



November 2017

DATA ACT

OMB, Treasury, and Agencies Need to Improve Completeness and Accuracy of Spending Data and Disclose Limitations

GAO Highlights

Highlights of [GAO-18-138](#), a report to congressional addressees

Why GAO Did This Study

The DATA Act requires agencies to increase the types and transparency of over \$3.7 trillion in annual federal spending data, and requires OMB and Treasury to establish data standards to enable the reporting and tracking of agency spending. Consistent with GAO's mandate under the act, this assessment is GAO's first review of the quality of the data collected under the act that agencies reported beginning in May 2017 and made available through [Beta.USAspending.gov](#), a website currently under development by Treasury.

Specifically, this report examines (1) the completeness, timeliness, accuracy and quality of the data and use of data standards; and (2) the consistency of the [Beta.USAspending.gov](#) website with selected standards for federal websites. GAO analyzed a sample of second quarter fiscal year 2017 data, projectable to the 24 CFO Act agencies, from a database that populates [Beta.USAspending.gov](#) and traced them back to agency source records. GAO also compared the data and functionality of this website with selected federal website standards.

What GAO Recommends

GAO makes two recommendations to OMB regarding technical assistance and clarifying guidance to help ensure agencies fully comply with DATA Act requirements and report data completely and accurately; and four recommendations to Treasury, including disclosing known data quality issues on its website. OMB and Treasury generally agreed with our recommendations.

View [GAO-18-138](#). For more information, contact J. Christopher Mihm at (202) 512-6806 or MihmJ@gao.gov, and Paula M. Rascona at (202) 512-9816 or RasconaP@gao.gov

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What GAO Found

A total of 78 federal agencies, including all 24 Chief Financial Officers (CFO) Act agencies, submitted data by May 2017, as required by the Digital Accountability and Transparency Act of 2014 (DATA Act). However, GAO identified issues and challenges with the completeness and accuracy of the data submitted, use of data elements, and presentation of the data on [Beta.USAspending.gov](#).

Completeness: Awards for 160 financial assistance programs with estimated annual spending of \$80.8 billion were omitted from the data for the second quarter of fiscal year 2017. Also, 13 agencies, including the Departments of Defense and Agriculture, submitted the file intended to link budgetary and award information without providing any data. The Office of Management and Budget (OMB) provided technical assistance to help agencies determine whether they are required to report under the act, but not all agencies had made that determination by the May 2017 reporting deadline. As a result of these issues, OMB and the Department of the Treasury (Treasury) cannot reasonably assure that subsequent data submissions will be complete.

Accuracy: Based on a projectable sample representing approximately 94 percent of all records in [Beta.USAspending.gov](#), GAO found that data accuracy—measured as consistency between reported data and authoritative agency sources—differed sharply between budgetary and award records. GAO estimates with 95 percent confidence that between 56 to 75 percent of the newly-required budgetary records were fully consistent with agency sources. In contrast, GAO estimates that only between 0 to 1 percent of award records were fully consistent. This represents a decrease in consistency from what GAO reported in 2014, when GAO estimated that between 2 to 7 percent of award records were fully consistent. A record was considered “fully consistent” if the information it contained matched agency sources for every applicable data element.

Use: GAO also identified challenges in the implementation and use of two data elements—*Primary Place of Performance* and *Award Description*—that are particularly important to achieving the DATA Act's transparency goals. GAO found that agencies differ in how they interpret and apply OMB's definitions for these data elements, raising concerns regarding data consistency and comparability. These findings underscore the need for clarified guidance and improved data governance.

Presentation: Treasury provides feedback mechanisms to users on [Beta.USAspending.gov](#), and plans to address known website search functionality issues. However, Treasury does not sufficiently disclose known limitations affecting data quality. The website is under continuing development and disclosing limitations will be essential in the fall of 2017 when, according to Treasury, the previous version of [USAspending.gov](#) will be retired and the new version becomes the sole available source of certified agency data submitted under the DATA Act.

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Abbreviations

ASP	Award Submission Portal
CFDA	Catalog of Federal Domestic Assistance
CFO	Chief Financial Officer
CFO Act	Chief Financial Officers Act of 1990
CIGIE	Council of the Inspectors General on Integrity and Efficiency
CPE	current period ending

DAIMS	DATA Act Information Model Schema
DATA Act	Digital Accountability and Transparency Act of 2014
DOD	Department of Defense
DSC	Data Standards Committee
ESC	Executive Steering Committee
FABS	Financial Assistance Broker Submission
FAEC	Federal Audit Executive Council
FAR	Federal Acquisition Regulation
FFATA	Federal Funding Accountability and Transparency Act of 2006
FPDS-NG	Federal Procurement Data System-Next Generation
FSRS	FFATA Subaward Reporting System
FYB	fiscal year beginning
GPRAMA	GPRA Modernization Act of 2010
GSA	General Services Administration
GTAS	Governmentwide Treasury Account Symbol Adjusted Trial Balance System
HHS	Department of Health and Human Services
HUD	Department of Housing and Urban Development
ID	identification
IG	inspectors general
IGTs	intragovernmental transfers
MTS	Monthly Treasury Statement
NAICS	North American Industrial Classification System
OIG	Office of Inspector General
OMB	Office of Management and Budget
PII	personally identifiable information
SAM	System for Award Management
SAO	Senior Accountable Official
SF 133	SF 133 Report on Budget Execution and Budgetary Resources
SSA	Social Security Administration
Treasury	Department of the Treasury
USDA	U.S. Department of Agriculture
USSGL	U.S. Standard General Ledger
VA	Department of Veterans Affairs

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November 8, 2017

Congressional Addressees:

To provide increased transparency to agencies, Congress, and the public, the Digital Accountability and Transparency Act of 2014 (DATA Act) required the Office of Management and Budget (OMB), the Department of the Treasury (Treasury), and other federal agencies to increase the types of information available on over \$3.7 trillion in annual federal spending. Accordingly, the law directed OMB and Treasury to establish data standards to enable the reporting and tracking of agency spending at multiple points in the spending lifecycle.¹ Agencies were required to start reporting data under the new standards by May 2017.

The DATA Act also requires us to submit a report to Congress by November 2017 assessing and comparing the timeliness, completeness, accuracy, and quality of these data, and the implementation and use of data standards by federal agencies. We have provided Congress with a series of products reporting on our ongoing monitoring of the implementation of the DATA Act. These reports identified a number of challenges related to OMB's and Treasury's efforts to facilitate agency reporting, as well as internal control weaknesses and challenges related to agency financial management systems that present risks to agencies' ability to submit quality data as required under the act.

This is our first assessment of the quality of the data agencies were required to report to Treasury under the act beginning in May 2017 and that Treasury has made available through a website, Beta.USAspending.gov. More specifically, this report addresses the following: (1) the timeliness, completeness, accuracy, and quality of the data and the implementation and use of data standards; and (2) the extent to which Beta.USAspending.gov is consistent with selected standards for federal websites. We also update the status of select implementation issues and our previous recommendations related to implementation of the DATA Act and data transparency.

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.

To assess the timeliness, completeness, accuracy, and quality of data, we extracted all records from a database containing agency data that Treasury said it used to populate Beta.USAspending.gov.² The records covered activity during the second quarter of fiscal year 2017. We filtered the dataset to include only the 24 Chief Financial Officers Act of 1990 (CFO Act) agencies' data, which comprised approximately 94 percent of all records in the dataset.³ We selected and reviewed a stratified random probability sample of 402 records. The probability sample was designed to estimate the overall rate of reporting errors for a data element with a sampling error of no greater than plus or minus 5 percentage points at the 95 percent level of confidence. We then compared selected data elements within sampled records with originating agencies' underlying sources, where available, to assess the extent to which the data were accurate and consistent.

We designed our sample to estimate rates of reporting errors within three subcategories ("strata") with a sampling error of no greater than plus or minus 10 percentage points at the 95 percent level of confidence. These subcategories are (1) procurement award transactions, (2) assistance award transactions, and (3) budgetary records. See table 1 for a listing of the 7 budgetary data elements and the 26 award data elements and subelements (covering both assistance and procurement awards) that we tested in our review.⁴

²Since 2007, USAspending.gov has reported information on federal awards (contracts, grants, loans, and other awards) as required by FFATA. In May 2017, Treasury released Beta.USAspending.gov in accordance with the DATA Act's requirement to display the updated spending data reported under the act on USAspending.gov or a successor system. According to Treasury officials, in fall 2017 the previous version of USAspending.gov will be replaced and the new site with updated spending data will be maintained at USAspending.gov.

³For a listing of the agencies included in our sample see appendix V. Although included in the initial filtering of the dataset, 1 CFO Act agency—the Office of Personnel Management—did not have any records selected in our random sample.

⁴The OMB data standards for *Primary Place of Performance* and *Legal Entity Address* are made up of multiple subelements (e.g. *Address Lines 1 and 2*, *City Name*, and *State Name*). For purposes of reporting our findings, we treated each of these subelements as its own data element. This allowed us to draw comparisons between the consistency rates we reported in 2014 and those in this report. See GAO, *Data Transparency: Oversight Needed to Address Underreporting and Inconsistencies on Federal Award Website*, [GAO-14-476](#) (Washington, D.C.: June 30, 2014). All other award elements are a one-to-one relationship with OMB data standards. Budgetary data elements are comprised of 47 subelements which were not assessed in [GAO-14-476](#) because the DATA Act was not yet enacted.

Table 1: Tested Data Elements, Second Quarter Fiscal Year 2017

7 Budgetary data elements^a	26 Award data elements and subelements
1. Appropriations Account	1. Action Date
2. Object Class	2. Award Type
3. Obligation	3. Award Description
4. Outlay	4. Award Identification (ID) Number
5. Program Activity	5. Awardee/Recipient Legal Entity Name
6. Treasury Account Symbol	6. Awarding Agency Name
7. Unobligated Balance	7. Catalog of Federal Domestic Assistance (CFDA) Number (assistance only)
	8. Current Total Value of Award (procurement only)
	9. Federal Action Obligation
	10. Funding Agency Code
	11. Funding Agency Name
	12. North American Industrial Classification System (NAICS) Code (procurement only)
	13. Legal Entity Congressional District
	14. Legal Entity Country Name
	Legal Entity Address ^b
	15. Address Lines 1 and 2
	16. City Name
	17. County Name (aggregate assistance only)
	18. State Name
	19. ZIP Code
	20. Primary Place of Performance Congressional District
	21. Primary Place of Performance Country Name
	Primary Place of Performance Address ^b
	22. Address Lines 1 and 2
	23. City Name
	24. County Name
	25. State Name
	26. ZIP Code

Source: GAO analysis of OMB DATA Act Guidance. | GAO-18-138

^aThe 7 budgetary data elements tested are comprised of 47 subelements. See appendix IV for the list of subelements tested and the results. These data elements were not assessed in [GAO-14-476](#) because the DATA Act had not yet become law when the review was performed.

^bOMB and Treasury define *Legal Entity Address* and *Primary Place of Performance Address* as individual data elements with multiple subelements (e.g. *Address Line 1 and 2* and *State Name*). We tested the accuracy of the subelements in order to align with how we reported this information in [GAO-14-476](#) and draw comparisons.

To further test completeness of the Treasury database, we compared obligation amounts and other information in the database with corresponding data in the SF 133 Report on Budget Execution and Budgetary Resources (SF 133) submitted to the Governmentwide Treasury Account Symbol Adjusted Trial Balance System (GTAS).⁵ In addition, we identified all programs listed on the Catalog of Federal Domestic Assistance (CFDA) website, as of July 2017, and analyzed the Treasury database to identify any CFDA program numbers that were on the CFDA website but not in agency submissions.⁶ For the purposes of our review we defined data quality as encompassing the concepts of timeliness, completeness, and accuracy so our assessment of overall data quality is reflected in our specific assessments of these constituent components.

To assess the extent to which Beta.USAspending.gov is consistent with selected standards for federal websites, we analyzed Beta.USAspending.gov to determine what user feedback mechanisms were available, which data elements were searchable, and the extent to which Treasury disclosed data limitations on the website. We assessed these mechanisms and functions against selected standards for federal websites and against DATA Act and Federal Funding Accountability and Transparency Act of 2006 (FFATA) requirements. To determine how Treasury incorporated user feedback in their development process, we also reviewed Treasury's open-source collaboration website. To assess the extent to which Treasury disclosed data limitations, we downloaded and analyzed Senior Accountable Officials' (SAO) qualification statements from Beta.USAspending.gov for all second quarter fiscal year 2017 agency data submissions. Finally, we interviewed Treasury officials to corroborate our observations and discuss their development process and planned improvements, website search issues, and disclosure of data limitations.

To determine the status of the DATA Act Section 5 Pilot requirements, we reviewed our prior reports and OMB's August 10, 2017 *Report to*

⁵An obligation is a definite commitment that creates a legal liability of the government for payment of goods and services ordered or received. An agency incurs an obligation, for example, when it places an order, signs a contract, or awards a grant. Object classification identifies obligations of the federal government by the type of goods or services purchased, such as personnel compensation, supplies and materials, and equipment.

⁶CFDA can be accessed at <https://www.cfda.gov>.

*Congress: DATA Act Pilot Program*⁷. We also interviewed OMB staff and officials from the Department of Health and Human Services (HHS). See appendix II for an update on the status of the Section 5 Pilot program.

To update the status of our recommendations related to the implementation of the DATA Act, we reviewed relevant documentation and interviewed OMB and Treasury staff and officials. See appendix III for an update on our recommendations related to DATA Act implementation. Additional details regarding our objectives, scope, and methodology along with information about data reliability are provided in appendix I.

We conducted this performance audit from March 2017 to November 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Signed into law on May 9, 2014, the DATA Act was enacted for purposes which include expanding on previous federal transparency legislation by requiring the disclosure of federal agency expenditures and linking agency spending information to federal program activities so that both policymakers and the public can more effectively track federal spending. The DATA Act requires government-wide reporting on a greater variety of data related to federal spending, such as budget and financial information, as well as tracking of these data at multiple points in the federal spending lifecycle. The DATA Act gives OMB and Treasury responsibility for establishing government-wide financial data standards for any federal funds made available to or expended by federal agencies. These standards specify the data to be reported under the DATA Act and define and describe what is to be included in each element with the aim of ensuring that information will be consistent and comparable.⁸ The act

⁷The DATA Act also requires that OMB, or an agency it designates, establish a pilot program to facilitate the development of recommendations to (1) standardize reporting elements across the federal government, (2) eliminate unnecessary duplication in financial reporting, and (3) reduce compliance costs for recipients of federal awards. FFATA, § 5(b).

⁸A full set of the government-wide data standards established by OMB and Treasury pursuant to the DATA Act of 2014 can be found here: <https://max.gov/maxportal/assets/public/offm/DataStandardsFinal.htm>.

requires each federal agency to report financial and payment information data in accordance with these data standards by May 2017.⁹ It also requires OMB and Treasury to ensure that the standards are applied to the data made available on USAspending.gov, or a successor site, by May 2018.¹⁰ To improve the quality of these data, the act holds agencies accountable for the completeness and accuracy of the data submitted to USAspending.gov and requires that agency-reported award and financial information comply with the data standards established by OMB and Treasury.

OMB and Treasury Efforts to Implement the DATA Act

We have reported that OMB and Treasury have made progress toward implementing the act's various requirements by leading efforts to establish the policy and technical framework that facilitates agency reporting. OMB, in coordination with Treasury, has helped agencies meet their reporting requirements by, among other activities, establishing 57 standardized data element definitions, and approximately 400 associated subelements, for reporting federal spending information and issuing guidance to implement the use of selected standards and clarify agency reporting requirements. In addition to issuing policy guidance to help agencies meet their reporting requirements under the act, OMB's Controller and Treasury's Fiscal Assistant Secretary conducted a series of meetings with CFO Act agencies to obtain information on any challenges that could impede effective implementation and assess agencies' readiness to report required spending data in May 2017.

Treasury led efforts to develop the technical guidance and reporting processes and systems to facilitate agency reporting by iteratively developing the DATA Act Broker and developing a successor site to USAspending.gov. Specific key actions include:

- Developing the initial DATA Act Information Model Schema (DAIMS), which provides information on how to standardize the way financial assistance awards, contracts and other financial and nonfinancial data will be collected and reported under the DATA Act. In June 2017, Treasury released DAIMS version 1.1, a minor update to facilitate the

⁹The DATA Act authorizes OMB to grant DOD up to three extensions to this deadline, each lasting up to 6 months. FFATA, § 4(c)(2)(B).

¹⁰FFATA, § 4(c)(3). In accordance with FFATA, OMB launched the site USAspending.gov in December 2007. When the DATA Act amended FFATA, it directed OMB and Treasury to post additional information on USAspending.gov, or a successor site.

transition of financial assistance reporting from the Award Submission Portal (ASP) to the Financial Assistance Broker Submission (FABS), and to improve alignment to data sources such as the Federal Procurement Data System-Next Generation (FPDS-NG). In September 2017, Treasury released a draft version of DAIMS version 2.0 for agency comment and plans to release a production version of DAIMS v2.0 to coincide with agencies third quarter fiscal year 2018 DATA Act submissions.

- Developing the DATA Act Broker—a system that collects and validates agency data—which operationalizes the reporting framework laid out in the schema. In addition, Treasury employed on-line software development tools to provide responses to stakeholder questions and comments related to the development and revision of the broker.
- Conducting regular outreach activities such as presentations at conferences, roundtable discussions, monthly stakeholder calls and informal working sessions, and weekly calls with agency DATA Act implementation staff.
- Creating and updating the Beta.USAspending.gov website to display certified agency data submitted under the DATA Act.

