity associated with linking hundreds of disconnected data elements across the federal government, they made the decision to use an iterative approach to provide incremental technical guidance to agencies. According to Treasury, among other things, this iterative approach enabled agencies and other key stakeholders to provide feedback and contribute to improving the technical guidance and the public website.

We are sending copies of this report to the Secretaries of Agriculture, Health and Human Services, and the Treasury; the Director of OMB; the Chief Executive Officer of the Corporation of National and Community Service; the Administrator of the General Services Administration; 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.lf 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.

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List of Congressional Addressees

The Honorable Ron Johnson
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The Honorable Thomas R. Carper
Ranking Member
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United States Senate

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

The Honorable Will Hurd
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The Honorable Robin Kelly
Ranking Member
Subcommittee on Information Technology
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The Honorable Mark R. Warner United States Senate

Appendix I: Objectives, Scope, and Methodology

This review is part of an ongoing effort to provide interim reports on the progress being made in implementing the Digital Accountability and Transparency Act of 2014 (DATA Act), while also meeting the reporting requirements for us mandated by the act. This report examines: (1) steps taken to establish a clear data governance structure which is particularly important during the upcoming transition to a new administration; (2) challenges reported by Chief Financial Officers Act of 1990 (CFO Act) agencies in their implementation plan updates; (3) the operationalization of government-wide data standards and the technical specifications for data reporting; and (4) updated designs for the Section 5 Pilot for reducing recipient reporting burden and progress made in its implementation.

To describe the Office of Management and Budget's (OMB) and the Department of the Treasury's (Treasury) efforts to implement a data governance structure for the DATA Act, we identified common key practices for establishing effective data governance structures. To identify key practices for data governance we reviewed our past reports to identify applicable laws, regulations, and guidance, as well as reports from other entities that could inform our work. To select the sources we used to identify key practices for establishing an effective data governance program, we identified organizations that had data governance expertise, had previously published work on data governance, were frequently cited as a primary source, or some combination of these qualifications. In addition, because the DATA Act requires that established data standards incorporate widely accepted common data elements such as those developed by international voluntary consensus standards bodies, federal agencies with authority over contracting and financial assistance, and accounting standards organizations, we selected a range of organizations, including domestic and international standards-setting organizations, industry groups or associations, and federal agencies, to ensure we had a comprehensive understanding of data governance key practices across several domains.

All of the organizations we identified endorse establishing and using a governance structure to oversee how data standards, digital content, and other data assets are developed, managed and implemented. Based on these selection factors we drew on work from the following organizations to help us identify data governance key practices: American Institute of Certified Public Accountants, American National Standards Institute, Carnegie-Mellon University-Software Engineering Institute, Data Governance Institute, Data Management Association International, Oracle, National Association of State Chief Information Officers, National

Institute of Standards and Technology, Digital Services Advisory Group and the Department of Education-Privacy Technical Assistance Center. We also met with OMB and Treasury to obtain information on the status of their efforts to address our previous recommendation that they establish a data governance structure.¹

To determine the implementation challenges reported by CFO Act agencies in their DATA Act implementation plan updates, we requested and received the updates from the 24 CFO Act agencies. We reviewed these implementation plan updates and assessed the information against OMB's requirements and the revised guidance in Treasury's DATA Act Implementation Playbook (Version 2.0) (Playbook 2.0) to determine whether the updates contained the information required by OMB—(1) an updated timeline and milestones with an explanation of the agency's progress to date and the remaining actions it would take to implement the act in accordance with the suggested steps in Playbook 2.0, (2) costs to date and estimated total future costs, and (3) an explanation of any new challenges and mitigation strategies.² We analyzed the agency-reported challenges and mitigating strategies and categorized them. We compared the categories of challenges reported by the CFO Act agencies in their implementation plan updates to the challenges that had been reported in their initial implementation plans in 2015 to identify any new categories of challenges. We interviewed cognizant OMB and Treasury officials and obtained any supporting documentation to further understand the implementation challenges reported by agencies in their implementation plan updates and OMB and Treasury's processes and controls for reviewing the updated implementation information and monitoring agencies' progress. We also met with OMB and Treasury to obtain information on the status of efforts to address our previous recommendations related to agency implementation plans.3

To assess efforts to date to operationalize government-wide standards we reviewed OMB policy guidance intended to facilitate agency reporting

¹GAO, DATA Act: Progress Made in Initial Implementation but Challenges Must be Addressed as Efforts Proceed, GAO-15-752T (Washington, D.C.: July 29, 2015).

²Office of Management and Budget, *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).

