



November 2021

FEDERAL SPENDING TRANSPARENCY

Opportunities Exist to
Further Improve the
Information Available
on USAspending.gov

GAO@100 Highlights

Highlights of [GAO-22-104702](#), a report to congressional addressees

Why GAO Did This Study

The DATA Act requires disclosure of federal agency expenditures and linking of agency spending information to federal program activities so that both policymakers and the public can more effectively track federal spending. The act also requires OMB and Treasury to establish data standards to provide consistent, reliable, and searchable government-wide spending data. The DATA Act contains a provision for GAO to report on the quality of the data. This is the third in a series of three reports on data quality.

This report examines (1) the timeliness, completeness, and accuracy of the data displayed on USAspending.gov; (2) business process controls over the data; (3) the implementation and use of data standards; (4) the disclosure of known data quality limitations; and (5) the status of agency efforts to develop a data governance structure over DATA Act reporting. To address these objectives, GAO analyzed data from USAspending.gov, reviewed agency documents, and interviewed agency officials.

What GAO Recommends

GAO is making two recommendations to OMB to ensure consistent use of data standards and seven recommendations to Treasury to improve business process controls, implementation and use of data standards, and the disclosure of known data limitations. OMB and Treasury generally agreed with our recommendations.

View [GAO-22-104702](#). For more information, contact Michelle Sager at (202) 512-6806 or sagerm@gao.gov, Paula M. Rascona at (202) 512-9816 or rasconap@gao.gov, or Vijay A. D'Souza at (202) 512-6240 or dsouzav@gao.gov.

November 2021

FEDERAL SPENDING TRANSPARENCY

Opportunities Exist to Further Improve the Information Available on USAspending.gov

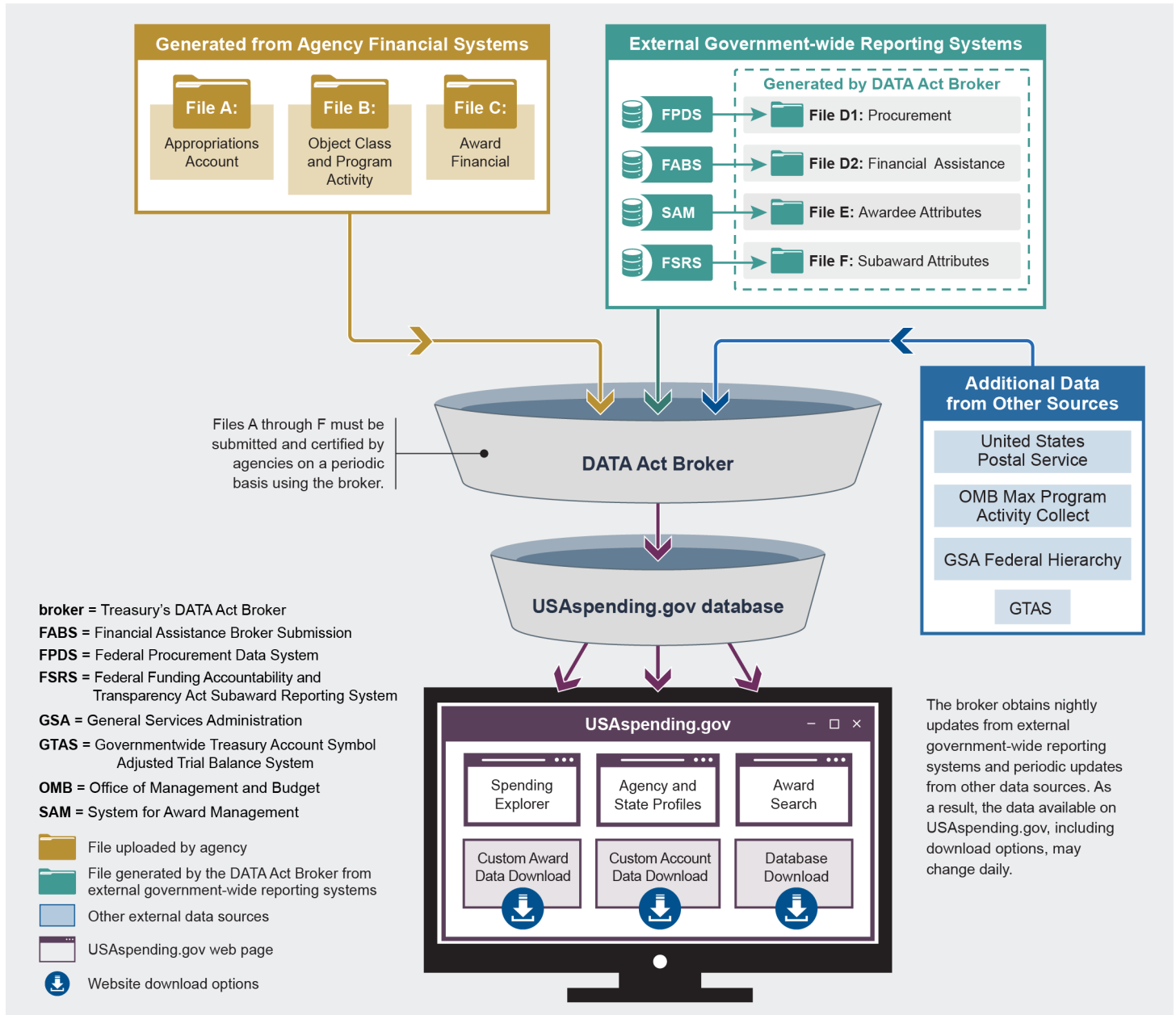
What GAO Found

The Digital Accountability and Transparency Act of 2014 (DATA Act) requires federal agencies to submit spending data for presentation on USAspending.gov. This public-facing website promotes federal spending transparency. Information displayed on USAspending.gov is sourced from agency financial systems and external government-wide reporting systems. GAO found that Treasury took additional steps to disclose known data limitations on USAspending.gov. GAO also identified some opportunities to further enhance the quality of the data displayed on the website and the business application controls that process the data.