Process Overview and Sources of Data on Beta.USAspending.gov

Beta.USAspending.gov has many sources of data; some data are from agency systems, and other data are pulled or derived from government-wide reporting systems. Agencies and Treasury perform several steps before the data are posted to Beta.USAspending.gov. As illustrated in figure 1 below, the data are first collected in the DATA Act Broker, from three files submitted by agencies sourced from their financial management and award systems (Files A, B, and C). The DATA Act Broker also extracts award and subaward information from existing government-wide reporting systems to build four files that include procurement information and information on federal assistance awards such as grants and loans (Files D1, D2, E and F). These government-wide reporting systems are:

- FPDS-NG, which collects information on contract actions;
- ASP, which, until September 2017, was the platform used by federal agencies to report financial assistance data;¹¹

¹¹Treasury replaced ASP with the Federal Assistance Broker Submission (FABS) in September 2017.

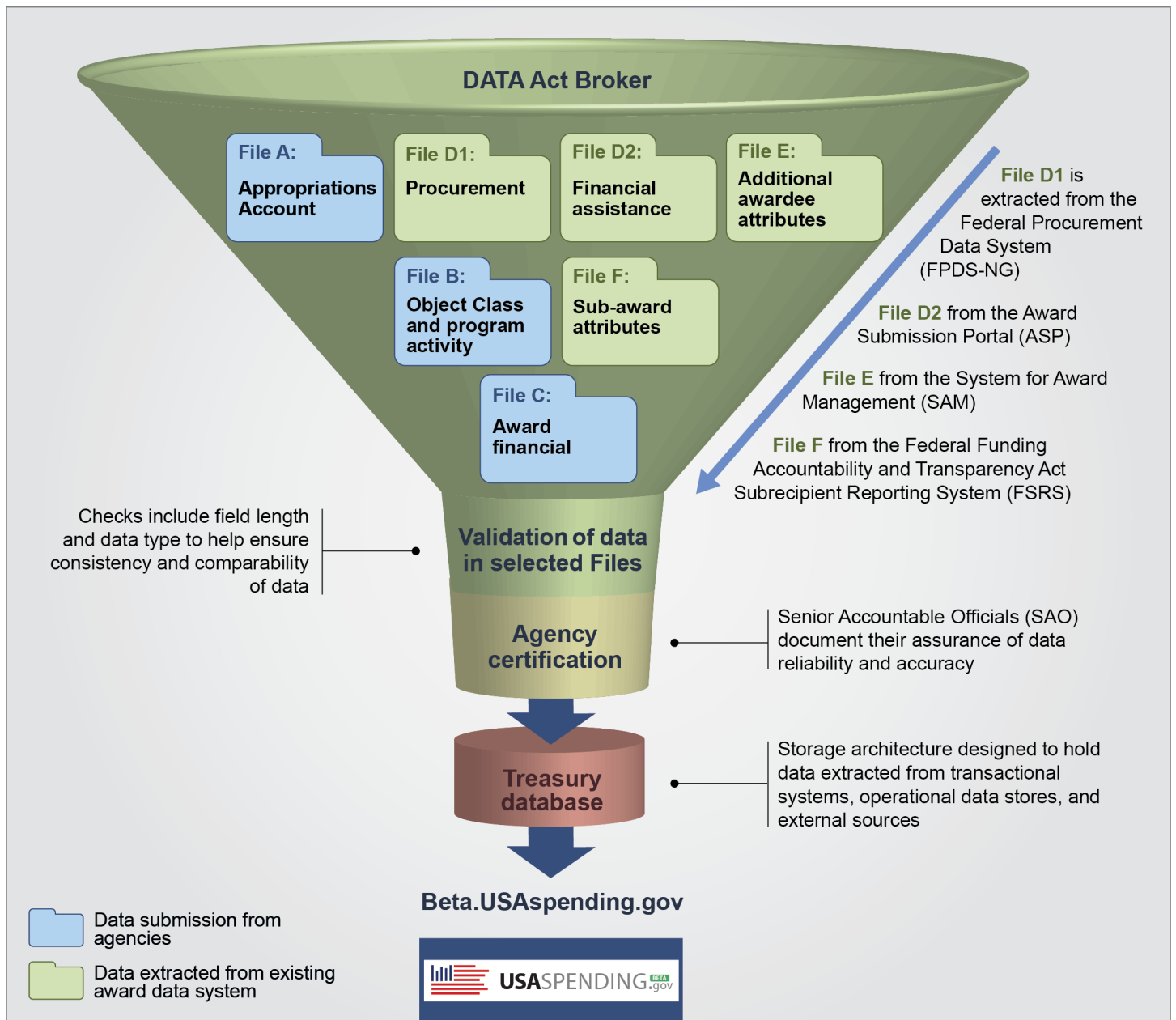
-
- System for Award Management (SAM) which is the primary database for information on entities that do business with the federal government, and in which such entities must register; and
 - FFATA Subaward Reporting System (FSRS), which provides data on first-tier subawards reported by prime award recipients.

After agencies submit the three files to the DATA Act Broker, it runs a series of validations and produces warnings and error reports for agencies to review. To submit data for display on Beta.USAspending.gov, agency SAOs then prepare certifications in the broker to assure that the alignment among Files A, B, C, D1, D2, E and F is valid and reliable, and that the data submitted in Files A, B, and C are valid and reliable. These certifications also provide qualification statements that include information about their data submissions as well as limitations, if any. According to OMB guidance, the purpose of the SAO certifications is to provide reasonable assurance that their agency's internal controls support the reliability and validity of the data they submit to Treasury for publication on the website. The SAO assurance means that, at a minimum, the data reported are based on OMB Circular A-123 appropriate controls and risk management strategies.¹² Once the certification is submitted, Treasury officials told us that a sequence of computer program instructions or scripts are issued to transfer and map the data from DATA Act Broker data tables to tables set up in a database. Treasury officials told us the database is a source for the information on the website. Selected certified data are then displayed on Beta.USAspending.gov along with historical information from other sources, including the Monthly Treasury Statements (MTS).¹³

¹²OMB 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/].

¹³MTS are summary statements prepared from agency accounting reports and issued by Treasury. The MTS presents the receipts, outlays, resulting budget surplus or deficit, and federal debt for the month and the fiscal year to date and a comparison of those figures to those of the same period in the previous year.

Figure 1: Operation of the DATA Act Broker



Source: GAO analysis of Department of Treasury technical documents. | GAO-18-138

The DATA Act's Reporting Requirements for GAO and Inspectors General

The accountability provisions in the DATA Act direct inspectors general (IG) and GAO to assess and report on the quality of spending data submitted by federal agencies. IGs of each federal agency are to review a statistically valid sample of the spending data submitted by their respective agency and to provide Congress a publicly-available report assessing the timeliness, completeness, accuracy, and quality of the data sampled and the implementation and use of the government-wide financial data standards. The first IG reports were due to Congress in November 2016. However, because agencies were not required to submit spending data in compliance with the act until May 2017, the IGs were not able to report on the spending data in November 2016 as envisioned under the act.

Instead, the Council of the Inspectors General on Integrity and Efficiency (CIGIE) delayed issuance of the mandated audit reports to November 2017 and developed a common approach for IGs to assess the readiness of their agencies' efforts to submit spending data in accordance with DATA Act requirements.¹⁴ IGs completed 30 of these readiness reviews as of January 2017 and 18 additional readiness reviews were completed by August 2017. Our prior review of the initial 30 readiness reviews noted agency challenges such as systems integration issues and lack of resources that could impede agencies' ability to meet reporting requirements.¹⁵

CIGIE also issued a common methodology guide that provides a baseline framework and procedures for IGs to use in assessing the timeliness, completeness, accuracy, and quality of the data sampled and the implementation and use of the government-wide financial data standards by the federal agency.¹⁶ The scope of the first IG reports mandated by the DATA Act is the second quarter, fiscal year 2017 budgetary and award

¹⁴CIGIE is an independent entity established within the executive branch to address integrity, economy, and effectiveness issues that transcend individual government agencies and aid in establishing a professional, well-trained, and highly skilled workforce in Offices of Inspectors General (OIG). CIGIE's mission includes identifying, reviewing, and discussing areas of weakness and vulnerability in federal programs with respect to fraud, waste, and abuse.

¹⁵GAO, *DATA Act: Office of Inspector General Reports Help Identify Agencies' Implementation Challenges*. [GAO-17-460](#) (Washington, D.C.: Apr. 26, 2017).

¹⁶Federal Audit Executive Council DATA Act Working Group: *Inspectors General Guide to Compliance Under the DATA Act*, Report Number Treasury OIG: OIG-CA-17-012 (Washington, D.C.: Feb. 27, 2017).

data that agencies submitted for publication on USAspending.gov (or a successor site) and any applicable agency procedures, certifications, documentation, and controls over the data. We have been coordinating our audit work and methods with the IGs through monthly coordination meetings. In October 2017, the Federal Audit Executive Council (FAEC) sent correspondence to the IG community providing standard reporting language to include in their November 2017 mandated audit reports for known government-wide issues identified subsequent to agencies submitting data to Treasury.¹⁷ For example, the correspondence includes government-wide DATA Act reporting issues for certain data elements (e.g., *Current Total Value of Award*) that are causing errors or may be raising quality concerns. We plan to review the IG's mandated reports and subsequently issue a report that summarizes the results. We will also coordinate with the Treasury IG on future audit work to assess the design, implementation, and operating effectiveness of controls over the data submission and mapping of data from the agency submissions to the Treasury database and website display.

Prior GAO Reports on Implementation Challenges That Affect Data Quality

Our prior work on federal data transparency has identified longstanding challenges related to the quality and completeness of data submitted by federal agencies. In 2010, we reported that USAspending.gov did not include information on awards from 15 programs at nine agencies for fiscal year 2008. Also in that report, we looked at a random sample of 100 awards on the website and found that each award had at least one data error.¹⁸ In June 2014, we reported that while agencies generally reported contract information as required, many assistance programs (e.g., grants or loans) were not reported. Specifically, we found agencies did not appropriately submit the required information on 302 assistance award programs totaling approximately \$619 billion in fiscal year 2012, although many reported the information after we informed them of the omission.¹⁹

¹⁷CIGIE established FAEC to discuss and coordinate issues affecting the federal audit community with special emphasis on audit policy and operations of common interest to FAEC members. FAEC formed the FAEC DATA Act Working Group to assist the Office of Inspector General (OIG) community in understanding and meeting its DATA Act oversight requirements by (1) serving as a working level liaison with Treasury, (2) consulting with GAO, (3) developing a common approach and methodology for the readiness reviews and mandated audits, and (4) coordinating key communications with other stakeholders.

¹⁸GAO, *Electronic Government: Implementation of the Federal Funding Accountability and Transparency Act of 2006*, [GAO-10-365](#) (Washington, D.C.: Mar. 12, 2010).

¹⁹[GAO-14-476](#).

Consistent with our mandate under the act, we have issued several interim products to Congress providing oversight of DATA Act implementation. Our prior reviews have identified several challenges related to OMB's and Treasury's efforts to standardize data element definitions and develop a technical schema to facilitate agency reporting. This work also identified concerns including inadequate guidance, tight time frames, competing priorities, a lack of funding, and system integration issues reported by agencies that could impede effective and timely implementation of the act, as well as the need for OMB to establish a data governance structure to help ensure the integrity of the standards over time.

Our prior work, as well as reports from several IGs, has identified data quality issues with agency source systems that could affect the quality of spending data made available to the public. For example, in April 2017, we reported a number of weaknesses and issues identified by agencies' auditors and IGs that affect agencies' financial reporting and may affect the quality of the information reported under the DATA Act.²⁰ These included (1) material weaknesses, significant deficiencies in internal control over financial reporting, or both, that may affect the quality of information reported; (2) a range of issues and challenges identified in agency readiness reviews that may affect agencies' abilities to produce quality data; and (3) financial management systems that did not substantially comply with certain laws and regulations.²¹

We have also reported issues with the four key award systems—FPDS-NG, SAM, ASP and FSRS—which increase the risk that the data submitted to USAspending.gov may not be complete, accurate, and timely. Unlike the data submitted by agencies directly from their financial systems to the DATA Act Broker, the award and subaward information extracted from these four systems are not subject to any validations in the broker. For a list of these and other related GAO products, see the Related GAO Products page at the end of this report.

²⁰GAO, *DATA Act: As Reporting Deadline Nears, Challenges Remain That Will Affect Data Quality*, [GAO-17-496](#) (Washington, D.C.: Apr. 28, 2017).

²¹We reported that 9 of 22 CFO Act agencies' financial management systems did not comply with section 803(a) of the Federal Financial Management Improvement Act of 1996, which may limit an agency's ability to provide reliable and timely financial information.

Although Almost All Agency Data Submissions Were Timely, Challenges with Completeness and Accuracy Affect Overall Quality

Seventy-eight agencies, including all 24 CFO Act agencies, submitted fiscal year 2017 second quarter data by the statutory deadline of May 8, 2017, or shortly thereafter.²² However, we identified issues and challenges with both the completeness and accuracy of the data submitted that affect the overall quality. Regarding the completeness of the data, we found that

- awards made for 160 financial assistance programs were not reported;
- 13 agencies submitted files intended to link budget and award information that did not contain any data;
- some agencies did not determine whether they were subject to the DATA Act before the May 2017 deadline; and
- differences between GTAS and DATA Act reporting indicate that budgetary data are incomplete.

Regarding accuracy of the data, which we assessed in terms of sampled data being consistent with agency sources, and the implementation and use of data standards, we found that

- budgetary information was largely consistent with agency sources but award information was largely inconsistent or unverifiable;
- data on *Primary Place of Performance* and *Award Description* continue to have widespread inconsistencies and unclear guidance, limiting their usefulness; and
- data quality concerns demonstrate the importance of developing a robust data governance structure.

Awards Made for 160 Financial Assistance Programs Were Not Reported

We found that agencies did not report on some financial assistance programs that made awards during the second quarter of fiscal year 2017. Specifically, 11 of the 24 CFO Act agencies did not report on at least one program that made one or more awards during the second quarter of fiscal year 2017. File D2 is the component of the DATA Act

²²The 78 agencies' data submissions covered data for 91 federal entities, including smaller units such as commissions, boards, and foundations. One of the entities submitted its files a week late. Three of the CFO Act agencies resubmitted updated files within 1 week of the deadline. For example, the Department of Agriculture (USDA) informed us that a natural disaster affected the operations of the agency's finance center. The agency submitted incomplete files on April 30, 2017, and submitted more complete information on May 8, 2017, and May 12, 2017.

reporting process that contains detailed information about individual financial assistance awards. We compared the data reported by the 24 CFO Act agencies in File D2 against the Catalog of Federal Domestic Assistance (CFDA), a government-wide compendium of federal programs, projects, services, and activities that provide assistance or benefits to the American public. The CFDA provides a list of grant, loan, and other financial assistance programs that is independent from DATA Act reporting. Using the CFDA allowed us to assess the completeness of DATA Act reporting on such programs.

As of July 2017, the CFDA listed 2,219 programs for the CFO Act agencies. Of these, 160 programs (approximately 7 percent) were not included in the DATA Act submissions, even though they made reportable awards during the second quarter.²³ The remaining programs either reported at least one award or did not make awards during the second quarter that were subject to reporting.²⁴ While our analysis focused on awards made during the second quarter, to provide a sense of magnitude of the underreporting, we obtained estimates of the total projected annual spending for these programs for fiscal year 2017 from the CFDA catalogue and applicable agencies. Based on these estimates, the 160 programs that did not report any of the awards they made during the second quarter account for approximately \$80.8 billion in estimated annual obligations for these programs for fiscal year 2017.

The omitted programs from two agencies, the Department of Agriculture (USDA) and the Department of Housing and Urban Development (HUD), make up most of this estimated \$80.8 billion in obligations. USDA estimated approximately \$77.4 billion in annual obligations for the 113 programs it omitted from its DATA Act submission, and HUD estimated approximately \$2.6 billion for the 6 HUD programs that were missing from

²³According to agencies responsible for these programs, awards for 5 of the 160 programs were reported after the deadline for second-quarter reporting had passed. We included these 5 programs in our count of nonreporting programs because their awards were not reported in agencies' initial DATA Act submissions for the second quarter.

²⁴Some awards, such as classified awards and individual transactions below \$25,000, are exempt from the reporting requirements of FFATA (as amended by the DATA Act). FFATA, §§ 2(a)(4),7. Separately, agencies told us that awards for certain programs were reported under different CFDA numbers, under a different fiscal quarter, or as procurements rather than financial assistance transactions. We did not include such programs in our count of nonreporting programs.

Beta.USAspending.gov.²⁵ According to USDA officials, USDA did not submit awards for some of these programs because one USDA agency was unable to submit nine-digit ZIP code data that matched the Postal Service database Treasury uses to validate addresses and decided to wait to submit until Treasury changed its requirements. In September 2017, Treasury changed the validation rules to allow agencies to submit award data even when the nine-digit ZIP codes cannot be validated. In these cases, agencies would receive a warning as opposed to a fatal error. USDA expects to include the programs affected by the ZIP code issue beginning with its submission for the fourth quarter of fiscal year 2017.

HUD officials told us that limitations in HUD's business processes and systems prevented HUD from reporting awards made under certain programs. These limitations include the use of management systems that do not currently capture all of the data fields required to generate DATA Act File D2 and the use of manual spreadsheets to manage certain loan programs. HUD officials told us that HUD plans to make changes to its processes, including increasing automation and improving the recording of required data.

Thirteen Agencies Submitted Files Intended to Link Budget and Award Information That Did Not Contain Any Data

The data submitted by individual agencies reporting for the second quarter fiscal year 2017 under the DATA Act is incomplete because 13 of 78 agencies, including 2 CFO Act agencies, submitted award financial data files (File C) that did not contain any data. In regards to the CFO Act agencies, in January 2017, the Department of Defense (DOD) requested two consecutive 6-month extensions from OMB for submitting File C, as allowed by the DATA Act,²⁶ and projected a completion date of May 2018 because, according to DOD, it does not have a system to capture award financial data. According to USDA, the agency's financial system does not include an award identifier in every transaction, which makes

²⁵According to HUD officials, HUD submitted awards for 1 of these programs, with estimated fiscal year 2017 obligations of approximately \$900 million, in its File D2, but these awards did not appear on Beta.USAspending.gov. After we asked HUD about these awards, HUD submitted this issue to the USAspending.gov help desk and received confirmation that the awards were not published on the Beta.USAspending.gov site. However, according to HUD, as of October 2017, the help desk had not identified the cause of the omission. According to Treasury officials, Treasury addressed this issue for subsequent agency data submissions through the implementation of the new FABS system.