³GAO, *DATA Act: Improvements Needed in Reviewing Agency Implementation Plans and Monitoring Progress*, GAO-16-698 (Washington, D.C.: July 29, 2016).

as well as guidance intended to respond to agency requests that OMB clarify how to report specific transactions. We also interviewed OMB staff and Treasury officials to obtain information about plans for additional guidance as well as to assess the extent to which issued guidance is responsive to agency questions, requests for additional clarity on their reporting requirements, or both. We met with OMB and Treasury to obtain information on the status of efforts to address our previous recommendation related to the provision of policy guidance.⁴

To examine the technical structure and specifications for reporting, we assessed Treasury's processes for developing technical guidance and reviewed applicable technical documentation related to the schema version, 1.0 and the broker. We reviewed the broker made available by Treasury through open source code posted on a public website (GitHub repositories associated with the DATA Act) in order to understand its functionality and validations. In addition, we observed several demonstrations of how agencies submit their data to a prototype of the broker and the feedback produced by the system regarding data verification. We also interviewed knowledgeable officials from OMB, Treasury, and selected federal agencies and inspectors general, as well as enterprise resource planning (ERP) vendors assisting federal agencies with technical implementation.

To obtain specific information on how agencies use the technical guidance, we selected three 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 a federal shared service provider for financial management. Based on these selection factors, we chose the Department of Health and Human Services (HHS), the Department of Agriculture (USDA), and the Corporation for National and Community Service (CNCS). Although the information obtained from these three agencies is not generalizable to all agencies, they illustrate a range of conditions under which agencies are implementing the act. These are the same three agencies we selected for our January 2016 and August 2016 reports. This allowed us to assess progress in DATA Act implementation at these agencies since our last review. At each agency, we reviewed DATA Act implementation plan updates and

⁴GAO, 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).

interviewed officials responsible for implementation and DATA Act implementation team members. We met with OMB and Treasury to obtain information on the status of efforts to address our recommendation related to providing technical guidance.⁵

To assess whether the Section 5 pilot designs meet statutory design requirements, we reviewed Section 5 of the Federal Funding Accountability and Transparency Act of 2006, as amended by the DATA Act, to understand the deadlines and design requirements. We reviewed the draft design documents to assess OMB and its partners' plans for meeting these requirements. To supplement our review of those plans, we also spoke with cognizant staff implementing these pilots at OMB, HHS, and General Services Administration.

To assess the extent to which the Section 5 pilot designs adhered to leading practices for effective pilot design, we reviewed the documented designs for both the grants and procurement portions of the pilot. To evaluate the grants portion of the pilot, we reviewed the draft design document from March 2016 as well as data collection instruments such as surveys and guizzes. We supplemented our assessment with information HHS officials provided to us during subsequent interviews, as appropriate. For the procurement portion, we reviewed the draft design document from July 2016. Additionally, we supplemented our assessment with information officials from OMB's Office of Federal Procurement Policy (OFPP) provided to us during subsequent interviews, as appropriate. To assess the grants and procurement portions of the pilot, we applied the five leading practices for effective pilot design we identified to both portion's design documents. Each of these analyst assessments were subsequently verified by a second analyst. We determined that the design met the criteria when we saw evidence that all aspects of a leading practice were met. When we were unable to assess whether all aspects of a leading practice were met, we determined that the design partially met the criteria. Finally, when we saw no evidence of a leading practice, or if we identified a critical gap or shortcoming related to the practice, we determined that the criteria were not met. In continuation of our constructive engagement approach for working with agencies implementing the DATA Act, we provided HHS and OMB with feedback

⁵GAO, 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).

Appendix I: Objectives, Scope, and Methodology

on the design of the grants and procurement portions of the pilot during our review. These officials generally accepted our feedback as useful and, in some instances, noted that they have or planned to make changes to their design as a result of our input. We also met with OMB to obtain information on the status of efforts to address our recommendation related to the design of the pilot for reducing recipient reporting burden.⁶

We conducted the work upon which this report is based from May 2016 to December 2016 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.

⁶DATA Act: Section 5 Pilot Design Issues Need to Be Addressed to Meet Goal of Reducing Recipient Reporting Burden GAO-16-438 (Washington, D.C.: Apr. 19, 2016).

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

Table 2: Status of GAO's Recommendations Related to the DATA Act

GAO-13-758

Federal Data Transparency: Opportunities Remain to Incorporate Lessons Learned as Availability of Spending Data Increases (September 2013)

Recommendations

The Director of the Office of Management and Budget (OMB), in collaboration with the members of the Government Accountability and Transparency Board, should develop a plan to implement comprehensive transparency reform, including a long-term timeline and requirements for data standards, such as establishing a uniform award identification system across the federal government.

Implementation status

Closed-Implemented. The passage of the Digital Accountability and Transparency Act (DATA Act) by Congress in 2014 set forth the foundation for comprehensive transparency reform for federal spending data. Included in the legislation was a long-term implementation timeline as well as requirements for establishing government-wide data standards. Actions taken by OMB and The Department of the Treasury (Treasury) to implement the act have substantively met the intention of this recommendation made in 2013. In addition, OMB has noted that agencies are on track to assign a Procurement Instrument Identifier (PIID) to identify all solicitation and contract actions and establish a process that ensures that each PIID used to identify a solicitation or contract action is unique governmentwide for at least 20 years from the date of contract award. OMB staff also told us that they have directed agencies to use a unique award identifier for their financial assistance awards and they are working directly with agencies to facilitate this process for DATA Act reporting.

GAO-14-476

Data Transparency:
Oversight Needed to
Address
Underreporting and
Inconsistencies on
Federal Award Website
(June 2014)

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 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.

Open. OMB and Treasury are working to implement the DATA Act, which includes several provisions that may address these recommendations once fully implemented. 1) OMB staff said they continue to deliberate on agency responsibilities for reporting awards funded by non-annual appropriations. 2) OMB staff provided a Frequently Asked Question (FAQ) document addressing the applicability of USASpending.gov reporting requirements for recipient information related to classified or sensitive information. We reviewed the FAQ document and determined that additional guidance is still needed to ensure complete reporting of unclassified awards as required by FFATA. 3) OMB staff have agreed that it will be important to clarify guidance on how agencies can report on award titles that appropriately describes 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. 4) OMB released policy guidance in May 2016 [Management Procedures Memorandum (MPM) No. 2016-03] that identifies the authoritative sources for reporting procurement and award data. However, we found that this policy guidance 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 a priority recommendation letter sent to OMB by the Comptroller General of the United States in July 2016.

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 governmentwide oversight process to regularly assess the consistency of information reported by federal agencies to the website other than the award amount.

Implementation status

Open. As part of their DATA Act implementation efforts, OMB issued policy guidance in May 2016 (MPM 2016-03) 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.

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 of the United States in December 2015 and July 2016.

GAO-15-752T

DATA Act: Progress Made in Initial Implementation but Challenges Must be Addressed as Efforts Proceed (July 2015)

- I. 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.
- 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.

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. OMB staff noted that they expect to begin analyzing the results of the study in fall 2016. This was identified as a high priority recommendation in letters sent from the Comptroller General of the United States to the Director of OMB in December 2015 and July 2016.

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 maintaining established standards and identifying new data elements. 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 of the United States to the Director of OMB in December 2015 and to the Director of OMB and the Secretary of the Treasury in July 2016.

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

Recommendations

3. To ensure that interested parties' concerns are addressed as implementation efforts continue, the Director of OMB, in collaboration with the Secretary of the Treasury, should build on existing efforts and put in place policies and procedures to foster ongoing and effective two-way dialogue with stakeholders including timely and substantive responses to feedback received on the Federal Spending Transparency GitHub website.

Implementation status

Closed—Implemented. OMB and Treasury have taken a number of steps to engage with federal and nonfederal stakeholders including presentations at conferences, roundtable discussions, monthly stakeholder calls, and weekly calls with agency DATA Act implementation staff. These outreach efforts are intended to provide information on new implementation initiatives as well as to address stakeholder concerns. OMB and Treasury have also added new features to the Federal Transparency GitHub site to facilitate two-way stakeholder communication related to the developing and testing agency data submission to the broker. For example, Treasury is using JIRA, an on-line software development tool, to provide responses to stakeholder questions and comments related to the development of the broker. Prior to its closure, this recommendation was identified as a high priority recommendation in letters sent from the Comptroller General of the United States to the Director of OMB in December 2015 and to the Director of OMB and the Secretary of the Treasury in July 2016.

GAO-15-814:

Federal Spending Accountability: Preserving Capabilities of Recovery Operations Center Could Help Sustain Oversight of Federal Expenditures (September 2015)

To capitalize on the opportunity created by the DATA Act, the Secretary of the Treasury should reconsider whether certain assets—especially information and documentation such as memoranda of understanding (MOUs) that would help transfer the knowledge gained through operating the Recovery Operations Center—could be worth transferring to Do Not Pay Center Business Center to assist in its mission to reduce improper payments. Additionally, the Secretary should document the decision on whether Treasury transfers additional information and documentation and what factors were considered in this decision.

Closed—Implemented. In response to our recommendation, in April 2016, Treasury provided us a summary of its evaluation of Recovery Operations Center (ROC) business processes and procedures. This summary cited our recommendation and included a review of the ROC's memoranda of understanding (MOU) with the General Services Administration, Treasury's Financial Crimes Enforcement Network, and the Department of Commerce. In August 2016, Treasury provided additional detail on its review of the Federal Awardee Performance and Integrity System (FAPIIS) and Past Performance Information Retrieval System now combined into FAPIIS and the Federal Audit Clearinghouse Single Audit data. According to these documents, Treasury has reconsidered whether certain assets, including MOUs, would be worth transferring to the Do Not Pay Center Business Center.

GAO-16-261

DATA Act: Data Standards Established, but More Complete and Timely Guidance Is Needed to Ensure **Effective** Implementation (January 2016)

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 Award Description and Primary Place of Performance and that they clearly document and communicate these actions to agencies providing this data as well as to end-users.