²⁶FFATA, § 4(c)(2)(B).

reconciling the data in the award and financial systems difficult, so USDA did not submit its File C with any data linking budget and award data.²⁷ We have previously reported that agencies faced challenges in linking their financial and award data using the unique award identifier.²⁸ Without this linkage, policymakers and the public may not be able to effectively track federal spending because they would not be able to see obligations at the award and object class level.

Some Agencies Did Not Determine Whether They Were Subject to the DATA Act Before the May 2017 Deadline

The completeness of the data submitted to the DATA Act Broker is also uncertain because some agencies had not yet determined whether they were subject to the act as of the May 2017 deadline for reporting on the second quarter of fiscal year 2017. Although some of these agencies reported data, others determined they were required to report, but did not submit data for the second quarter fiscal year 2017. According to OMB guidance, federal agencies that submit SF 133 data²⁹ and meet the definition of an “Executive agency” under section 105 of title 5, United States Code,³⁰ are required to report under the DATA Act.³¹ More than 130 entities across the executive, judicial, and legislative branches submit SF 133 data; however, many of these entities are not subject to the DATA Act because they do not fall within the applicable statutory definition of an “Executive agency.”

To help ensure effective government-wide implementation and that complete and consistent spending data will be reported as required by the DATA Act, in July 2016 we recommended that OMB, in collaboration with Treasury, establish a process to determine the complete population of agencies that are required to report spending data under the DATA Act

²⁷According to USDA officials, the agency has taken steps to ensure that award identifiers are populated in the agency’s general ledgers, including providing additional guidance in July 2017 and subsequent training to ensure compliance.

²⁸GAO, *DATA Act: As Reporting Deadline Nears, Challenges Remain That Will Affect Data Quality*, [GAO-17-496](#) (Washington, D.C.: Apr. 28, 2017).

²⁹OMB requires all Executive Branch agencies to report their budget and financial information by submitting SF 133 data on a quarterly basis through GTAS. Treasury uses GTAS in part to compile the *Financial Report of the U.S. Government*.

³⁰FFATA, as amended by the DATA Act, imposes reporting requirements on federal agencies. The act defines “Federal agency” by referencing the definition of “Executive agency” in section 105 of title 5, United States Code. FFATA, § 2(a)(3).

³¹OMB, *Agency FAQs – Digital Accountability and Transparency Act of 2014, May 2016*.

and make the results of those determinations publicly available.³² OMB generally concurred with our recommendation, but stated that it is each agency's responsibility to determine whether it is subject to the DATA Act. OMB staff also stated that, in coordination with Treasury, OMB issued a frequently asked questions (FAQ) document clarifying the legal framework under which federal agencies should determine whether they are subject to the act and stating that agencies may consult with OMB for additional counsel.

In May 2017 and August 2017, OMB staff provided us with lists of agencies, including the 24 CFO Act agencies, which OMB staff said had determined that they were required to comply with the DATA Act for the second quarter fiscal year 2017. Based on the information provided by OMB and the data submitted to Treasury, we identified 28 agencies that should have reported under the DATA Act for the second quarter, fiscal year 2017, but did not submit any data. Seventeen of these 28 agencies reported almost \$2 billion in obligations on their SF 133 reports as of the second quarter of fiscal year 2017. OMB staff said they were following up with agencies and providing technical assistance to help them determine whether they must come into compliance with DATA Act reporting requirements for subsequent reporting periods. On November 1, 2017, OMB provided additional information indicating that only two agencies had not made a determination on reporting requirements for subsequent quarters and did not report for the second quarter. We did not have sufficient time to corroborate the information before publishing this report.

As noted in our July 2016 report, it is important for OMB and Treasury to determine on a periodic basis the complete population of agencies that are required to comply with DATA Act reporting requirements so that OMB and Treasury can follow up with agencies that have not reported and help ensure that they comply.³³ Treasury officials deferred to OMB on the recommendation on determining the complete population of agencies that are required to report and said they do not monitor whether required agencies are reporting because they do not have a complete list of required agencies from OMB.

³²GAO, *DATA Act: Improvements Needed in Reviewing Agency Implementation Plans and Monitoring Progress*, [GAO-16-698](#) (Washington, D.C.: July 29, 2016).

³³[GAO-16-698](#).

As we reported in July 2016, OMB and Treasury may be able to leverage the existing process and controls used in the preparation of the U.S. government's consolidated financial statements, which requires the identification of the complete population of agencies that are required to report their annual audited financial information.³⁴ This process or a similar process could help OMB and Treasury establish a full list of agencies required to report under the DATA Act and monitor agency submissions to reduce the risk of incomplete data being reported.

According to OMB staff, they will continue to carry out data quality control by monitoring agency submissions and providing technical assistance as needed. Because OMB issued the FAQs establishing a framework for agencies to determine if they are required to report and took steps to provide technical assistance, we are closing our previous recommendation. However, a full determination of agencies required to report second quarter fiscal year 2017 data was not made as of the first reporting deadline, which increased the risk of incomplete reporting. Therefore, we are making recommendations to OMB and Treasury to help reasonably assure that their processes and controls for providing ongoing technical assistance and monitoring agency submissions are in place and operating as designed in order to fulfill their financial management and reporting missions.

Differences Between GTAS and DATA Act Reporting Indicate That Budgetary Data Are Incomplete

Obligation amounts reported by certain agencies to GTAS in their SF 133 data were not consistent with obligation amounts in Treasury's database of agencies' DATA Act submissions. To quantify the amount of spending that may not be included in the DATA Act submissions, we obtained from Treasury a file with 134 agencies that reported SF 133 data to GTAS and compared obligation balances reported to GTAS to the obligation balances reported by agencies in their DATA Act submissions. Under the DATA Act, agencies are to submit several files, including appropriations account details (File A), which includes obligations amounts. As shown in table 2, the amount of obligations reported in File A was about \$94 billion less than obligations they reported in their SF 133 reports. Seven agencies, including 3 CFO Act agencies, had a difference of greater than 10 percent between the obligations reported on their SF 133 and the File A data; the difference for these 7 agencies is \$91.4 billion.

³⁴[GAO-16-698](#)

Table 2: Government-wide Obligations Reported under GTAS and Treasury’s Database for DATA Act, Second Quarter Fiscal Year 2017

Numbers in billions

	Second quarter of fiscal year 2017 Obligations		
	Per GTAS (SF 133)	Per File A data included in Treasury’s database ^a	Difference between agency reported SF 133 data and File A data
CFO Act agencies	\$3,010.3	\$2,918.5	(\$91.8)
Non-CFO Act agencies	\$51.9	\$49.5	(\$2.4)
Total government-wide obligations	\$3,062.2	\$2,968.0	(\$94.2)

Legend: CFO Act = Chief Financial Officers Act of 1990; DATA Act = Digital Accountability and Transparency Act of 2014; GTAS = Governmentwide Treasury Account Symbol Adjusted Trial Balance System.

Source: GAO analysis of GTAS and Treasury’s database documents. | GAO-18-138.

^aAgencies’ SF 133 data and File A are unaudited.

The differences in government-wide obligation amounts reported to GTAS and the balances reported by agencies in their DATA Act submissions indicates that the spending data in Treasury’s database and thus available for display on Beta.USAspending.gov may not be complete. According to Treasury, some agency records may fail the broker’s validation rules and therefore would not be included in an agency’s submissions to the Treasury’s database. As a result, there could be differences at the agency-wide level between GTAS and the DATA Act submissions. Other potential reasons for these differences could include partial data submissions or missing agency programs. Additional reasons may be identified by the IGs in their upcoming November 2017 reports on data quality.

Budgetary Information Was Largely Consistent with Agency Sources but Award Information Was Largely Inconsistent or Unverifiable

We judged data accuracy as the percentage of records selected from Treasury’s database that are consistent with agencies’ systems of record or other authoritative sources.³⁵ We analyzed consistency in two different but complementary ways. The first focuses on the record level and describes the extent to which information contained in an individual record is consistent with all applicable data elements and subelements.³⁶ The second focuses on the data elements/subelements used for reporting budgetary and award information and describes the extent to which the information for particular data elements/subelements was consistent across all the records we reviewed.

Consistency of records: We found that the level of consistency differed sharply between budgetary and award records. Based on our representative sample of the 24 CFO Act agencies, we estimate with 95 percent confidence that between 56 to 75 percent of the newly-required budgetary records were fully consistent with agency sources. In contrast, we estimate that only between 0 and 1 percent of the award records were fully consistent with agency sources.³⁷ We considered a record to be “fully consistent” if the information contained in the record matched agency sources for every applicable data element. This result represents a decrease in consistency from what we reported in 2014, when we estimated that between 2 and 7 percent of award records were fully consistent.

Consistency of data elements: Similarly, we found that the consistency of budgetary data elements with agency sources was considerably better than that of award data elements and subelements. We considered a data element to be “significantly consistent” if we estimated that at least 90 percent of the data contained in Treasury’s database was consistent

³⁵This is the same approach we used in [GAO-14-476](#) and is consistent with guidance from OMB and CIGIE’s Federal Audit Executive Council (FAEC) DATA Act Working Group. See FAEC DATA Act Working Group, *Inspectors General Guide to Compliance Under the DATA Act*, Report Number-Treasury OIG: OIG-CA-17-012 Feb. 27, 2017).

³⁶Depending on their specific type and other factors, records varied greatly in the number of data elements and subelements that applied to them for reporting under the act.

³⁷In calculating the number of award records that were fully consistent, we excluded the *Primary Place of Performance Address, Address Lines 1 and 2* subelement. As discussed later in this report, this was not submitted by any agencies because of limitations with the data collection systems approved by OMB and was therefore excluded from all award transactions. Inclusion of this component would have resulted in none of the award transactions being fully consistent.

with the information in agency sources. Conversely, we considered a data element to be “significantly inconsistent” if we estimated that at least 10 percent of the information for that element and the underlying agency sources were not in agreement.

Four of the seven data elements relating to the budgetary data in our sample met our criterion for significant consistency with agency sources. In contrast, just 1 of the 26 data elements and subelements relating to awards—*Awarding Agency Name*—met this criterion. (See figure 2.) In our 2014 review we also found just one award data element to be significantly consistent with agency sources.³⁸ That review did not sample budgetary data elements because they were not required to be reported at the time, so a comparison for that category cannot be made.

In contrast, we identified 11 of the 26 award data elements and subelements as meeting our criterion for being significantly inconsistent (at least 10 percent of the information inconsistent with underlying sources). This is a larger number (as well as a larger overall proportion) of data elements than we found were significantly inconsistent in our 2014 review.³⁹ In addition, the estimated magnitude of inconsistency among data elements we found ranged from a low of 10 percent to a high of 78 percent, depending on the data element. (See figure 2.) Officials cited several reasons for inconsistencies between award data elements and agency sources. For example, according to a Treasury official, *Funding Agency Name* and *Funding Agency Code* are new data elements that were not previously required in agency assistance award submissions and are optional.

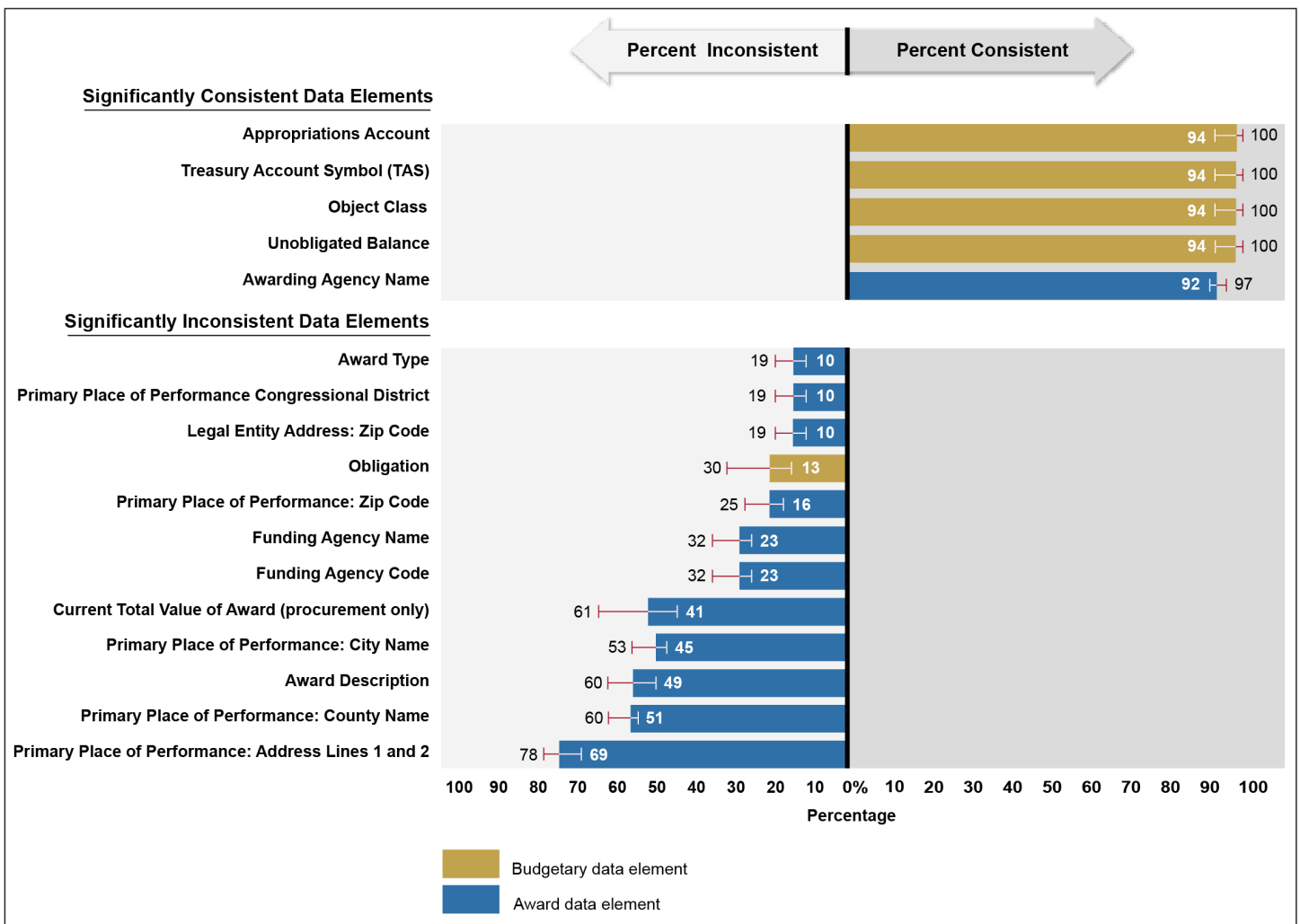
An official within Treasury’s Bureau of the Fiscal Service stated that another data element, *Current Total Value of Award*, is often inconsistent because it is based on the history of transactions for a particular award. However, Treasury has not yet loaded any data earlier than the second quarter of fiscal year 2017 into the database that supports Beta.USAspending.gov, so previous transactions are not accurately captured when this data element is displayed on the website. Treasury

³⁸In our 2014 review, *Awardee/Recipient Legal Entity Name* was the one data element that we found to be consistent with agency sources for at least 90 percent of awards. See [GAO-14-476](#).

³⁹In our 2014 review, 8 of 21 (38 percent) of the data elements we examined were inconsistent with agency sources for at least 10 percent of awards, compared to 11 of the 26 (42 percent) award data elements we found met this threshold in 2017.

officials stated that this issue should be resolved once the historical data are uploaded. Discussion of these two issues as well as recurring concerns with *Primary Place of Performance* and *Award Description* are covered in more detail later in this report.

Figure 2: Data Elements Found to Be Significantly Consistent or Significantly Inconsistent with Agency Sources



Source: GAO analysis of Beta.USAspending.gov database, downloaded on 5/24/2017. | GAO-18-138

Notes: Range bars display confidence intervals (sampling errors) for the estimates at the 95 percent confidence level.

Projection for the *Current Total Value of Award* data element excludes all assistance awards and is only projected from our subset of procurement award transactions.

See appendix IV for detailed scores by subelement.

In addition, one of the seven budgetary data elements—*Obligation*—met our criteria for being significantly inconsistent with agency sources. We found instances where the data reviewed from Treasury’s database for related subelements were inconsistent, which led us to identify a processing error made by Treasury.⁴⁰ For example, we found 16 instances in our sample of 98 budgetary records where the ending balances for certain accounts were inconsistent with agency submissions to Treasury. This inconsistency was related to an error that was introduced by Treasury subsequent to agency submission. When we brought this inconsistency to Treasury’s attention, Treasury officials stated that these inconsistencies were the result of an error in the process of mapping that associates each element of the agency file submissions from the DATA Act Broker with one or more elements of the database. Treasury did not provide or describe specific controls in place to verify the accuracy of the processes for moving data from one data set to another. According to Treasury officials, for data displayed on the website, controls are in place to verify that data brought in to the DATA Act Broker is correctly transferred to the website tables and appropriately displayed on the website, before making the new features and data available. Treasury officials indicated that they would address this issue in a subsequent update to Beta.USAspending.gov. Due to the iterative nature of their website development, we will follow up with Treasury on this issue to verify whether that corrections were made for these mapping errors.