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.

Implementation status

Open. In May 2016, OMB issued additional guidance for implementing the DATA Act entitled Implementing the Data-Centric Approach for Reporting Federal Spending Information (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. Despite these positive steps, additional guidance is needed to facilitate agency implementation of certain data definitions (such as "award description" and "primary place of performance") 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 of the United States to the Director of OMB and the Secretary of the Treasury in July 2016.

Open. 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. Despite these efforts, some agencies are concerned about the late release of software patches developed by ERP vendors that are intended to help agencies submit required data to the broker. In some instances the release of the software patches has been delayed. Treasury officials told us that they have developed a solution, so that agencies do not need to use the ERP vendor software patches for their file submissions. This was identified as a high priority recommendation in letters sent from the Comptroller General of the United States to the Director of OMB and the Secretary of the Treasury in July 2016.

GAO-16-438

DATA Act: Section 5
Pilot Design Issues
Need to Be Addressed
to Meet Goal of
Reducing Recipient
Reporting Burden
(April 2016)

- 1. To help ensure and more clearly convey how the procurement portion of the pilot will contribute to meeting the Section 5 Pilot design requirements, we recommend that the Director of OMB determine and clearly document (1) how it will collect certified payroll data over a 12-month reporting cycle, (2) ensure the diversity of pilot participants, and (3) how the inclusion of federal contracts will contribute to an aggregate amount of \$1 billion to \$2 billion.
- 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.

Implementation status

Closed—Implemented. We reviewed the revised design plans for both the grants and procurement portions of the pilot and interviewed with cognizant agency staff, and determined that OMB is on track to meet the statutory requirements for the pilot established under the DATA Act. For example, for both portions of the pilot, OMB will be collecting data for a 12-month reporting cycle, has developed sampling plans that will ensure the diversity of pilot participants, and has a strategy for meeting the aggregate amount of \$1 to \$2 billion collectively between the grants and procurement portions of the Section 5 Pilot. Prior to its closure, this recommendation was identified as a high priority recommendation in a letter sent from the Comptroller General of the United States to the Director of OMB in July 2016.

Open. Our analysis of the August 2016 revised design for the procurement portion of the Section 5 Pilot found it to partially reflect all 5 leading practices for effective pilot design. In assessing the previous version of the procurement portion of the pilot, we found the design did not meet any of these leading practices. For example, in the revised design OMB provides additional details regarding its assessment methodology, includes a data analysis plan to evaluate pilot results, and has a strategy for two-way stakeholder outreach. Despite these improvements, the design still does not fully meet the leading practices for effective pilot design. For example, the written plan should be more explicit about what will be assessed. While the plan gives specifics about the testing of certified payroll to answer some of the research questions, it does not outline any additional FAR requirements that will be tested to achieve the objectives. Although OMB staff explained that they expect to test the centralized portal on other types of FAR required reporting, the plan does not specify which requirements will be tested or how. Additionally, while the design includes a data-analysis plan that generally describes how OMB will collect, track, and assesses data, the plan lacks details such as how OMB will use the data to develop recommendations. Furthermore, it is not clear how OMB plans to incorporate qualitative feedback from discussion groups into its findings and recommendations. This was identified as a high priority recommendation in a letter sent from the Comptroller General of the United States to the Director of OMB in July 2016.

GAO-16-698

and Monitoring

in Reviewing Agency

Implementation Plans

DATA Act:

Progress

(July 2016)

To help ensure effective governmentwide implementation and that complete and consistent spending Improvements Needed 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.

Implementation status

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.

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.

To help ensure effective governmentwide 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.

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. Confirming that all agencies required to report under the DATA Act actually do so—whether they are funded through the annual appropriations process or receive appropriated funds through other means—is a necessary step towards meeting the statutory requirement that OMB and Treasury ensure that all the required data is posted to USASpending.gov or a successor

- 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 establish documented policies and procedures for the periodic review and use of agency implementation plans to facilitate and monitor agency progress against the plans.
- 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 request that non-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.
- 5. 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.

Implementation status

Closed—Implemented. OMB developed a document entitled, Utilizing the Updates to Implementation Plans, which describes OMB's planned review of the implementation plan updates and also includes a tool to document their review of the updated plan information. Treasury also developed a document entitled DATA Act – Agency Implementation Progress Monitoring, which describes Treasury's process for monitoring agency progress. To facilitate monitoring, OMB and Treasury regularly interact with agencies through weekly phone calls, monthly SAO meetings, and other forms of communication. Treasury also established a progress dashboard, which documents agencies' reported progress in meeting certain milestones. According to the Treasury document, the dashboards are reviewed by the DATA Act Executive Steering Committee and presented at the Interagency Advisory Council and SAO monthly meetings.

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.

Open. OMB's document, *Utilizing the Updates to Implementation Plans*, states that OMB will analyze the information submitted by the CFO Act agencies to determine whether the agencies have submitted updates as directed by OMB in its June 15, 2016, memo. OMB also developed a tool to help it review agency implementation plan information. According to OMB staff, they reviewed the updates and had constructive communications with agencies via phone calls and e-mails asking for more information. Based on these efforts OMB believes agencies' information and documentation is complete. However, we have not received the completed tool used to facilitate OMB's reviews or documentation of follow-up meetings and discussions with agencies. This recommendation will remain open until we have received and assessed this documentation.

Source: GAO summary and analysis of statements and documentation provided by OMB staff and Treasury officials. | GAO-17-156

In May 2015, the Office of Management and Budget (OMB) directed federal agencies to submit Digital Accountability and Transparency Act of 2014 (DATA Act) implementation plans to OMB concurrent with the agencies' fiscal year 2017 budget requests. In June 2015, the Department of the Treasury (Treasury) issued guidance—*DATA Act Implementation Playbook (Version 1.0)*—to help agencies prepare their implementation plans. We reviewed these implementation plans and on July 29, 2016, we issued a report on the results of our review. ²

In June 2016, OMB directed Chief Financial Officers Act of 1990 (CFO Act) agencies to submit updates to their initial DATA Act implementation plans by August 12, 2016.³ The updates were to (1) update timeline and milestones and explain the agency's progress to date and the remaining actions it would take to implement the act in accordance with the suggested steps in the *DATA Act Implementation Playbook (Version 2.0)* (Playbook 2.0), (2) report costs to date and estimated total future costs, and (3) explain any new challenges and mitigation strategies.

Treasury's *DATA Act Implementation Playbook (Version 1.0)* contained eight suggested steps and a timeline for agencies to use as they began to develop their DATA Act implementation plans. Steps 1 through 4 were to be completed by September 2015. However, as of October 2016, only 16 of the 24 CFO Act agencies reported that they had completed all steps 1 through 4.⁴ For example, there were four agencies reporting that they had not completed their inventory of data and identified the gaps in systems and processes for data elements (step 3).

DATA Act Implementation Playbook (Version 1.0) indicated that agencies would be working on steps 5 through 8 throughout fiscal years 2016 and 2017. Playbook 2.0—issued June 24, 2016—includes, among other

¹Office of Management and Budget, *Increasing Transparency of Federal Spending by Making Federal Spending Data Accessible, Searchable, and Reliable*, OMB Memorandum M-15-12 (Washington, D.C.: May 8, 2015).

²GAO, *DATA Act: Improvements Needed in Reviewing Agency Implementation Plans and Monitoring Progress*, GAO-16-698 (Washington, D.C.: July 29, 2016).

³Office of Management and Budget, *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).

⁴See GAO-16-698 for additional details and descriptions of the suggested steps 1 through 4 and timeframes for completion as noted in the *DATA Act Implementation Playbook* (*Version 1.0*).

things, expanded guidance on actions to be included in steps 5 through 8. Playbook 2.0 did not include expected timeframes for agencies to complete each step, rather, it referred agencies to Treasury's implementation roadmap, which includes high level milestones for Treasury's technical deliverables. Playbook 2.0 states that agencies can use the milestones in Treasury's implementation roadmap to help determine their own implementation milestones. Descriptions of steps 5 through 8 from Playbook 2.0 follow:

- Step 5: Prepare Data for Submission to the Broker.⁵ This step involves reviewing the schema version 1.0, extracting data from source systems, mapping agency data to the schema version 1.0, and implementing system changes as needed to collect and link data.
- Step 6: Test Broker Outputs and Ensure Data are Valid. Agencies
 may use the broker to verify the data files the agency plans to submit
 to Treasury. The broker uses validation rules to test the completeness
 and accuracy of the data elements and linkages between financial
 and award data. The broker also tests whether the data passes basic
 validations within the schema version 1.0.
- Step 7: Update Data. This step involves updating information and systems. If data does not pass validation (see Step 6), the broker will provide error details to the agency. The agency should then reference the authoritative data sources and address the discrepancies.
- Step 8: Submit Data. Once the data is linked, validated, and standardized, agencies are to submit the data to Treasury for posting on USASpending.gov or a successor system. Agency senior accountable officials (SAO) are to provide reasonable assurance that their internal controls support the reliability and validity of the agency account-level and award-level data they submit to Treasury. This assurance is to be provided quarterly with data submissions beginning with fiscal year 2017 second quarter data. The SAO assurance means, at a minimum, that data reported are based on appropriate internal controls and risk management strategies identified in OMB Circular A-123.6

⁵For additional background on the DATA Act broker as well as a graphic illustrating its structure and operation, see GAO, DATA Act: Initial Observations on Technical Implementation, GAO-16-824R (Washington, D..: Aug. 3, 2016).