We also identified 7 instances in our sample of 94 budgetary records where the *Program Activity Name* was inconsistent with agency submissions to Treasury. According to Treasury officials, whenever the program activity name submitted by agencies differed from OMB’s authoritative list of program activity names, this element would be populated according to OMB’s authoritative list instead of the data submitted by the agency. We will continue to evaluate this issue in future work on subsequent agency submissions.

Unverifiable information in award data elements: For the remaining 14 of the 26 award data elements and subelements, incomplete or inadequate agency sources prevented us from determining whether they were significantly consistent or inconsistent. Of these, 2 data elements,

⁴⁰In our sample of 94 budgetary records, we found 59 instances across 20 subelements, including *Gross Outlays* and *Obligations Incurred*, where the data reviewed were inconsistent with agency sources, and 3 instances across 3 subelements where data reviewed could not be verified against agency sources.

Primary Place of Performance Address: State Name and Primary Place of Performance Country Name, exhibited a significant amount of unverifiable information.⁴¹ See appendix IV, table 4 for details.

Data on *Primary Place of Performance* and *Award Description* Continue to Have Widespread Inconsistencies and Unclear Guidance, Limiting Their Usefulness

Two award data elements are particularly important to achieving the transparency goals envisioned by the DATA Act—*Primary Place of Performance* and *Award Description*. These data elements provide the public with information on where the federal government spends money and what it spends it on, respectively. Our analysis of these data elements identified challenges regarding the accuracy of the data displayed on Beta.USAspending.gov, as demonstrated by the consistency of these data elements with supporting agency documents. Taking into account each of its subelements, we found information regarding *Primary Place of Performance Address* was inconsistent with agency sources for 62 to 72 percent of awards.⁴² For *Award Description*, information was inconsistent for 49 to 60 percent of awards. In our 2014 report on the quality of the data displayed on USAspending.gov, we found that the data elements associated with *Primary Place of Performance* and *Award Description* were also among those that were significantly inconsistent with information contained in agency sources.⁴³

Primary Place of Performance: We found inconsistent and potentially confusing guidance from OMB regarding *Primary Place of Performance* data elements/subelements as well as different practices among agencies regarding how to interpret and report them. The standard developed in 2015 by OMB and Treasury as part of their implementation of the DATA Act defines *Primary Place of Performance* as “where the predominant performance of the award will be accomplished.”⁴⁴ However, other OMB

⁴¹For the purposes of this report, we defined data elements as having a significant amount of unverifiable information as those where at least 10 percent of the awards contained unverifiable information. This is the same definition we used in our 2014 review.

⁴²This figure for *Primary Place of Performance Address* represents a roll up of applicable subelements. For disaggregated results for individual subelements, see appendix IV, table 4.

⁴³GAO-14-476. Under FFATA, *Primary Place of Performance* is called “Principal Place of Performance” and *Award Description* is called “Award title descriptive of the purpose of each funding action.”

⁴⁴The four *Primary Place of Performance* data elements standardized by OMB and Treasury in 2015 are: (1) *Primary Place of Performance Address*; (2) *Primary Place of Performance Congressional District*; (3) *Primary Place of Performance Country Code*; and (4) *Primary Place of Performance Country Name*.

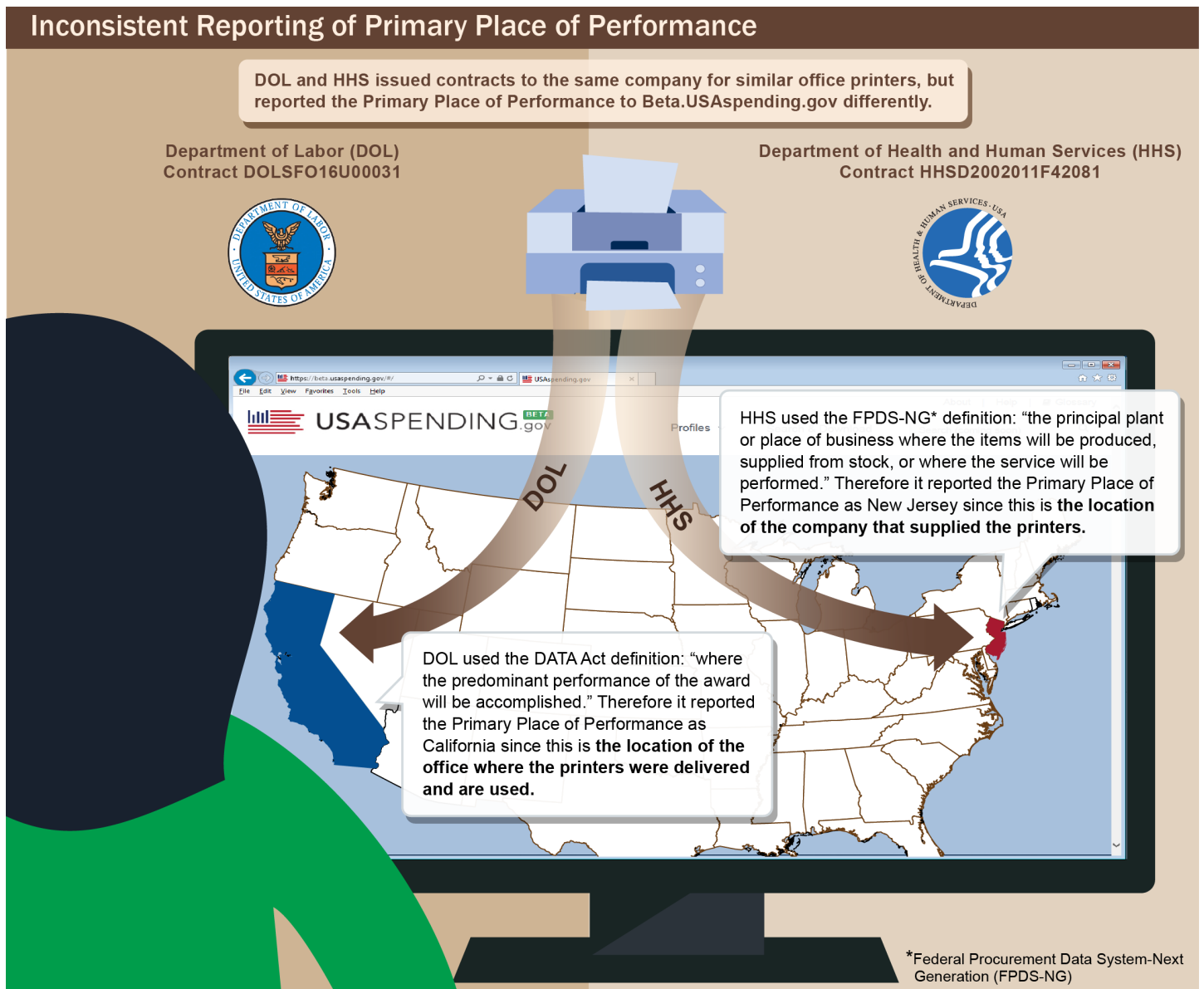
guidance identifies the authoritative source for reporting procurement award data under the DATA Act as the Federal Procurement Data System—Next Generation (FPDS-NG) and this system defines *Primary Place of Performance* as “the location of the principal plant or place of business where the items will be produced, supplied from stock, or where the service will be performed.”⁴⁵

Of the 20 agencies that provided responses to our questions on *Primary Place of Performance*, officials from 8 agencies reported that they use the definition established under the DATA Act, officials from 4 agencies cited the FPDS-NG definition, and officials from the remaining 8 cited a range of other approaches.⁴⁶ For example, figure 3 illustrates an instance from our sample in which 2 agencies awarded contracts for similar computer systems sourced from the same company. One agency applied the DATA Act definition for *Primary Place of Performance Address* and the other used the FPDS-NG definition. Without a consistent approach, these data will not be comparable between agencies or across the federal government.

⁴⁵See OMB Guidance, M-17-04. FPDS-NG refers to the data element as “Principal Place of Performance.”

⁴⁶Officials from the 8 remaining agencies described using other approaches such as reporting the same address for *Primary Place of Performance* as for *Legal Entity Address*, which is the legal business address for the contract or grant recipient, obtaining *Primary Place of Performance* data from the recipient, and using a combination of approaches, such as different approaches for procurement awards and financial assistance awards.

Figure 3: Different Definitions of *Primary Place of Performance* Affect Reporting



Source: GAO analysis of Beta.USAspending.gov database, downloaded on 5/24/2017. | GAO-18-138

In addition to the existence of multiple definitions, another challenge to accurately reporting *Primary Place of Performance* is that the authoritative source systems agencies are required to use to report

federal awards do not allow agencies to submit all of the information called for in OMB guidance. OMB guidance available on the <https://fedspendingtransparency.github.io> and Max.gov websites specifies that the *Primary Place of Performance Address* data element consists of six components: *Address Lines 1 and 2*, *City Name*, *County Name*, *State Code*, and *ZIP+4 or Postal Code*. However, officials from several agencies told us that the authoritative source for reporting procurement awards, FPDS-NG, does not include a data field for two of these—*Address Lines 1 and 2*. As a result, agencies cannot provide this information using the authoritative source system identified by OMB. Consistent with this, none of the procurement transactions in our sample included either of these address fields for *Primary Place of Performance Address*.

When we raised this issue with OMB staff they acknowledged the inconsistency and told us that our findings led them to discover that the definition of *Primary Place of Performance Address* that had appeared online since 2015 as the standardized DATA Act definition was incorrect. They informed us that the correct final version of the definition should not include the *Address Lines 1 and 2* fields and that they planned to update the definition. We will continue to follow this issue as well as OMB's strategy for appropriately communicating the change in the definition of this data element.

Award Description: We also found challenges with the way agencies reported data for the *Award Description* data element. In 2015, OMB and Treasury standardized this data element definition as “a brief description of the purpose of the award.” This is consistent with the definition previously established for reporting under FFATA. In our previous work on the data quality of USAspending.gov, we identified challenges with the *Award Description* data element. Specifically, we found that agencies routinely provided information for this data element using shorthand descriptions, acronyms, or terminology that could only be understood by officials at the agency that made the award. This lack of basic clarity would make the data element difficult for others outside the agency to understand and would also limit the ability to meaningfully aggregate or compare this data across the federal government.⁴⁷

⁴⁷[GAO-14-476](#).

Based on our testing of a representative sample of second quarter fiscal year 2017 data, we estimate that the *Award Description* data element contains inconsistent information in 49 to 60 percent of awards contained in the Treasury database linked to Beta.USAspending.gov. This represents an increase in the level of inconsistency for this data element when compared to our 2014 review, when we found inconsistent information for 24 to 33 percent of awards. See figure 4 for several examples of the *Award Description* data submitted by agencies in our sample, which illustrate the range of agency interpretations of this data element from understandable to incomprehensible.

Figure 4: Award Descriptions Submitted by Agencies Varied Greatly

**According to the DATA Act standard, Award Description is defined as:
“A brief description of the purpose of the award.”
Here are four examples of how agencies interpreted the definition:**



“To aid small businesses which are unable to obtain financing in the private credit marketplace.”
**Small Business Administration
Loan 9189205007**

What is the purpose of this Award?



Beta.USAspending.gov



**National Aeronautics and Space
Administration Grant NNX16AI31G**
“We propose to study the influence of debris released by giant impacts on the late formation and evolution of the inner solar system using dynamical methods and results of impact simulations. Although the asteroid belt is the main source of impactors in the inner solar system today it contains only 0.05 lunar masses of material. While the asteroid belt would have been much more massive when it formed it is unlikely to have had greater than a lunar mass since the formation of Jupiter and the dissipation of the solar nebula. By comparison giant impacts onto the terrestrial planets during the late stage of accretion typically released debris equal to several per cent of the planet’s mass into heliocentric orbit. The moon-forming impact on earth for example released over a lunar mass of debris more than has ever been contained in the asteroid belt. The borealis basin impact on mars released more debris at once than the present day asteroid belt. Escaping impact debris is less long lived than the main asteroid belt as it is injected on unstable planet-crossing orbits. This same factor however also increases the impact probability with the terrestrial planets and asteroids. With such a large amount of mass it seems highly likely that these now-extinct populations of impactors should have played an important role in the evolution of the solar system much as now-extinct radionuclides played an important role in the thermal histories of solar system bodies. One of the most obvious effects of re-impacting debris is the production of craters. The moon mars mercury and the largest asteroids may be expected to display



“IGF::OT::IGF”
**Department of State
Contract SNI50015M0874**



“Federal Supply Schedule
Contract”
**General Services Administration
Contract GS03F005CA**

Source: GAO analysis of Beta.USAspending.gov database, downloaded on 5/24/2017. | GAO-18-138

Without consistent application of the data standards across the federal government, OMB and Treasury cannot ensure that the data available to the public on Beta.USAspending.gov are reliable and can be clearly

understood. We have previously recommended that OMB and Treasury provide additional guidance to agencies on how to report *Primary Place of Performance* and *Award Description* to ensure the definitions are clear and the data standards are implemented consistently by agencies.⁴⁸ OMB staff generally agreed with the recommendation and said they continue to work with federal communities to discuss data element definitions to determine where additional guidance may be needed, but that they do not have a timeframe for issuing additional guidance. Moreover, additional steps are necessary to ensure that *Primary Place of Performance* data are consistently reported in accordance with appropriate definitions. Until OMB and Treasury can ensure that the *Primary Place of Performance* and *Award Description* data displayed on Beta.USAspending.gov are consistent and comparable, the data will be less than fully useful and may be misleading.

Data Quality Concerns Demonstrate the Importance of Developing a Robust Data Governance Structure

The DATA Act requires OMB and Treasury to establish government-wide data standards that, to the extent reasonable and practicable, produce consistent and comparable data.⁴⁹ As we have reported previously, establishing a formal framework for providing data governance throughout the lifecycle of developing and implementing these standards is critical for ensuring that the integrity of the standards is maintained over time.⁵⁰ We have previously recommended that OMB, in collaboration with Treasury, establish a set of clear policies and procedures for developing and maintaining data standards that are consistent with leading practices. These practices include not only developing and approving data standards, but monitoring and enforcing consistent application of data standards and resolving conflicts related to the application of the data standards.⁵¹

Consistent with that recommendation, OMB and Treasury have taken some steps to establish a data governance structure including creating a Data Standards Committee to advise OMB and Treasury on new data

⁴⁸GAO, *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).

⁴⁹FFATA, § 4(b)(6).

⁵⁰GAO, *DATA Act: Progress Made in Initial Implementation but Challenges Must be Addressed as Efforts Proceed*. [GAO-15-752T](#) (Washington, D.C.: Jul. 29, 2015).

⁵¹See [GAO-15-752T](#) and appendix III, *infra*.

elements and revisions to established standards and obtain input from different lines of business across the federal government regarding data standards. According to OMB staff, this committee has met monthly since September 2016, but to date it has not produced any recommendations or released any information about the topics it has reviewed. OMB staff also told us that they are in the process of assessing future data governance needs as the federal government moves beyond the milestones of initial implementation of the act.

Notwithstanding OMB and Treasury's efforts thus far, our analysis of the quality of data displayed on Beta.USAspending.gov as well as specific concerns we highlighted in this report regarding how agencies report data according to data standards underscore the need for OMB and Treasury to establish a data governance structure that ensures the integrity of the data standards. Of particular importance is having a framework in place for adjudicating revisions, monitoring, and ensuring compliance with the standards over time.

Such a framework, if properly implemented, would greatly reduce the likelihood of having incorrect data or data standards publicly posted for an extended period as took place with the *Primary Place of Performance Address* data element. The current data governance structure as implemented by OMB and Treasury has allowed conflicts and inconsistencies like this to remain unresolved. We therefore believe additional action by OMB and Treasury is needed to maintain the integrity of the DATA Act data standards across the federal government and ensure data are consistent and complete.

Treasury Solicits User Feedback on Beta.USAspending.gov, and Plans to Address Search Issues, but Does Not Disclose Known Data Limitations

Treasury Has a Variety of User Feedback Mechanisms

Beta.USAspending.gov includes mechanisms for users to provide feedback, consistent with FFATA's requirement that the website provide an opportunity for the public to provide input about its utility and recommend improvements.⁵² Specifically, it has a public community forum where users can post comments and suggestions, ask questions, and interact with each other. Treasury responds to users' comments on this forum, and users may also respond to other users' comments. Treasury also uses this forum to solicit comments on specific issues. For example, Treasury asked users what changes they would like to see in the next version of the DATA Act Information Model Schema (DAIMS).

In addition, users can request one-on-one interviews through Beta.USAspending.gov. According to Treasury officials, as of July 2017, Treasury had conducted 131 of these interviews with users such as citizens, funding recipients, and federal agency officials. Users may also submit feedback via email by clicking a "Contact Us" link on Beta.USAspending.gov, but according to officials, as of August 2017 Treasury had not received any feedback through this channel. In addition, users can view the programming code for Beta.USAspending.gov on Treasury's GitHub site.⁵³ This publicly-accessible platform also allows users to leave comments, questions, and suggestions on the code for the

⁵²FFATA § (2)(c)(3).

⁵³GitHub is a commercial platform for open-source communities that provides for collaboration on documentation and code. The website for Treasury's work can be found at <http://fedspendingtransparency.github.io>

technology that Treasury is building to implement the DATA Act including Beta.USAspending.gov and the DATA Act Broker.

User feedback has resulted in some changes to Beta.USAspending.gov. For example, officials said user feedback prompted them to add per capita spending to a United States map showing spending by states, and to enable users to view data by budget subfunctions—such as ground transportation and air transportation—in addition to broader budget functions, such as transportation.⁵⁴ Treasury officials said they are continuing to consider users’ needs and incorporate their feedback as they make further improvements to Beta.USAspending.gov and prepare for it to replace the existing USAspending.gov in fall 2017.