⁶See OMB, Additional Guidance for DATA Act Implementation: Implementing a Data Centric Approach for Reporting Federal Spending Information, Management Procedures Memorandum 2016-03 (Washington, D.C.: May 3, 2016) for additional details.

Table 3 shows the information that OMB required CFO Act agencies to include in their implementation plan updates, information on remaining actions the agencies should take to implement suggested steps 5 through 8 in Playbook 2.0, and the number of CFO Act agencies that included the information.

Table 3: Information to be included in August 2016 CFO Act Agency DATA Act Implementation Plan Updates and Number of CFO Act Agencies that included such Information

Information required by OMB to be included in agency DATA Act implementation plan updates	Number of CFO Act agencies
Timeline with milestone dates	24
Explanation of the agency's progress to date	23
Explanation of the agency's remaining steps they will take to implement the DATA Act	23
Explanation of milestones included in the time line	21
Cost estimate and/or summary of resources used to date and estimated future costs ^a	21
Challenges in implementing DATA Act requirements	20 ^b
Mitigating strategies to overcome challenges	16
Remaining actions to implement suggested steps 5 through 8 in Treasury's DATA Act Implementation Playbook (Version 2.0)	
Discussion about extracting data from agency financial systems directly to the broker	23
Discussion of planned testing of the broker and validation of information submitted to Treasury to ensure that all necessary data has been uploaded and is formatted correctly	23
Discussion about mapping agency data from agency systems to the DATA Act Schema	22
Discussion of system changes necessary to collect and link agency financial and program data	21
Discussion about the actions to validate and/or test agency data to ensure data have been accurately mapped from agency source systems to the DATA Act Schema	21
Discussion of the agency's review of the DATA Act Schema, including the reporting architecture and submission specifications to prepare data for submission to the broker	21
Description of process to submit data to Treasury for posting on USAspending.gov or a successor system	19
Discussion of testing of the completeness and accuracy of data elements the agency plans to submit to Treasury	19
Documentation of the workflow for addressing validation errors and revisions such as identifying the people and systems necessary to make changes to the data prior to submittal	13
Discussion of testing of linkages between program and financial data or needed interim solution to link financial and program data	11

Legend: CFO = Chief Financial Officers; DATA Act = Digital Accountability and Transparency Act of 2014; OMB = Office of Management and Budget; Treasury = Department of the Treasury

Source: GAO analysis of CFO Act agencies' implementation plan updates. | GAO-17-156

^aFor the requirement to report costs to date, most agencies reported costs through fiscal year 2016, rather than reporting costs "to date."

^bAlthough 20 agencies included this element in their implementation plan updates, 1 of those agencies reported that it did not identify any challenges.

Table 4 describes the categories of challenges reported by 19 of the 24 CFO Act agencies in their implementation plan updates and the number of agencies reporting challenges in each category. Five CFO Act agencies did not identify any challenges in their implementation plan updates.

Table 4: Categories of DATA Act Implementation Challenges and Number of CFO Act Agencies Reporting Challenges in their August 2016 Implementation Plan Updates

Category	Description of reported challenges	Number of CFO Act agencies reporting challenges in this category
Systems integration	Technology issues, including challenges with integrating multiple existing and disparate financial and management systems or the need to install new systems or modify existing systems to implement the DATA Act.	19
Resources	Lack of funding or human resources needed for implementation.	14
Reporting	Issues related to meeting mandatory DATA Act reporting requirements, including completeness and quality of agency data to be reported, as well as SAO certification and reporting non-financial data.	13
Guidance	Issues with incomplete, unclear, and evolving guidance on requirements, including data elements, technical schema, and other key policies issued by OMB and Treasury guidance, and/or a lack of guidance provided on agency DATA Act implementation.	11

Legend: CFO = Chief Financial Officers; DATA Act = Digital Accountability and Transparency Act of 2014; OMB = Office of Management and Budget; SAO = Senior Accountable Official; Treasury = Department of the Treasury Source: GAO analysis of CFO Act agencies' implementation plan updates. | GAO-17-156

Table 5 describes the mitigating strategies reported by 16 of the 24 CFO Act agencies in their implementation plan updates and the number of agencies reporting mitigating strategies in each category.

Table 5: Categories of DATA Act Mitigation Strategies Reported by CFO Act Agencies in their August 2016 Implementation Plan Updates

Category	Description of mitigation strategies	Number of CFO Act agencies reporting strategies in this category
Changes to Internal Policies and Procedures	Developing procedures to educate agency stakeholders and staff about the validation and certification process.	11
Leveraging Existing Resources	Leveraging existing processes, systems and human resources to maximize efficiency.	11
Utilizing External Resources	Working with software vendors on required code and configuration changes.	7

Category	Description of mitigation strategies	Number of CFO Act agencies reporting strategies in this category
Communication	Holding regular, frequent meetings of members of the implementation team and other agency stakeholders to identify challenges and address them.	6
Manual/Temporary Workarounds	Implementing interim solutions and workarounds to address ongoing systems upgrades and delayed or nonfunctioning patches.	6
Monitoring and Developing Guidance	Engaging regularly with OMB and Treasury through various councils, committees, and weekly office hours to receive the latest information and guidance.	4
Enhancing Existing Systems	Developing additional system capabilities to identify data elements required for monthly data submission.	1

Legend: CFO = Chief Financial Officers; DATA Act = Digital Accountability and Transparency Act of 2014;

OMB = Office of Management and Budget; Treasury = Department of the Treasury

Source: GAO analysis of CFO Act agencies' implementation plan updates. | GAO-17-156

Appendix IV: Comments from Office of Management and Budget



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503
December 2, 2016

Mr. J. Christopher Mihm Managing Director, Strategic Issues Ms. Paula M. Rascona Director, Financial Management and Assurance Government Accountability Office 441 G Street, NW Washington, DC 20548

Dear Mr. Mihm and Ms. Rascona:

Thank you for the opportunity to review the draft report, "OMB and Treasury Have Issued Additional Guidance and Have Improved Pilot Design but Implementation Challenges Remain (GAO-17-156)." From the Administration's first days in office, improving Federal financial spending transparency has been a focus of the President's Open Government initiative. The Office of Management and Budget is committed to realizing the vision that all stakeholders know how and where tax dollars are spent.

Since passage of the Digital Accountability and Transparency Act (DATA Act), OMB has worked closely with GAO to provide insight into our real-time progress and implementation of the DATA Act. OMB's leadership in DATA Act implementation has been extensive – since the passage of the Act, OMB has:

- Issued three memorandums to federal agencies, providing guidance to implement the DATA Act.¹
- Finalized 57 financial data standards for use on USAspending.gov.²
- Partnered directly with individual federal agencies to actively monitor DATA Act implementation progress. In Summer 2015, OMB required agencies to submit DATA Act implementation plans to inform funding requests and identify needs for policy clarification. In Spring 2016, OMB and Treasury met with all CFO Act agencies on implementation progress. In Spring/Summer 2016, OMB required all CFO Act agencies to submit updated implementation plans. OMB reviewed these plans, based on a defined process and criteria, identified agencies with the largest challenges, and met with agencies to discuss their DATA Act progress.
- Formally established the DATA Standards Committee (DSC), designed to maintain and
 continue to develop data standards for Federal spending and award level reported data.
 The DSC includes representation from various Federal lines of business (budget, finance,
 procurement, financial assistance, performance, human resources, information

(https://www.whitehouse.gov/sites/default/files/omb/memoranda/2015/m-15-12.pdf), MPM-2016-03 (https://www.whitehouse.gov/sites/default/files/omb/financial/memos/management-procedures-memorandum-no-2016-03-additional-guidance-for-data-act-implementation.pdf), and M-17-04 (https://www.whitehouse.gov/sites/default/files/omb/memoranda/2017/m-17-04.pdf).

² These final data standards are posted at:

https://max.gov/maxportal/assets/public/offm/DataStandardsFinal.htm.

¹ These three memoranda are: M-15-12

technology), and consistent with our approach last summer, the process for identifying and finalizing new data standards will be conducted in an open, transparent manner, with opportunities for non-Federal stakeholders to provide feedback. The Committee will maintain the existing standards while also seeking opportunities for further enhancing standards that cut across multiple communities.

- Provided necessary clarifications of policy guidance to the federal community through issuance of frequently asked questions (FAQs). These were developed with significant agency coordination, and in collaboration with Treasury, to ensure they met agencies' needs and helped with implementation.
- Collaborated extensively with our non-federal stakeholders on both reporting of federal spending data and our work under the Section 5 pilot to reduce recipient reporting burden.

Over the past six months, OMB and Treasury have met with each of the 24 CFO Act agencies to discuss their implementation timeline, unique risks, and their risk mitigation strategy. As a result of these progress discussions, OMB and Treasury have taken action to address issues that may affect successful DATA Act implementation, including providing additional guidance for reporting, showcasing agency best practices, and underscoring opportunities to leverage existing resources. Through agency one-on-one meetings, Dave Lebryk and I have learned that in spite of resource challenges, system integration issues, and changes to business processes, 19 of 24 of the CFO Act agencies expect that they will fully meet the May 2017 deadline for DATA Act implementation.

In addition to OMB's leadership to provide increased transparency in federal spending under the DATA Act's reporting provisions, in the past eight months, OMB has continued to pilot strategies to reduce unnecessary reporting burden for Federal grant and contract recipients. OMB has pursued a two-track approach—one for grants and one for contracts—to address significant pain points associated with Federal reporting.

We appreciate GAO's positive assessment of OMB and Department of Health and Human Services' (HHS) leadership to develop and execute the grants portion of the pilot. We also appreciate GAO's positive assessment of the improvements made to the Section 5 pilot, both the grants and procurement tracks. We will continue to use GAO's feedback and observations to make ongoing improvements.