Treasury Plans to Address Some Known Issues with the Beta.USAspending.gov Search Functionality by Fall 2017

Beta.USAspending.gov provides users with designated search fields that correspond with various data elements, such as “Awarding Agency,” “Recipient Location,” and “Place of Performance.” These search fields give users auto-populated drop-down search options. As we tracked the progress of the site through several stages of development, we found that some search options were fragmented or incomplete in every iteration of the website we tested in September and October 2017. This could cause users of Beta.USAspending.gov to receive inaccurate or misleading data as a result of their search. For example, when we typed “New York” into the “Place of Performance” search field on October 25, 2017, we were presented with the option to select four different cities:

- “New York – City,” which returned \$8,266,688,657 in spending for 2017;
- “New York – City in New York,” which returned \$1,765,526,363 in spending for 2017;
- “New York City – City,” which returned “No Data to Display” for spending in 2017; and

⁵⁴Budget functions are a system of classifying budget authority, outlays, receipts, and tax expenditures according to the national needs being addressed. A function may be divided into two or more subfunctions, depending upon the complexity of the national need addressed. For more information on budget terms and concepts see GAO, *A Glossary of Terms Used in the Federal Budget Process (Supersedes AFMD-2.1.1)*, [GAO-05-734SP](#) (Washington, D.C.: Sept. 1, 2005).

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- “New York (New York) – City,” which returned “No Data to Display” for spending in 2017.⁵⁵

One day later, on October 26 2017, typing “New York” into the “Place of Performance” field no longer returned four fragmented search options, but instead resulted in a notification that the website was “unable to find that location,” providing no search results for New York at all. The Beta.USAspending.gov search function consistently presented these fragmentation and incompleteness issues across time. For example, we conducted searches using the “Recipient Location” field for all 50 U.S. states on three separate dates. During those reviews, the number of states that could be successfully searched without fragmentation or an “unable to find that location” error message varied as a result of changes to the website, but never exceeded 23.⁵⁶ According to Treasury officials, the fragmentation we observed was a result of the different ways in which agencies reported location data, and they are working to improve location searches, which may involve normalizing some location data.

In addition, the provided “Keyword Search” field can only be used to search for award description information, according to Treasury officials. However, the website does not inform users of this. As a result, the “Keyword Search” field may be incorrectly interpreted by users as a general search field, leading to incomplete search results. According to officials, Treasury does not have immediate plans to change the “Keyword Search” bar and any future changes would be based on further user input. However, Treasury plans to address some issues with the search functionality of Beta.USAspending.gov in fall of 2017 that will respond to some search problems we identified, such as fragmentation of results for states and cities in the “Place of Performance” and “Recipient Location” fields. We will continue to monitor Treasury’s ongoing efforts to improve search functionality.

⁵⁵As of October 25, 2017, Beta.USAspending.gov displays data for the second and third quarters of 2017.

⁵⁶We tested all 50 U.S. states in the “Recipient Location” field on September 28, October 6, and October 25, 2017. Respectively, those tests resulted in 23, 1, and 0 successful searches (i.e., neither fragmented nor resulting in an “unable to find that location” error).

Information on Data Quality Limitations Is Lacking and Not Readily Accessible

Treasury identifies the sources of the information disseminated to Beta.USAspending.gov but does not sufficiently identify or disclose known limitations affecting data quality. According to OMB guidance, federal agencies should provide the sources and the limitations of the data they disseminate to the public. Further, Treasury's Information Quality Guidelines state that, when disseminating information to the public, it is sometimes necessary to share additional information—including the sources of the disseminated information—in order to ensure an accurate, clear, complete, and unbiased presentation. Consistent with these requirements, Treasury provides the sources of the data on Beta.USAspending.gov. On the website's "Sources of Data" page, Treasury explains how the data flow from the agencies to Beta.USAspending.gov, including a graphic to explain the process as well as a link to its GitHub site, which provides more detailed information. In addition, Treasury identifies the data sources for specific data sets and graphics on the Beta.USAspending.gov homepage. However, Treasury does not sufficiently identify or disclose known limitations and error sources affecting data quality.

Disclosing data limitations on Beta.USAspending.gov: As of October 25, 2017, Treasury did not provide information on data limitations in the relevant Frequently Asked Questions (FAQ) section of the website. (See text box.) Treasury includes a high level statement on the banner at the top of each page on Beta.USAspending.gov alerting users that the site is in beta (i.e., under development) and indicating that spending data from before 2017 at USAspending.gov will be transferred to the new site on a rolling basis. Neither the FAQ nor the banner identifies specific limitations affecting the quality and integrity of the data.

Disclosure of Data Limitations on Beta.USAspending.gov, as of October 25, 2017

What are the limitations of the data presented on the new site when trying to understand government spending?

On May 9th, the public can search the newly linked financial and award level data and download the raw file submissions for the first quarter of reported data (Fiscal Year 17 Q2). Over the summer Treasury will add new functionality to the site including agency and recipient pages, more sophisticated download features and will move the historical data onto the new site. Over time, with each quarter of reporting, the data will become richer and the public will be able to identify more trends in federal spending. The Beta.USAspending.gov website is just the beginning.

Source: "Frequently Asked Questions" page of Beta.USAspending.gov. Accessed 10/25/2017. | GAO-18-138

Treasury's Information Quality Guidelines state that error sources affecting data quality should be identified and disclosed. Further, OMB, M-17-06, Policies for Federal Agency Public Websites and Digital

Services, requires agencies to be transparent about the quality of the information that they disseminate and to take reasonable steps where practicable to inform users about the quality of such information, such as clearly identifying the inherent limitations in the information so that users are fully aware of its quality and integrity. We identified a number of examples of known data limitations that Treasury did not disclose on Beta.USAspending.gov:

- **Optional data subelements:** It is optional for agencies to report approximately 50 out of approximately 400 subelements within the required 57 data elements, such as *Non-Federal Funding Amount*. As a result, Beta.USAspending.gov may only include partial information for these subelements, depending on the number of agencies that chose to voluntarily submit data for each field. For example, an award transaction could have no nonfederal funding amount listed either because there was no nonfederal funding associated with the award to report or the agency chose not to report it. Knowing this could affect how users interpret the data in this data element.
- **Incomplete or inaccurate information from source systems:** Treasury, as directed by OMB, leverages a number of existing source systems, such as the Federal Procurement Data System-Next Generation (FPDS-NG) and Award Submission Portal (ASP), to report information under the DATA Act. However, there are limitations associated with using these source systems for this purpose. For example, the incorrect award type was reported for some indefinite delivery contracts. According to Treasury officials, this was caused by inconsistencies between the FPDS-NG data dictionary and the data feed from which the broker extracts all the procurement data. Officials said they are programming a workaround into the broker to address this particular misalignment but Treasury is not able to directly change FPDS-NG, which is managed by the General Services Administration (GSA). Treasury officials said they are working with GSA to address these issues.
- **DOD delay and extensions:** While DOD typically accounts for about two-thirds of federal contracting activity, some of its data are not published on Beta.USAspending.gov at the same time as other agencies' data. FPDS-NG releases DOD-reported procurement data to the public after a 90-day waiting period, which results in a 90-day delay in reporting these data to Beta.USAspending.gov. In addition, OMB granted DOD a 6-month extension for reporting File C (award financial) data on May 3, 2017. DOD officials said they requested a

second 6-month extension from OMB.⁵⁷ As a result, DOD data and thus government-wide data on Beta.USAspending.gov are not always as timely for some contracts or may be incomplete.

- **Nonreporting agencies:** As previously discussed, while 78 agencies—including all of the CFO Act agencies—reported data covering 91 entities for the second quarter of fiscal year 2017, it is unclear whether all required agencies reported data, which could cause the data to be incomplete. As a result, website users may unknowingly see inaccurate government spending totals in places on the website where agencies' spending is aggregated, such as spending by award type or by recipient.

According to Treasury officials, Treasury plans to make some changes to the website that could help inform users of these data limitations. For example, Treasury plans to develop agency profile pages that will include information about if and when agencies submitted data; as a result, these pages could help inform users of the 90-day delay for DOD procurement data and the number of nonreporting agencies. Treasury officials also said they would explore opportunities to further disclose limitations based on user research, and would work with OMB to determine whether and how to communicate which agencies are subject to DATA Act reporting requirements. As of October 2017, Treasury's service desk lists the disclosure of known data limitations and error sources affecting data quality as "under development." However, Treasury did not have the disclosure of limitations listed as one of its upcoming priorities for the website, and as of October 2017 Treasury officials said that they do not have specific plans for disclosing data limitations including timeframes or which specific limitations they intended to disclose. Until Treasury takes such steps, users of Beta.USAspending.gov may be unaware of the limitations with the quality of the data on the website and may view, download, or use data made available on the site without full knowledge of the extent to which the data are timely, complete, or accurate. As a result, users could inadvertently draw inaccurate conclusions from the data.

Agency-specific data limitations: Treasury includes Senior Accountable Officials' (SAO) qualification statements on the website,

⁵⁷The DATA Act specifies that OMB may grant up to three extensions to DOD for reporting financial and payment data, each lasting up to 6 months. FFATA, § 4(c)(2)(B). In October 2017, OMB staff confirmed that DOD submitted a second extension request, which is pending with OMB.

which may contain information on agency-specific data quality limitations, along with other agency files that it uploads to Beta.USAspending.gov. However, the files containing qualification statements are not labeled or described anywhere on the website in a way to indicate their purpose. OMB guidance requires that for each quarterly data submission to Beta.USAspending.gov, agency SAOs must certify that their agency's internal controls support the reliability and validity of the agency account-level and award-level data reported for display on Beta.USAspending.gov. SAO qualification statements give agencies the optional opportunity to describe known data issues that may affect the timeliness, completeness, accuracy, and quality of Beta.USAspending.gov data. For example, the SAO qualification statements for 16 out of 24 CFO Act agencies indicated that their submissions for the DATA Act use data from multiple sources with different frequencies for updating the relevant data to USAspending.gov. These timing differences can result in data being reported at different intervals throughout the quarter, at times resulting in potential delays in awards data matching appropriations account-level data.

Additionally, the SAO qualification statements for 10 out of 24 CFO-Act agencies included comments regarding data that are missing from their submission, including entire required submission files, certain award transactions, or specific data fields. The SAO qualification statements for 6 out of 24 CFO-Act agencies included comments regarding information technology system deficiencies, such as problems with legacy systems, which affected the quality of the data in the agency's submission. Treasury includes the quarterly SAO qualification statements along with individual agency submission files for download on Beta.USAspending.gov, but each SAO qualification statement is labeled "data.yml," and Beta.USAspending.gov does not contain any information for users indicating that these are the official SAO certifications, as shown in figure 5.

Figure 5: Sample Screen Shot of Treasury’s Agency Submission with Link to Senior Accountable Officials’ Qualification Statement



Source: Beta.USAspending.gov. | GAO-18-138

Note: Selected text has been enlarged for emphasis.

Treasury officials stated that they may include the SAO qualification statements on the forthcoming agency profile pages or elsewhere depending on user research. However, as with limitations more generally, Treasury officials could not provide us with information on the timeframes for implementation or specifically how information from the SAO qualification statements would be used. As such, users of Beta.USAspending.gov may not know that the qualification statements—which in some instances contain important information about the timeliness, completeness, accuracy, and quality of data—exist or where to find them. In our future work reviewing agency IG’s November 2017 oversight reports on the DATA Act, we will determine the nature and extent of agency specific limitations and recommendations to improve agency data quality and the potential effect on government-wide data quality.

Conclusions

Across the federal government, agencies are now submitting data according to requirements established by the DATA Act. In the 3 years since enactment, OMB, Treasury, and federal agencies have made significant strides to address many of the policy and technical challenges presented by the act’s requirements, including standardizing data elements across the federal government, linking data contained in agencies’ financial and award systems, and expanding the type of data reported. However, our audit of the initial data submitted by agencies and made available to the public on Treasury’s Beta.USAspending.gov website shows that much more needs to be done if the DATA Act’s promise of improving the accuracy and transparency of federal spending data is to be fully realized.

Inconsistencies in key award data elements—similar to the issues we identified with its predecessor website in 2014—persist that may limit the usefulness of the data for Congress and the public. In addition, there continue to be issues with the completeness of the information reported. While the DATA Act holds agencies accountable for the accuracy and completeness of their data submissions, these data quality challenges demonstrate the critical importance of having OMB and Treasury make additional progress in addressing our previous open recommendations regarding the development of a robust and transparent data governance structure to ensure the integrity of established data standards, and to implement controls for monitoring agency compliance with DATA Act requirements.

To ensure that the DATA Act fulfills its purpose of increasing accountability and transparency in federal spending, the data need to be presented in a way that meets the needs of the end user. While Treasury has undertaken a variety of efforts to obtain user feedback on how it disseminates these data, increased transparency about known data quality issues would help users make more informed decisions about how to interpret the data. Treasury expects to finish the initial development of Beta.USAspending.gov by fall 2017, at which time the previous version of USAspending.gov will be retired and the new USAspending.gov will become the sole available source of certified agency data submitted under the DATA Act. At this point, disclosing data limitations will become essential.

Without the transparent disclosure of known limitations, users may view, download, or use data made available on the site without full knowledge of the extent to which the data are timely, complete, or accurate, and therefore, could inadvertently draw inaccurate conclusions from the data. Disclosing data limitations does not detract from the value of the data reported under the DATA Act. Instead, it enhances its value by providing users with the information that they need to interpret and use the data appropriately to inform future decision making.

Recommendations for Executive Action

We are making a total of six recommendations, including two to OMB and four to Treasury. Specifically:

The Director of OMB should continue to provide ongoing technical assistance that significantly contributes to agencies making their own determinations about their DATA Act reporting requirements and monitor agency submissions. (Recommendation 1)

The Director of OMB should clarify and align existing guidance regarding the appropriate definitions agencies should use to collect and report on *Primary Place of Performance* and establish monitoring mechanisms to foster consistent application and compliance. (Recommendation 2)

The Secretary of the Treasury should reasonably assure that the process for determining whether required agencies are submitting spending data is in place and operating as designed. (Recommendation 3)

The Secretary of the Treasury should reasonably assure that ongoing monitoring controls to help ensure the completeness and accuracy of agency submissions are designed, implemented, and operating as designed. (Recommendation 4)

The Secretary of the Treasury should disclose known data quality issues and limitations on the new USAspending.gov. (Recommendation 5)

The Secretary of the Treasury should make the known data limitations found in SAO certifications more accessible and evident to users of the new USAspending.gov. (Recommendation 6)

Agency Comments and Our Evaluation

We provided a draft of this report to the Secretaries of Agriculture, Defense, Health and Human Services, Housing and Urban Development, Labor, State, and the Treasury; the Director of OMB; and the Administrators of the Environmental Protection Agency, General Services Administration, National Aeronautics and Space Administration, and the Small Business Administration for review and comment. HUD, OMB, and Treasury provided written responses, which are summarized below and reproduced in appendixes VI, VII, and VIII, respectively. USDA, DOD, OMB, and Treasury provided technical comments, which we incorporated as appropriate. EPA, GSA, HHS, Labor, NASA, SBA, and State had no comments on the draft report.

In its written response, HUD provided an overview of its efforts to improve reporting under the DATA Act and enhance the agency's ability to provide reasonable assurance over the completeness and accuracy of its financial assistance awards. These include working with Treasury to identify the cause of and to resolve issues related to omissions in agency-submitted award data on the Beta.USAspending.gov website, and taking steps to refine business processes and explore long-term solutions for underreported loan programs.

In its written response, OMB noted that our report contains valuable observations that will inform future iterations of DATA Act implementation as well as government-wide transparency in general. OMB concurred with our conclusion regarding the critical importance of a robust and transparent governance structure to facilitate agency compliance and ensure appropriate integrity of established standards for data and internal controls. OMB generally agreed with our recommendations.

In its written response, Treasury provided an overview of its efforts to address potential implementation challenges including:

- developing an implementation approach which leverages the agile development methodology to reduce risks and increase the speed and flexibility to respond to stakeholder feedback,
- establishing government-wide financial data standards, in collaboration with OMB, and

-
- facilitating agency reporting through updates to the DATA Act Information Model Schema and DATA Act Broker.

Treasury agreed with our recommendations. Treasury noted that while it conducts robust outreach to assist agencies with data submissions and has processes in place to ensure the systems are operating as designed, it will consider enhancements in these areas in response to our recommendations. Regarding our recommendations on disclosing known data quality issues on the new USAspending.gov website, Treasury noted that it will develop a plan to better disclose data limitations and make Senior Accountable Official certifications more accessible to users.

We are sending copies of this report to the Secretaries of Agriculture, Defense, Health and Human Services, Housing and Urban Development, Labor, State, and the Treasury; the Director of OMB; the Administrators of the Environmental Protection Agency, General Services Administration, National Aeronautics and Space Administration, and the Small Business Administration; and the heads of the other CFO Act agencies, as well as interested congressional committees and other interested parties. This report will be available at no charge on our website at <http://www.gao.gov>.

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



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List of Congressional Addressees

The Honorable Ron Johnson
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The Honorable Claire McCaskill
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The Honorable Trey Gowdy
Chairman
The Honorable Elijah E. Cummings
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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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Committee on Oversight and Government Reform
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The Honorable Will Hurd
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The Honorable Robin Kelly
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Committee on Oversight and Government Reform
House of Representatives

The Honorable Thomas R. Carper
United States Senate

The Honorable Mark R. Warner
United States Senate

Appendix I: Objectives, Scope, and Methodology

The Digital Accountability and Transparency Act of 2014 (DATA Act) requires that we report on the timeliness, completeness, accuracy, and quality of the data submitted under the act and the implementation and use of data standards.¹ This review responds to the act's requirement by addressing the following: (1) the timeliness, completeness, accuracy, and quality of the data and the implementation and use of data standards; and (2) the extent to which the website is consistent with selected standards for federal websites. We also update the status of select implementation issues and our previous recommendations related to implementing the DATA Act and data transparency.

To assess the timeliness, completeness, accuracy, and quality of the data submitted and the implementation and use of data standards, we performed analytical procedures on the database the Department of the Treasury (Treasury) used to populate and display data on the Beta.USAspending.gov website, assessed whether all agencies that are required to report under the DATA Act did so, and selected and reviewed a representative random sample from Treasury's database.²

To assess the completeness of the Treasury database, we determined whether agencies' DATA Act submissions were complete and consistent with SF 133 Report on Budget Execution and Budgetary Resources (SF 133) data.³ We compared obligation amounts and other data reported in the Treasury database with corresponding data in the SF 133 submitted to the Governmentwide Treasury Account Symbol Adjusted Trial Balance System (GTAS).

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

²Since 2007, USAspending.gov has reported information on contracts, grants, loans, and other awards as required by FFATA. In May 2017, Treasury released Beta.USAspending.gov in accordance with the DATA Act's requirement to display the updated spending data reported under the act on USAspending.gov or a successor system. According to Treasury officials, in fall 2017 the previous version of USAspending.gov will be replaced and the new site with updated spending data will be maintained at USAspending.gov.

³The Office of Management and Budget (OMB) requires all Executive Branch agencies to report their budget and financial information by submitting SF 133 data on a quarterly basis through the Governmentwide Treasury Account Symbol Adjusted Trial Balance System (GTAS). Treasury uses GTAS in part to compile the *Financial Report of the U.S. Government*.

To assess whether all agencies that are required to report under the DATA Act did so, we obtained from the Office of Management and Budget (OMB) a list of agencies that OMB staff stated had determined they were required to report under the DATA Act for the second quarter fiscal year 2017 and held discussions with OMB staff regarding whether the agencies are or are not subject to DATA Act reporting requirements or have yet to make a final determination. In addition, we analyzed Treasury's database to determine whether those agencies that are subject to the act submitted data as required.

Further, to assess the completeness of the Treasury database and determine the extent to which federal agencies were reporting required award data, we reviewed assistance award reporting requirements as defined in the Federal Funding Accountability and Transparency Act of 2006 (FFATA), the DATA Act, OMB guidance, and other federal guidance. We compiled a list of potential award-making agencies/programs using the Catalog of Federal Domestic Assistance (CFDA) for assistance awards.⁴ To determine the extent to which agencies reported assistance award information to Beta.USAspending.gov, we identified all programs listed in the CFDA, as of July 2017. For the 24 Chief Financial Officers Act of 1990 (CFO Act) agencies only, we compared the Treasury database to programs listed in the CFDA to determine which programs reported information on at least one assistance award for the second quarter of fiscal year 2017. For any program reporting no assistance award information for the quarter, we interviewed agency officials and reviewed documentation to determine why information was not reported. For all programs categorized as either making an award and not reporting, or reporting awards late to Beta.USAspending.gov, we extracted the agencies' obligation estimates for fiscal year 2017 as reported on cfda.gov. If an estimate was not published, we requested that the agency provide an estimate for obligations made under the program for fiscal year 2017 following the same approach used when reporting to cfda.gov.

To assess the timeliness, completeness, accuracy, and quality of the data submitted and the implementation and use of data standards, we also extracted all records from a database Treasury used to populate and

⁴CFDA can be accessed at <https://www.cfda.gov>.

display data on the Beta.USAspending.gov website.⁵ The records covered activity during the second quarter of fiscal year 2017 (January through March 2017). To extract all records from the database, we mapped the database fields to the data elements within the scope of our audit.⁶ Treasury officials confirmed that the data fields in our mapping were the DATA Act elements.

- **Limiting dataset to CFO Act agencies:** Prior to sampling from the extracted records, we filtered the dataset based on the agency submitting the record. We included only the 24 CFO Act agencies within the scope of our testing. These agencies comprised approximately 94 percent of all records and \$659 billion of the \$664 billion (99 percent) in obligations in our dataset. Non-CFO Act agencies were excluded from the government-wide sample due to time constraints and the relatively low percentage of total dollars they represent.
- **Sampling data to determine accuracy:** To determine the extent to which the data submitted were accurate or whether any inconsistencies existed between the data available in the Treasury database and sources at federal agencies, we selected a stratified random probability sample of 402 records from the second quarter of fiscal year 2017.⁷ The probability sample was designed to estimate the overall rate of reporting errors for a data element with a sampling error of no greater than plus or minus 5 percentage points at the 95 percent level of confidence. Because we followed a probability procedure based on random selections, our sample is only one of a large number of samples that we might have drawn. Since each sample could have provided different estimates, we express our confidence in the precision of our particular sample's results as a 95 percent confidence interval (e.g., plus or minus 7 percentage points).

⁵In response to our request for all records from Beta.USAspending.gov for the second quarter of fiscal year 2017, Treasury did not provide a complete dataset. Instead, the agency provided a link to the underlying database, requesting that we pull the requested information directly. We relied on the link provided to create the dataset from which we drew our sample.

⁶Treasury has not developed a crosswalk that maps the database fields to OMB-defined data elements. As such, we had to perform this exercise independently based upon the documentation available.

⁷The sample and subcategories within the sample, discussed later in this section, were designed to be statistically representative of the population from which they were selected. Although included in the initial filtering of the dataset, one CFO Act agency—the Office of Personnel Management—did not have any records selected in our random sample.

This is the interval that would contain the actual population value for 95 percent of the samples we could have drawn. For select data elements and subelements required by FFATA or the DATA Act, or established by OMB as data standards,⁸ we compared the information available in the Treasury database to information contained in the originating agency's underlying sources, where available, to evaluate to what extent the data were accurate and consistent. We then interviewed agency officials to discuss inconsistencies between the information in the Treasury database and information in agency sources.

- **Estimating error rates in three subcategories:** The sample was further designed to estimate rates of reporting errors within three subcategories (“strata”) with a sampling error of no greater than plus or minus 10 percentage points at the 95 percent level of confidence. These subcategories consist of procurement award transactions, assistance award transactions, and budgetary records. Because data elements can apply to multiple subcategories and the samples varied in size between subcategories, the sampling error varies based upon data element. Table 3 below describes the data elements tested and the subcategories testing those elements, including 33 required data elements.⁹ Specific error rates by subcategory can be found in appendix IV.

The government-wide results are a weighted total of the three strata of our sample: (1) procurement award transactions, (2) assistance award transactions, and (3) budgetary records. The results include the

⁸*Legal Entity Address and Primary Place of Performance Address* are considered individual data elements. However, each element is comprised of multiple subelements (e.g. *Address Lines 1 and 2* and *State Name*). We tested the accuracy of the subelements in order to align with how we reported this information in [GAO-14-476](#) and draw comparisons. See GAO, *Data Transparency: Oversight Needed to Address Underreporting and Inconsistencies on Federal Award Website*, [GAO-14-476](#) (Washington, D.C.: June 30, 2014). Budgetary data elements are comprised of 47 subelements that were not assessed in [GAO-14-476](#) because the DATA Act was not yet enacted.

⁹The OMB data standards for *Primary Place of Performance Address and Legal Entity Address* are made up of multiple components (e.g. *Address Lines 1 and 2*, *City Name*, and *State Name*). For our purposes, we treated each of these components as its own data element. This allowed us to draw comparisons between the consistency rates reported in [GAO-14-476](#) and those within this report. All other award data elements are a one-to-one relationship with OMB data standards. The budgetary data elements are comprised of 47 subelements that were not assessed in [GAO-14-476](#) because the DATA Act was not yet law. The list of the 47 budgetary subelements and testing results are found in appendix IV, table 5.

procurement and assistance strata because they account for all award transactions available in the Treasury database and each is reported using a different mechanism (FPDS-NG for procurements and ASP for assistance). The results also include the budgetary stratum because they are the only records that trace to the new budgetary DATA Act data elements. Estimates for the results of the procurement, assistance, and budgetary samples have sampling errors of +/-9, 7, and 10 percentage points or less, respectively, at the 95 percent level of confidence. See appendix V for the list of CFO Act agencies and number of records randomly selected and tested in each strata.

Table 3: Data Elements and Number of Records Tested in the GAO Sample, Second Quarter Fiscal Year 2017

Data element	Subcategory	Sample representation ^a
Appropriations Account	Budgetary	94
Object Class	Budgetary	94
Obligation	Budgetary	94
Outlays	Budgetary	94
Program Activity	Budgetary	94
Treasury Account Symbol (excluding subaccount)	Budgetary	94
Unobligated Balance	Budgetary	94
Award Identification Number	Procurement and Assistance	304
Action Date	Procurement and Assistance	304
Award Type	Procurement and Assistance	304
Award Description	Procurement and Assistance	304
CFDA Number	Assistance	198
NAICS Code	Procurement	106
Current Total Value of Award	Procurement	106
Federal Action Obligation	Procurement and Assistance	304
Awardee/Recipient Legal Entity Name	Procurement and Assistance	304
Legal Entity Address		
Address Lines 1 and 2	Procurement and Assistance	224
City Name	Procurement and Assistance	224
County Name	Assistance (Aggregates only)	80
State Name	Procurement and Assistance	304

Appendix I: Objectives, Scope, and Methodology

Data element	Subcategory	Sample representation^a
Zip Code	Procurement and Assistance	224
Legal Entity Congressional District	Procurement and Assistance	304
Legal Entity Country Name	Procurement and Assistance	304
Primary Place of Performance Address		
Address Lines 1 and 2	Procurement and Assistance	224
City Name	Procurement and Assistance	224
County Name	Procurement and Assistance	304
State Name	Procurement and Assistance	304
Zip Code	Procurement and Assistance	224
Primary Place of Performance Congressional District	Procurement and Assistance	304
Primary Place of Performance Country Name	Procurement and Assistance	304
Funding Agency Code	Procurement and Assistance	304
Funding Agency Name	Procurement and Assistance	304
Awarding Agency Name	Procurement and Assistance	304

Sources: GAO analysis of OMB DATA Act guidance and GAO sample. | GAO-18-138

^aTotals for some procurement and assistance award data elements do not equal 304 because some data elements, such as *Primary Place of Performance*, *Legal Entity Address: Address Lines 1 and 2*, and *Legal Entity Address: City Name* are not required for reporting aggregate awards. Totals for the budgetary records do not equal 98 because there were four records that were not representative of the population.

To determine the extent to which records from our sample of award transactions were complete, we reviewed data available in the Treasury database for each of the data elements tested. We excluded *Primary Place of Performance Address: Address Lines 1 and 2* from our test of completeness as we determined that this data element was not available for any award transactions on Beta.USAspending.gov. If we determined, after reviewing agency source documents, that a data element was not applicable to the award transaction, we did not factor the data element into our evaluation of completeness. For all applicable data elements, we determined the award transaction to be complete if a value was available for all the data elements in the Treasury database, regardless of the accuracy of the data element. We determined the award transaction to be incomplete if a value was unavailable for at least one applicable data element in the Treasury database.

To test the controls over the reliability of agency data, we obtained supporting documentation to confirm that the agency provided only official

agency source documents, such as a system of records notice. When such a supporting document was unavailable, we reviewed agency transparency policy documentation, data verification and validation plans or procedures, or system source code information to ensure the reliability of the data. We did not assess the accuracy of the data contained in sources provided by agencies. To the extent that we had previously assessed the reliability of a system, we obtained the necessary supporting documentation. For the purposes of our review we defined data quality as encompassing the concepts of timeliness, completeness, and accuracy, so our assessment of overall data quality is reflected in our specific assessments of these components.

To assess the extent to which Beta.USAspending.gov is consistent with select standards for federal websites, we reviewed the website, interviewed Treasury officials, and reviewed agency documents. Specifically, we analyzed the Beta.USAspending.gov website to determine what user feedback mechanisms were available, which data elements were searchable, and the extent to which Treasury disclosed data limitations on the website. We assessed Beta.USAspending.gov against the following criteria:

- OMB M-17-06 Policies for Federal Agency Public Websites and Digital Services,
- OMB M-10-06 Open Government Directive,
- OMB Circular No. A-130 *Managing Information as a Strategic Resource*,
- U.S. Digital Service's Digital Services Playbook, and
- Treasury's Information Quality Guidelines.

We also assessed Beta.USAspending.gov against DATA Act and FFATA requirements. To determine how Treasury incorporated user feedback in their development process, we also reviewed Treasury's GitHub website.¹⁰ To assess the extent to which Treasury disclosed data limitations, we downloaded and analyzed Senior Accountable Officials' qualification statements from Beta.USAspending.gov for all second quarter 2017 agency data submissions. Finally, we interviewed Treasury officials to corroborate our observations and discuss their development

¹⁰GitHub is a commercial platform for open-source communities that provides for collaboration on documentation and code. The website for Treasury's work can be found at <http://fedspendingtransparency.github.io>

process and planned improvements, website search issues, and disclosure of data limitations.

To determine the status of the DATA Act Section 5 Pilot requirements we reviewed our prior reports and OMB's August 10, 2017, Report to Congress: DATA Act Pilot Program. We also interviewed OMB staff and officials from the Department of Health and Human Services. See appendix II for an update on the status of the Section 5 Pilot program.

To update the status of our recommendations related to implementing the DATA Act, we reviewed relevant documentation and interviewed OMB and Treasury staff and officials. We also updated the current status of OMB's and Treasury's efforts to address our open recommendations related to DATA Act implementation in appendix III.

Appendix II: Update on Section 5 Pilot

As required by the Digital Accountability and Transparency Act of 2014 (DATA Act), the Office of Management and Budget (OMB) is conducting a pilot program, known as the Section 5 Pilot, aimed at developing recommendations for reducing recipient reporting burden for grantees and contractors.¹ OMB partnered with the Department of Health and Human Services (HHS) to design and implement the grants portion of the pilot, and with the General Services Administration (GSA) to implement the procurement portion. OMB launched the Section 5 pilot in May 2015 and expects to continue pilot-related activities until at least February 2018.

The DATA Act also required OMB to issue a report to Congress by August 2017 that, among other things, provided a set of recommendations for: (1) consolidating aspects of federal financial reporting to reduce costs to recipients of federal awards, (2) automating aspects of federal reporting to increase reporting efficiency, (3) simplifying the reporting requirements for recipients of federal awards, and (4) improving financial transparency.² OMB issued this report on August 10, 2017, detailing the results of both the procurement and the grants portions of the pilot and each pilot's test case results, if available.³ The report also contained three high-level recommendations for streamlining recipient reporting. These recommendations were (1) create additional standardization of data elements to meet a variety of statutory, regulatory and business needs; (2) use available technologies to auto-populate reporting fields from existing federal resources; and (3) leverage open technology standards to develop new, user-centered applications.

Grants Pilot: According to OMB's report to Congress, the purpose of the grants pilot was to find opportunities to create new common data standards, to build tools to increase efficiencies in reporting, and to provide resources for lowering the administrative burden on awardees and the government workforce. The pilot consisted of six test models that collected data from March 2016 through May 2017. OMB's report to

¹Pub. L. No. 113-101, § 3, 128 Stat. 1146, 1151–1152 (May 9, 2014). Section 3 of the DATA Act added section 5 to 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. The pilot required by section 5 of FFATA as added by section 3 of the DATA Act is known as the Section 5 Pilot.

²FFATA, § 5(b)(6).

³Office of Management and Budget *Report to Congress: DATA Act Pilot Program* (August 10, 2017)

Congress outlines the six test models, describes the data, discusses its findings, and discusses conclusions drawn; examples of two of the test models and OMB's findings are listed below.⁴

- The Consolidated Federal Financial Report (CFFR) test model was geared toward submitting the Federal Financial Report through a single system. Among other results, according to OMB's report, the pilot indicated that the majority of participants saw the benefits of submitting through one system as opposed to multiple different avenues and said that the majority of participants stated that it eliminated the need to supply duplicative information through multiple systems.
- The Notice of Award—Proof of Concept test model focused on standardizing notices of award (NOA) to reduce reporting burden by standardizing the data needed to populate information collected. According to OMB, participants concluded that a standardized NOA would decrease reporting burden and many supplied suggestions for standardization. As a next step, OMB and federal agencies will explore opportunities to reuse existing data.

Procurement Pilot: According to OMB's report to Congress, the goal of the procurement pilot is to explore burden reduction for contractor data by building and testing an online proof of concept tool. This application would centralize collection of all reporting requirements under the Federal Acquisition Regulation (FAR), rather than require contractors to submit reports to multiple locations and in multiple formats. As a result, contractors would now report information only once and in a single location. The pilot's purpose is to analyze the burden reduction associated with a centralized FAR reporting tool and determine how automating the reporting could contribute to burden reduction. The pilot consists of five test models focused on the sequence of this proof of concept test model; collection for this proof of concept reporting tool began in March 2017.⁵ OMB's report to Congress outlines the five test models and discusses analysis of the findings and data collection for

⁴The six test models focused on the following requirements and areas: 1-2) Aspects of the Common Data Element Repository Library, 3) Consolidated Federal Financial Reporting, 4) Single Audit, 5) Notice of Award Proof of Concept, and 6) Learn Grants.

⁵For the procurement portion of the pilot, the five test models of the proof of concept tool are: 1) standardize the process for submission of FAR data, 2) verify that FAR data standards address needs, 3) pre-populate data, 4) consolidate data collection and access (proof of concept), and 5) interface with other reporting systems.

phases of the pilot that had collected information through July 2017. At the time of OMB's report to congress, the procurement pilot had collected information on three of its five test models; data collection will continue through February 2018. As of August 2017, OMB had not met the minimum number of 180 contractors needed for participation in the pilot test model; at that time there were 10 registered users of the tool—nine contracting officers and one federal contractor, which according to OMB staff holds multiple contracts. However, OMB staff told us they are optimistic they will be able to meet the 180 minimum number of contractors for procurement pilot data collection by scaling the pilot to support a straightforward reporting requirement for testing that requires less information and time commitment from contractors.