OMB is committed to the goal of providing a complete view of how Federal appropriated dollars are spent from appropriations to obligations and expenditure. Standardized, published data sets will provide the tools needed for agencies to examine their spending and improve how the Federal government spends taxpayer dollars. Upon successful implementation of the DATA Act, open Federal financial data will no longer be a vision, but a reality to drive a better government.

Appendix IV: Comments from Office of Management and Budget

If you have any questions, please contact me at (202) 395-3895. Your staff may contact Karen F. Lee, Branch Chief for Management Controls and Assistance Branch, at (202) 395-3993.

Sincerely,

U.S. Controller

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Appendix V: Comments from the Department of the Treasury



DEPARTMENT OF THE TREASURY

December 1, 2016

Mr. J. Christopher Mihm
Managing Director, Strategic Issues
Ms. Paula M. Rascona
Director, Financial Management and Assurance
Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Mihm and Ms. Rascona:

We appreciate the opportunity to review the Government Accountability Office's (GAO) draft report GAO-17-156 (Draft Report) regarding the implementation of the Digital Accountability and Transparency Act of 2014 (DATA Act).

Since the enactment of the DATA Act in May 2014, the Department of the Treasury (Treasury), in partnership with the Office of Management and Budget (OMB), has made significant progress in implementing the DATA Act. When fully implemented, the DATA Act will make it easier to understand how the Federal government spends taxpayer dollars. It will also serve as a tool for better oversight, data-driven decision-making, and innovation both inside and outside of government. We believe that better data leads to better decisions and ultimately a better government.

When we began this process over two years ago, Treasury identified a number of potential implementation challenges including the transformative nature of the DATA Act, short statutory deadlines, funding constraints, and the need to consider ongoing and evolving stakeholder interests. The reporting of financial and payment information, consistent with the purposes of the DATA Act, requires the association or linkage of a myriad of disconnected data elements from hundreds of financial and management systems across the Federal enterprise to more transparently account for Federal funds. Due to these challenges, Treasury recognized that a traditional approach would not be effective. As noted in GAO-16-698 (July 2016), we decided to use an agile approach to our DATA Act implementation, which we believe is paying off. Despite the aggressive timeline, the agile approach allowed Treasury to provide incremental technical guidance and iterative releases of the "broker" for agencies to test data extraction and submission as early as the fall of 2015.

We appreciate that the Draft Report acknowledges the significant steps we have taken to implement the various DATA Act requirements, including OMB and Treasury's issuance of uniform data standards and implementation resources (e.g., Treasury's DATA Act Implementation Playbook, Version 2.0, June 24, 2016) to assist Federal agencies in planning for, and meeting, their reporting requirements. Treasury also issued the DATA Act Information Model Schema (DAIMS) version 1.0 in April 2016. Treasury continues to be actively engaged with Federal agencies in various outreach efforts to facilitate agency reporting, including

monthly Senior Accountable Officer (SAO) calls and weekly agency office hours. Treasury also has developed a monthly progress report to monitor agency progress.

In addition, Treasury achieved a significant milestone in September by releasing the latest version of the DATA Act Broker. The Broker is an online tool through which agencies will submit and validate their data to Treasury. It includes approximately 100 complex validations and more than 170 data element level validations. The Broker was developed with open source technology and the code, which is published online, is also open for public input. The use of open source code is an efficient use of resources from a cost and technical perspective because Federal agencies can reuse the same code or extend it within their own environments to improve the internal quality of agency data before it is submitted to Treasury. Treasury used an agile development approach and user-centered design principles to develop the Broker, which allowed us to complete development just five months after Treasury released the DAIMS in April 2016.

Treasury continues to be on track to meet the goal of delivering the new public website in May 2017.

Treasury's iterative approach to developing the DAIMS has enabled agencies and other key stakeholders to provide feedback and contribute to improving and refining the DAIMS, the DATA Act broker, and public website. In addition, by developing the DAIMS and tools in the open and in an iterative manner, agencies and vendors were able to get a head start with their specific implementation solutions.

Treasury values your feedback on these important issues as we continue our efforts to implement the DATA Act, and we remain committed to working with Federal agencies to meet the DATA Act's requirements and objectives. Thank you again for the opportunity to review and comment on the Draft Report.

Sincerely,

David A. Lebryk Fiscal Assistant Secretary

Appendix VI: Staff Acknowledgments

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In addition to the above contacts, Peter Del Toro (Assistant Director), Michael LaForge (Assistant Director), Kathleen Drennan (analyst-in-charge), Diane Morris (analyst-in-charge), Michelle Sager, Shirley Hwang, Aaron Colsher, Katherine Morris, Sophia Tan, Thomas Hackney, Charles Jones, Laura Pacheco, Maria Belaval, Carrol Warfield, Jr., 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.

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