Although the report provides details on the results of the pilot, next steps regarding individual test models, and high-level recommendations for reducing burden, it does not detail specific implementation steps for the recommendations, including any legislative actions that might be required, as specified in the act. According to OMB staff, the President's Management Agenda, set to publish in February 2018 will reflect lessons learned and recommendations from the pilot, and, if necessary, include any legislative actions needed to fulfill this requirement. Staff will also continue to engage stakeholders in the development of this guidance.

We will continue to monitor and report on OMB's efforts to implement Section 5 Pilot recommendations, including on-going efforts to complete data collections for the procurement portion of the pilot and efforts to meet the statutory requirement to provide guidance to agencies on how to use established data standards to reduce recipient burden.

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

Report	Recommendations	Implementation Status
<p>GAO-14-476 Data Transparency: Oversight Needed to Address Underreporting and Inconsistencies on Federal Award Website (June 2014)</p>	<ol style="list-style-type: none"> <li data-bbox="370 527 813 1115">1. To improve the completeness and accuracy of data submissions to the USASpending.gov website, the Director of the Office of Management and Budget (OMB), in collaboration with the Department of the Treasury's (Treasury) Fiscal Service, should clarify guidance on (1) agency responsibilities for reporting awards funded by nonannual appropriations; (2) the applicability of USASpending.gov reporting requirements to nonclassified 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. <li data-bbox="370 1150 813 1440">2. To improve the completeness and accuracy of data submissions to the USASpending.gov website, the Director of OMB, in collaboration with Treasury's Fiscal Service, should develop and implement a government-wide oversight process to regularly assess the consistency of information reported by federal agencies to the website other than the award amount. 	<p>Open. OMB and Treasury continue working to implement the Digital Accountability and Transparency Act of 2014 (DATA Act), which includes several provisions that may address these recommendations once fully implemented. 1) OMB staff said they continue to work with individual agencies to clarify their responsibilities for reporting awards funded by nonannual appropriations. 2) OMB staff said that they have no current plans to issue guidance on the topic of nonclassified awards related to intelligence operations because of the broader exemptions provided by Section 7 of the DATA Act. 3) OMB staff agreed that it will be important to clarify guidance on how agencies can report on award titles that appropriately describe the awards' 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 2016 (MPM 2016-03 and M-17-04) that identifies the authoritative sources for reporting procurement and award data. However, in reviewing this policy guidance, we determined that it does not address the underlying source that can be used to verify the accuracy of nonfinancial procurement data or any source for data on assistance awards. This recommendation was included in priority recommendation letters sent to the Director of OMB by the Comptroller General in July 2016 and May 2017.</p> <p>Closed-Implemented. In June 2014 we reported that federal agencies did not report required information on hundreds of federal award programs to USASpending.gov, a public website. We also found that many of the reported awards we reviewed were inconsistent with agency records. Accordingly, we recommended that the Director of OMB, in collaboration with Treasury's Fiscal Service, should develop and implement a government-wide oversight process to regularly assess the consistency of reported information. In response, OMB and Treasury took several steps to improve oversight of the reported spending data. Specifically, OMB issued policy guidance in 2016 (MPM 2016-03 and M-17-04) that identifies authoritative systems to validate some agency spending information and directs senior agency officials to certify the quality of their data based on agency internal controls and risk management procedures. Also, Treasury developed a broker system that checks agency-reported data for errors. Together, these actions provide OMB and agencies with additional tools to help ensure that spending data reported to USASpending.gov is accurate and complete.</p>

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

Report	Recommendations	Implementation Status
<p>GAO-15-752T DATA Act: Progress Made in Initial Implementation but Challenges Must Be Addressed as Efforts Proceed (July 2015)</p>	<p>3. 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 Modernization Act of 2010 (GPRAMA) requirement to produce a federal program inventory.</p>	<p>Open. In July 2017, OMB staff said that they expect to issue new guidance on the Program Management Improvement Accountability Act by the end of 2017. They told us that within a year of issuing the new guidance, they would expect to be able to move forward with plans to resume implementation of the federal program inventory.</p> <p>In October 2017, OMB staff told us they believe there are opportunities to leverage the DATA Act taxonomy in service to the goals of GPRAMA and they continue to work with their performance management colleagues on this effort. OMB has defined specific data elements as required by the DATA Act, and they stated that they will continue to consider identification of programs for the purposes of DATA Act implementation. This was identified as a high priority recommendation in letters sent from the Comptroller General to the Director of OMB in December 2015, July 2016, and May 2017.</p>
	<p>4. To ensure that the integrity of data standards is maintained over time, the Director of OMB, in collaboration with the Secretary of the Treasury, should establish a set of clear policies and processes for developing and maintaining data standards that are consistent with leading practices for data governance.</p>	<p>Open. OMB and Treasury have taken some initial steps to build a data governance structure standardizing data elements and definitions, 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 (DSC) that is responsible for advising OMB and Treasury, and providing recommendations on DATA Act data standards to the Executive Steering Committee (ESC)—the decision-making body regarding DATA Act and other data standards. According to OMB staff, the DSC meets on a monthly basis, but has not yet provided recommendations to OMB or to the ESC. OMB staff told us, in October 2017, that, in accordance with their broader data governance mandates and overall transparency efforts, they are reviewing opportunities to incorporate and leverage other mandates and existing governance structures.</p> <p>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 (GAO-17-156). This was identified as a high priority recommendation in letters sent from the Comptroller General to the Director of OMB in December 2015 and to the Director of OMB and the Secretary of the Treasury in July 2016 and May 2017.</p>

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

Report	Recommendations	Implementation Status
<p>GAO-16-261 DATA Act: Data Standards Established, but More Complete and Timely Guidance Is Needed to Ensure Effective Implementation (January 2016)</p>	<p>5. To help ensure that agencies report consistent and comparable data on federal spending, we recommend that the Director of OMB, in collaboration with the Secretary of the Treasury, provide agencies with additional guidance to address potential clarity, consistency, or quality issues with the definitions for specific data elements including <i>Award Description</i> and <i>Primary Place of Performance</i> and that they clearly document and communicate these actions to agencies providing this data as well as to end-users.</p>	<p>Open. In May 2016, OMB issued guidance for implementing the DATA Act entitled <i>Implementing the Data-Centric Approach for Reporting Federal Spending Information (MPM 2016-03)</i>. 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 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 Senior Accountable Official (SAO) assurance regarding quarterly submissions to USASpending.gov.</p> <p>OMB staff stated they communicated to agency SAOs via an email announcement that information submitted to USASpending.gov is subject to plain language requirements. However, this is not stated in official guidance. OMB staff also said they advised agencies to reference the white papers issued with the data element definitions to help standardize implementation.</p> <p>Given the complexity of the elements, OMB staff said they continue to work with federal communities to discuss the element definitions and business processes to determine where additional guidance may be needed. OMB staff stated they do not have a timeframe for issuing additional guidance, and anticipate that agency inspectors general (IG) and GAO reports will help inform future guidance.</p> <p>We continue to believe additional guidance is needed to facilitate agency implementation of certain data definitions (such as <i>Award Description</i> and <i>Primary Place of Performance</i>) in order to produce consistent and comparable information. As discussed in this report, given the challenges the <i>Award Description</i> and <i>Primary Place of Performance</i> data elements continue to present, we have concerns about whether the guidance provides sufficient detail for agencies to consistently interpret and implement the definitions. This was identified as a high priority recommendation in letters sent from the Comptroller General to the Director of OMB and the Secretary of the Treasury in July 2016 and May 2017.</p>

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

Report	Recommendations	Implementation Status
<p>GAO-16-698 Improvements Needed in Reviewing Agency Implementation Plans and Monitoring Progress (July 2016)</p>	<p>6. To help ensure effective government-wide implementation and that complete and consistent spending data will be reported as required by the DATA Act, the Director of OMB, in collaboration with the Secretary of the Treasury, should establish or leverage existing processes and controls to determine the complete population of agencies that are required to report spending data under the DATA Act and make the results of those determinations publicly available.</p>	<p>Closed – implemented. As we previously reported, OMB generally concurred with the recommendation, but stated that each agency is responsible for determining whether it is subject to the DATA Act. To help agencies make that determination, in May 2016 OMB and Treasury published guidance in the form of frequently asked questions (FAQ) 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 required to report and which agencies have determined that they are exempt from reporting under the DATA Act and prepared a list of such agencies. However, according to OMB staff a limited number of entities that may meet the criteria of OMB's FAQs have not shared their determinations with OMB regarding the applicability of the DATA Act to them. OMB staff told us that they have plans to reach out to these entities. Based on the actions taken to date, we are closing this recommendation as implemented.</p>
	<p>7. To help ensure effective government-wide implementation and that complete and consistent spending data will be reported as required by the DATA Act, the Director of OMB, in collaboration with the Secretary of the Treasury, should reassess, on a periodic basis, which agencies are required to report spending data under the DATA Act and make appropriate notifications to affected agencies.</p>	<p>Closed – implemented. As we previously reported, OMB generally concurred with the recommendation, but stated that each agency is responsible for determining whether it is subject to the DATA Act. To help agencies make that determination, in May 2016 OMB and Treasury published guidance in the form of FAQs and stated that the agencies may consult with OMB for additional counsel. In response to our recommendation, OMB staff told us they have ongoing conversations with agencies to clarify how they determine whether or not they are subject to the requirements of the act. In addition, agencies are required to notify OMB if they change their determination. Based on the actions taken by OMB and agencies to date, we are closing this recommendation as implemented.</p>
	<p>8. To help ensure effective implementation of the DATA Act by the agencies and facilitate the further establishment of overall government-wide governance, the Director of OMB, in collaboration with the Secretary of the Treasury, should request that non-Chief Financial Officers Act of 1990 (CFO Act) agencies required to report federal spending data under the DATA Act submit updated implementation plans, including updated timelines and milestones, cost estimates, and risks, to address new technical requirements.</p>	<p>Closed – implemented. As we previously reported, OMB generally concurred with the recommendation. OMB stated that it is monitoring non-CFO Act agencies' implementation by providing feedback to non-CFO Act agencies through workshops instead of requesting updated implementation plan information. OMB has worked with Treasury to engage with small and independent agencies through weekly phone calls and other forms of communication. As a result, there were over 60 non-CFO Act agencies that submitted data in May 2017 reporting almost \$50 billion in outstanding obligations for the second quarter of fiscal year 2017. Therefore, we are closing this recommendation as implemented since OMB has met the intent of our recommendation.</p>

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

Report	Recommendations	Implementation Status
<p>GAO-17-460 DATA Act: Office of Inspector General Reports Help Identify Agencies' Implementation Challenges (April 2017)</p>	<p>9. We recommend that the Director of OMB and the Secretary of the Treasury establish mechanisms to assess the results of independent audits and reviews of agencies' compliance with the DATA Act requirements, including those of agency Offices of Inspectors General (OIG), to help inform full implementation of the act's requirements across government.</p>	<p>Open. In April 2017, OMB staff stated that it generally concurred with our recommendation, but they noted that OIG readiness reviews are just one of its agency engagement efforts, which also includes reviewing agency implementation plans, holding numerous meetings with the agencies, and requesting regular progress updates on the agencies' implementation efforts. We recognize that OMB's efforts to engage regularly with agencies are helpful for monitoring agencies' implementation. However, it is also important to use information in independent audits and reviews to validate agencies' progress. In October 2017, OMB staff stated that they have been coordinating with the Chief Financial Officers (CFO) Council and Council of the Inspectors General on Integrity and Efficiency (CIGIE) working group on known DATA Act implementation issues. We will continue to assess OMB's efforts to address this recommendation as IGs required reports are issued. This was identified as a high priority recommendation in a letter sent from the Comptroller General to the Director of OMB in May 2017.</p> <p>Treasury officials stated they will establish mechanisms to assess the results of independent audits and reviews of agencies' compliance with the DATA Act requirements, including those of agency OIGs. Treasury officials also stated these mechanisms will inform Treasury's efforts on whether and how to tailor its future outreach efforts to help agencies meet their DATA Act requirements. We will continue to assess Treasury's efforts to address this recommendation as IGs required reports are issued.</p>
<p>GAO-17-496 DATA Act: As Reporting Deadline Nears, Challenges Remain That Will Affect DATA Quality (April 2017)</p>	<p>10. To promote transparency in the development and management of data standards for reporting federal spending, the Director of OMB should ensure that the DSC makes information about the topics of the committee's proceedings and any resulting outcomes available to the public.</p>	<p>Open. Created in September 2016, the DSC is responsible for advising OMB and Treasury, and providing recommendations on DATA Act data standards to the ESC—the decision-making body regarding DATA Act and other data standards. According to OMB staff, the DSC meets on a monthly basis, but has not yet provided recommendations to OMB or to the ESC. OMB staff told us that the procedures for revising data standards will include an opportunity for public feedback on proposed revisions, but the DSC has not yet released information about the topics it has reviewed, as designated in its charter.</p> <p>OMB staff told us, in October 2017, that, in accordance with their broader data governance mandates and overall transparency efforts, they are reviewing opportunities to incorporate and leverage other mandates and existing governance structures. They also said that the DSC is an internal organization, which serves as a deliberative forum to harmonize approaches to implementation, and that public stakeholder engagement is part of the broader governance process. This was identified as a high priority recommendation in a letter sent from the Comptroller General to the Director of OMB in May 2017.</p>

Source: GAO summary and analysis of statements and documentation provided by OMB staff and Treasury Officials. | GAO-18-138

Appendix IV: GAO Estimates of Consistency Rates for Award Transactions and Budgetary Accounts/Balances

Table 4: GAO Estimates of Consistency Rates for Award Information by Beta.USAspending.gov Data Element, Second Quarter Fiscal Year 2017

Numbers are rounded to the nearest whole number

Data element ^b	Estimated ranges ^a		
	Consistent (%) ^c	Inconsistent (%) ^d	Unverifiable (%)
Award ID Number ^e	83-91	5-11	3-8
Action Date	79-88	4-10	7-13
Award Description	35-46	49-60	3-8
Award Type	69-79	10-19	8-16
CFDA Number ^f	86-95	0-3	5-13
NAICS Code ^g	68-85	7-20	5-18
Current Total Value of Award ^g	33-52	41-61	3-13
Federal Action Obligation	84-92	1-6	6-13
Awardee/Recipient Legal Entity Name	86-93	4-10	2-6
Legal Entity Address ^h (all subelements)	69-79	13-22	6-13
Address Lines 1 and 2 ⁱ	77-86	10-18 ^j	3-8
City Name ^l	80-89	7-15	3-8
County Name ^k	72-90	0-7	9-26
State Name	84-91	2-6	6-13
Zip Code ^l	76-85	10-19	3-8
Legal Entity Congressional District	73-82	8-16	8-15
Legal Entity Country Name	89-95	0-3	4-10
Primary Place of Performance Address ^l (all subelements)	9-16	62-72	17-25
Address Lines 1 and 2 ⁱ	22-31	69-78	0-1
City Name ^l	39-48	45-53	5-11
County Name	19-28	51-60	17-25
State Name	42-53	3-8	43-54
Zip Code ^l	48-58	16-25	23-32
Primary Place of Performance Congressional District	32-43	10-19	43-54
Primary Place of Performance Country Name	46-57	2-6	40-51
Funding Agency Code	55-66	23-32	9-16
Funding Agency Name	55-66	23-32	9-16
Awarding Agency Name	92-97	0-1	3-8

Source: GAO analysis of agency sources. | GAO-18-138

Appendix IV: GAO Estimates of Consistency Rates for Award Transactions and Budgetary Accounts/Balances

^aThis table shows the 95 percent confidence intervals for the estimates.

^bWe did not evaluate the amount of award (including total funding amount) because this value is calculated directly by Treasury and not submitted by the agency.

^cConsistency includes data elements rated as “consistent,” “not applicable,” and “not required for aggregate transactions.”

^dInconsistency includes data elements rated as “USASpending data was inconsistent with agency records”; “USASpending data was inconsistent with the law” (i.e., the agency’s submission was inconsistent with the data standard or the award description was not descriptive of the purpose of the award as required by FFATA); and “USASpending did not include a value for this field.”

^eThe award identifier is dependent upon the type of award. For procurements, the identifier is the procurement instrument identifier (PIID), for assistance awards it is the federal award ID number (FAIN), and for aggregate awards it is the unique record identifier (URI).

^fThis data element is only applicable to assistance award transactions. Accordingly, the estimates presented in the table for this data element are based only on our evaluation of assistance award transactions and may contain a higher error rate.

^gThis data element is only applicable to procurement award transactions. Accordingly, the estimates presented in the table for this data element are based only on our evaluation of procurement award transactions and may contain a higher error rate.

^hThe OMB data standard states that the *Legal Entity Address* is made up of five components: *Address Lines 1 and 2*, *City Name*, *State Code*, and *ZIP+4 or Postal Code*. The county name is only applicable for aggregate records.

ⁱAggregate award transactions are typically aggregated at the county or state level and therefore are not required to submit an address line, city name, or zip code for *Legal Entity Address* or *Primary Place of Performance Address*.

^jWe estimate that the *Legal Entity Address: Address Lines 1 and 2* data element is inconsistent in at least 9.6 percent of second quarter fiscal 2017 award transactions. Although it is displayed in the table as 10 percent due to rounding, we do not consider this element to have exceeded the 10 percent threshold of significant inconsistency.

^kThis data element is only applicable to aggregate assistance award transactions. Accordingly, the estimates presented in the table for this data element are based only on our evaluation of aggregate award transactions and may contain a higher error rate.

^lThe OMB data standard for *Primary Place of Performance Address*, as posted on the fedspendingtransparency.github.io and [Max.gov](https://www.max.gov) websites during the time of our review, consists of six components: *Address Lines 1 and 2*, *City Name*, *County Name*, *State Code*, and *ZIP+4 or Postal Code*.

Table 5: GAO Estimates of Consistency Rates for Budgetary Accounts/Balances by Beta.USASpending.gov Data Element, Second Quarter Fiscal Year 2017

Numbers are rounded to the nearest whole number.

Data element	Estimated ranges ^a		
	Consistent (percentage) ^b	Inconsistent (percentage) ^c	Unverifiable (percentage)
Appropriations Account (all subelements)	94-100	0-3	0-6
Allocation Transfer Agency Identifier	97-100	0-3	0-3
Agency Identifier	94-100	0-3	0-6
Beginning Period of Availability	97-100	0-3	0-3
Ending Period of Availability	97-100	0-3	0-3
Availability Type Code	97-100	0-3	0-3

Appendix IV: GAO Estimates of Consistency Rates for Award Transactions and Budgetary Accounts/Balances

Data element	Estimated ranges ^a		
	Consistent (percentage) ^b	Inconsistent (percentage) ^c	Unverifiable (percentage)
Main Account Code	97-100	0-3	0-3
SubAccount Code	97-100	0-3	0-3
Object Class (all subelements)	94-100	0-3	0-6
Object Class	97-100	0-3	0-3
Object Class Name	97-100	0-3	0-3
By Direct Reimbursable Funding Source	94-100	0-3	0-6
Obligation (all subelements)	70-87	13-30	0-3
USSGL 4801 Undelivered Orders Obligations Unpaid CPE	94-100	0-6	0-3
USSGL 4831 Undelivered Orders Obligations Transferred Unpaid CPE	97-100	0-3	0-3
USSGL 4881 Upward Adjustments of Prior Year Undelivered Orders Obligations Unpaid CPE	83-96	5-17	0-3
Obligations Undelivered Orders Unpaid Total CPE	94-100	0-6	0-3
USSGL 4901 Delivered Orders Obligations Unpaid CPE	94-100	0-6	0-3
USSGL 4931 Delivered Orders Obligations Transferred Unpaid CPE	97-100	0-3	0-3
USSGL 4981 Upward Adjustments of Prior Year Delivered Orders Obligations Unpaid CPE	85-97	3-15	0-3
Obligations Delivered Orders Unpaid Total CPE	94-100	0-6	0-3
USSGL 4801 Undelivered Orders Obligations Unpaid FYB	94-100	0-6	0-3
Obligations Undelivered Orders Unpaid Total FYB	94-100	0-6	0-3
USSGL 4901 Delivered Orders Obligations Unpaid FYB	94-100	0-6	0-3
Obligations Delivered Orders Unpaid Total FYB	94-100	0-6	0-3
Obligations Incurred By Program Object Class CPE	84-96	4-16	0-3
USSGL 4971 Downward Adjustments of Prior Year Unpaid Delivered Orders Obligations Recoveries CPE	94-100	0-6	0-3
USSGL 4871 Downward Adjustments of Prior Year Unpaid Undelivered Orders Obligations Recoveries CPE	94-100	0-6	0-3
Outlay (all subelements)	75-91	9-25	0-3
USSGL480200 Undelivered Orders Obligations Prepaid Advanced CPE:	97-100	0-3	0-3
USSGL483200 Undelivered Orders Obligations Transferred Prepaid Advanced CPE:	97-100	0-3	0-3
USSGL488200 Upward Adjustments Of Prior Year Undelivered Orders Obligations Prepaid Advanced CPE:	97-100	0-3	0-3
Gross Outlays Undelivered Orders Prepaid Total CPE:	97-100	0-3	0-3
USSGL490200 Delivered Orders Obligations Paid CPE:	91-99	1-9	0-3
USSGL490800 Authority Outlayed Not Yet Disbursed CPE:	97-100	0-3	0-3

Appendix IV: GAO Estimates of Consistency Rates for Award Transactions and Budgetary Accounts/Balances

Data element	Estimated ranges ^a		
	Consistent (percentage) ^b	Inconsistent (percentage) ^c	Unverifiable (percentage)
USSGL498200 Upward Adjustments Of Prior Year Delivered Orders Obligations Paid CPE:	97-100	0-3	0-3
Gross Outlays Delivered Orders Paid Total CPE:	91-99	1-9	0-3
Gross Outlay Amount By Program Object Class CPE:	91-99	1-9	0-3
USSGL480200 Undelivered Orders Obligations Prepaid Advanced FYB:	97-100	0-3	0-3
Gross Outlays Undelivered Orders Prepaid Total FYB:	97-100	0-3	0-3
USSGL490800 Authority Outlayed Not Yet Disbursed FYB:	97-100	0-3	0-3
Gross Outlays Delivered Orders Paid Total FYB:	76-92	8-24	0-3
Gross Outlay Amount By Program Object Class FYB:	76-92	8-24	0-3
USSGL487200 Downward Adjustments Of Prior Year Prepaid Advanced Undelivered Orders Obligations Refunds Collect CPE:	97-100	0-3	0-3
USSGL497200 Downward Adjustments of Prior Year Paid Delivered Orders Obligations Refunds Collected CPE:	94-100	0-6	0-3
Unobligated Balance	94-100	0-6	0-3
Deobligations Recoveries Refunds Of Prior Year By Object Class_CPE:	94-100	0-6	0-3
Program Activity (all subelements)	83-96	5-17	0-3
Program Activity Name:	84-96	4-16	0-3
Program Activity Code:	94-100	0-6	0-3
Treasury Account Symbol/TAS (all subelements)	94-100	0-3	0-6
Agency Identifier:	94-100	0-3	0-6
Main Account Code:	97-100	0-3	0-3
SubAccount Code:	97-100	0-3	0-3

Legend: CPE = current period ending; FYB = fiscal year beginning; USSGL = U.S. Standard General Ledger

Source: GAO analysis of agency data. | GAO-18-138

^aThis table shows the 95 percent confidence intervals for the estimates.

^bConsistency includes data elements determined to be consistent with agency records and not applicable.

^cInconsistency includes data elements determined to be inconsistent with agency records.

Appendix V: List of Agencies Included in Our Sample

Agency	Number of Procurements	Total Number of Assistance Awards	Number of Aggregate Assistance Awards	Number of Budgetary Records	Total Records
Agency for International Development	2	0	0	4	6
Department of Agriculture	4	0	0	17	21
Department of Commerce	1	0	0	2	3
Department of Defense	1	1	0	16	18
Department of Education	0	45	0	2	47
Department of Energy	0	0	0	1	1
Department of Health and Human Services	10	16	0	15	41
Department of Homeland Security	8	2	0	4	14
Department of Housing and Urban Development	0	12	0	2	14
Department of the Interior	7	4	0	2	13
Department of the Treasury	1	0	0	4	5
Department of Justice	14	1	0	10	25
Department of Labor	2	0	0	3	5
Department of State	9	0	0	2	11
Department of Transportation	4	15	0	2	21
Department of Veterans Affairs (VA)	21	53	52	2	76
Environmental Protection Agency	2	0	0	5	7
General Services Administration	13	0	0	1	14
National Aeronautics and Space Administration	5	2	0	1	8
National Science Foundation	0	3	0	1	4
Nuclear Regulatory Commission	1	0	0	1	2
Small Business Administration	0	20	5 ^a	1	21
Social Security Administration (SSA)	1	24 ^b	23	0	25
Total	106	198	80	98	402

Source: GAO. | GAO-18-138

Appendix V: List of Agencies Included in Our Sample

^aThese 5 award transactions are not aggregated in the same fashion as VA and SSA but instead are awards to individuals where personally identifiable information has been redacted.

^bAlthough SSA reported this transaction as a nonaggregate award, according to agency sources, this was misreported and is an aggregate award transaction.

Appendix VI: Comments from the Department of Housing and Urban Development



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-3000

OFFICE OF THE CHIEF FINANCIAL OFFICER

November 1, 2017

J. Christopher Mihm
Managing Director, Strategic Issues
U.S. Government Accountability Office
441 G Street, NE.
Washington, D.C. 20548

Dear Mr. Mihm:

On behalf of the U.S. Department of Housing and Urban Development (HUD) we would like to express our appreciation for working with such a professional and responsive staff during the engagement activities that led to the draft report findings. Throughout the engagement, there was a constant dialogue and stream of communication from both sides. The outcome of these efforts is apparent in the accuracy related to HUD's DATA Act activities by recognizing the agency's successes as well as capturing its ongoing efforts for improved reporting. With that said, thank you for the opportunity to respond to your draft report titled, "*DATA Act: OMB, Treasury, Agencies Need to Improve Completeness and Accuracy of Spending Data and Disclose Limitations*", issued November 2017 (GAO-18-138). We have reviewed the draft report and our comments are listed below.

- For the \$2.6 billion cited across six HUD programs, GAO correctly noted that \$900 million of these transactions (35%) were reported to USA Spending, but not published. HUD submitted awards for the Community Development Block Grant/State's Program and Non-Entitlement Grants in Hawaii, with estimated fiscal year 2017 obligations of approximately \$900 million, in File D2. These awards appeared on USA Spending.gov, but did not appear on Beta.USA Spending.gov. In 2nd quarter FY 2017, HUD submitted this issue to the USA Spending.gov help desk and received confirmation that that these awards were not published on the Beta.USA Spending.gov site. HUD is actively working with the Department of the Treasury to identify the cause of this omission and resolve this issue.
- For the \$1.7 million of remaining unreported programs (65%), HUD is working diligently to refine business processes and explore long-term solutions for these particular loan programs. Specifically, HUD is prioritizing efforts to increase DATA Act compliance across all HUD components, including manually captured / transmitted loan data. As part of the prioritization, HUD completed a loan assessment to fully understand loan processes and related systems. The Department will be reengineering its loan processes to promote and increase automation, the capture of required reporting data, and internal

www.hud.gov

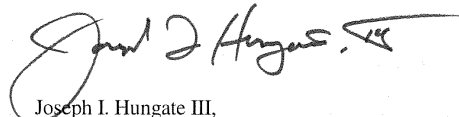
espanol.hud.gov

**Appendix VI: Comments from the Department
of Housing and Urban Development**

controls. These improvements will enhance HUD's ability to provide reasonable assurance over the completeness and accuracy of its financial assistance reporting HUD values your feedback on these important issues as we continue our efforts to implement the DATA Act, and we remain committed to working with Treasury and OMB to meet the DATA Act's requirements and objectives. If you have any questions, please contact Joseph I. Hungate III at (202) 402-2801. Your staff may also contact James C. Norsworthy at (202) 402-6827.

Thank you again for the opportunity to review and comment on the Draft Report; we look forward to working with your staff on future engagements.

Sincerely,



Joseph I. Hungate III,
Senior Accountable Official, DATA Act
Assistant Chief Financial Officer for Systems
U.S. Department of Housing and Urban Development

Appendix VII: Comments from the Department of the Treasury



DEPARTMENT OF THE TREASURY
WASHINGTON, D.C.

ASSISTANT SECRETARY

November 1, 2017

Dawn B. Simpson
Director, Financial Management and Assurance
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Ms. Simpson:

We appreciate the opportunity to review the Government Accountability Office's (GAO) Draft Report GAO-18-138 (the Draft Report) regarding the implementation of the Digital Accountability and Transparency Act of 2014 (DATA Act).

The Department of the Treasury (Treasury) and the Office of Management and Budget (OMB) have been leading the implementation of the DATA Act since its passage. When we began this process three years ago, Treasury identified a number of potential implementation challenges including the development of government-wide financial standards to link financial and award level data, short statutory deadlines, funding constraints, and the need to consider a broad range of stakeholder interests. To overcome these challenges, Treasury developed an implementation approach that leveraged the agile development methodology and utilized open source and user-centered design principles to build solutions and improvements more quickly. Treasury built the infrastructure to support the DATA Act implementation in two-week cycles, which reduced risks and increased the speed and flexibility required to respond to stakeholder feedback and ultimately build better products. After considering the input of public and private stakeholders, OMB and Treasury established the Government-wide financial data standards in 2015 and the DATA Act Information Model Schema (DAIMS) and DATA Act Broker in 2016 to facilitate Federal agency reporting of information. Federal agencies were required to submit and certify their first data submissions to Treasury by April 30, 2017, and Treasury released those data on the new Beta.USAspending.gov website nine days later on May 9. The Beta.USAspending.gov website allows taxpayers to examine nearly \$4 trillion in annual federal spending and to see how this money flows from Congressional appropriations to local communities and businesses.

Treasury recognizes the need for continuous improvement and we remain committed to our long-standing goal of displaying more accessible, searchable, and reliable spending information for the purposes of promoting transparency, facilitating better decision-making, and improving operational efficiency. GAO's Draft Report reviews the first quarterly agency submission to Treasury and we have made enhancements since the April submission. We also anticipate future refinements to the standards or the underlying infrastructure to support the accuracy and completeness of agency data submissions going-forward. This continuous improvement

**Appendix VII: Comments from the Department
of the Treasury**

approach is consistent with the agile development process that OMB and Treasury have used for the DATA Act implementation since 2014. In addition, we maintained the legacy USASpending.gov website to allow for the historic data to be integrated into the new website gradually, allowing data users to become familiar with the new data and website functionality.

The DATA Act implementation has resulted in both a substantial increase in the amount of data publicly reported, and an increased awareness of the complexity of the relationship between summary-level financial information required by the DATA Act and legacy Federal award-level information. Since May 2017, and as noted above, Treasury has taken steps to evaluate and address issues that will facilitate continuous improvement, and we will continue to do so in an effort to further improve data quality ahead of our May 2018 statutory deadline to ensure that the data standards are applied to the data available on the public website.

The Draft Report contains six recommendations – two to OMB and four to Treasury (Recommendations 3-6) Recommendations 3 and 4 focus on Treasury’s processes for monitoring agency submissions to the Broker and ensuring proper controls are in place to ensure the infrastructure and website are operating as designed. Treasury conducts robust outreach to assist agencies with their data submissions to the Broker, and we have processes in place to ensure the systems are operating as designed. Treasury will consider enhancements it can make in response to these recommendations. Recommendations 5 and 6 focus on Treasury disclosure of known data quality issues and limitations on the USASpending.gov website. Treasury will develop a plan to better disclose known data quality issues and to make Agency Senior Accountable Official certifications more accessible to users.

We value your thoughtful review of the DATA Act implementation and we remain committed to working with GAO and the 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

cc: J. Christopher Mihm, Managing Director, Strategic Issues
Paula M. Rascona, Director, Financial Management and Assurance

Appendix VIII: Comments from the Office of Management and Budget



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

NOV 2 - 2017

OFFICE OF FEDERAL
FINANCIAL MANAGEMENT

Dear Mr. Mihm and Ms. Rascona,

This letter is in response to your transmission of the Government Accountability Office's (GAO's) draft report entitled *OMB, Treasury, and Agencies Need to Improve Completeness and Accuracy of Spending Data and Disclose Limitations* (GAO-18-138). The Office of Management and Budget (OMB) appreciates GAO's comprehensive review of this first quarter of implementation of the Digital Accountability and Transparency Act of 2014 (DATA Act) and the display of data on beta.usaspending.gov.

The report is the first comprehensive review of this newly reported data and contains valuable observations that will inform future iterations of the DATA Act's implementation and government-wide transparency in general. OMB generally agrees with the report's recommendations, and would like to particularly emphasize GAO's note that each agency is legally responsible for making its own determination about whether it is subject to the DATA Act, and complying accordingly. Further, it is important to note the critical role that GAO and each agency's Inspector General plays in monitoring compliance in accordance with the statute.

OMB also agrees with the draft report's conclusion about the critical importance of a robust and transparent data governance structure to facilitate agency compliance and ensure appropriate integrity of established standards for data and internal controls. Such governance could help to assure that standards for elements such as place of performance are appropriately aligned to how these data are used in agency management. We remain committed to monitoring agency compliance, and to continuing to provide technical assistance and aligning our guidance as needed.

OMB has prioritized government-wide implementation of the DATA Act, and is committed to continuing our iterative approach to improving Federal spending transparency. OMB has worked closely with the Chief Financial Officers (CFO) Act agencies, as well as many other Federal agencies, to provide the public with the most comprehensive overview of Federal spending to date.

Finally, we note that while the Congressional Budget Office estimated the cost of implementation for DATA Act at \$300 million across the Federal government, this new and unprecedented view connecting audited financial system data to award-level data (verified and validated in the case of procurement awards) was accomplished almost entirely within existing resources. We are pleased with the ongoing, agile and iterative implementation efforts to date and appreciate GAO's observations of continuing opportunities to improve.

Sincerely,

Mark Reger

Deputy Controller

Appendix IX: GAO Contacts and Staff Acknowledgments

GAO Contacts

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Paula M. Rascona, (202) 512-9816 or rasconap@gao.gov

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In addition to the above contacts, Peter Del Toro (Assistant Director), Michael LaForge (Assistant Director), Thomas J. McCabe (Assistant Director), James Sweetman, Jr. (Assistant Director), Mathew Bader (Analyst-in-Charge), Maria Belaval (Analyst-in-Charge), Kathleen Drennan (Analyst-in-Charge), Diane Morris (Analyst-in-Charge), and Laurel Plume (Analyst-in-Charge) supervised the development of this report. Theodore Alexander, David Ballard, Carl Barden, Colenn Berracasa, Rathi Bose, Mark Canter, Jenny Chanley, Mark Cheung, John Craig, Charles Ego, Samuel Gaffigan, Thomas Hackney, Ajane Hinton, Kirsten Leikem, Tabitha Lowell, William Lowrey, Quang Nguyen, Laura Pacheco, Adam Peterson, Silvia Porres, Carl Ramirez, James Skornicki, Althea Sprosta, A.J. Stephens, Wade Tanner, and Gary Wiggins made major contributions to this report. Margaret Adams, Shea Bader, Divya Bali, Debra Conner, Jeff DeMarco, Chris Falcone, Cole Haase, and Zsaroq Powe verified the contents of this report. Additional members of GAO's DATA Act Internal Working Group also contributed to the development of this report.

Related GAO Products

DATA Act: As Reporting Deadline Nears, Challenges Remain That Will Affect Data Quality. [GAO-17-496](#). Washington, D.C.: April 28, 2017.

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

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