- **Timeliness.** Most agencies submitted their data files by the deadlines established by Treasury. For the period ending March 31, 2021, 83 of 101 agencies submitted their data files on time.
- **Completeness.** Of the 101 agencies that submitted data for the period ending March 31, 2021, 19 did not include data in the required file that links budget and award information needed to effectively track federal spending.
- **Accuracy.** Data displayed on selected USAspending.gov web pages were largely consistent with agency-certified data, the USAspending.gov database, data displayed on other USAspending.gov web pages and data available for download. However, Treasury should help ensure that users of the data are able to distinguish whether information on award description describes the purpose of the base award or the purpose of a transaction or modification.
- **Business process controls.** Treasury could strengthen its business process controls to prevent or detect incomplete or inaccurate data displayed on USAspending.gov. For example, Treasury did not have a process to periodically inform agencies of unlinked data to help them reconcile and resolve data linkage differences, and the unique award key did not always result in a complete and accurate display of financial assistance award information.
- **Implementation and use of data standards.** Some data elements displayed on USAspending.gov were inconsistent with the established data standards. For example, agencies were required to report program activity information included in the program and financing schedules of the annual budget of the federal government. However, for the reporting period ending March 31, 2021, GAO found that hundreds of billions of dollars in obligations were reported with a program activity of "Unknown/Other."
- **Disclosure of known data limitations.** Treasury disclosed known data limitations by adding an Agency Submission Statistics web page in response to user feedback requesting greater transparency into the completeness of agency data available on the website. However, Treasury does not disclose the effects of changes to reporting standards over time. In addition, disclosures on the linkage of financial and award information are unclear.
- **Data governance.** Agencies have made progress completing the data governance milestones outlined in the Federal Data Strategy 2020 Action Plan. The Office of Management and Budget (OMB) recently issued the 2021 Action Plan and is considering future efforts to monitor agency progress.

USAspending.gov integrates data from many sources, including data that agencies submit and certify, and data from government-wide reporting systems (see figure). Agencies are required to submit seven data files, sourced from agency financial management systems and government-wide reporting systems, either monthly or quarterly. As seen below, agencies submit these files to Treasury’s DATA Act Broker (broker)—the system that collects and validates agency data—and attest to or certify the accuracy of the seven data files. The broker also obtains award and subaward data and information from government-wide reporting systems each evening to update USAspending.gov. This nightly update process also integrates new agency-certified data files after each monthly or quarterly submission due date. Additional data from other external sources is periodically updated in the broker and reflected on USAspending.gov.

Process Overview and Sources of Data Displayed on USAspending.gov



Contents

Letter		1
	Background	4
	Data Files Submitted by Agencies Were Generally Timely but Sometimes Incomplete, and USAspending.gov Displays of Data Were Largely Consistent	10
	Deficiencies in Business Process Controls for USAspending.gov Increase the Risk of Incomplete and Inaccurate Data	20
	Challenges Remain with the Implementation and Use of Data Standards	23
	Disclosures of Known Data Limitations Increased, but Opportunities Remain for Additional Disclosures	29
	Federal Agencies Made Progress Establishing Data Governance	36
	Conclusions	39
	Recommendations for Executive Action	39
	Agency Comments	41
Appendix I	Objectives, Scope, and Methodology	44
Appendix II	Process Overview, Timing, and Sources of Data Displayed on USA spending	50
Appendix III	Comments from the Department of Treasury	57
Appendix IV	GAO Contacts and Staff Acknowledgments	58
Related GAO Products		59
Table		
	Table 1: Consistency of Information Displayed for Six Selected Award Data Elements Displayed on Individual Award Profile Web Pages with Agency-Certified Data, the USAspending.gov Database, and the Custom Award Data Download (N=120)	15

Figures

Figure 1: Process Overview and Sources of Data Displayed on USAspending.gov	6
Figure 2: Screenshots of Individual Award Profile Web Page on USAspending.gov Showing Complete and Blank Primary Place of Performance Information	17
Figure 3: Screenshot of Individual Award Profile Web Page with Base Award Description and Transaction Award Descriptions	18
Figure 4: Example of an Inaccurate Display of a Financial Assistance Award	22
Figure 5: Screenshot of an Unlinked Award's Individual Award Web Page on USAspending.gov	32
Figure 6: Screenshot of Agency Submission Statistics Web Page with Counts of Unlinked Awards on USAspending.gov	34
Figure 7: Process Overview and Sources of Data Displayed on USAspending.gov	52

Abbreviations

API	application programming interface
broker	Treasury's DATA Act Broker
CDO	Chief Data Officer
CDO Council	Federal Chief Data Officers Council
CFO Act	Chief Financial Officers Act of 1990
COVID-19	Coronavirus Disease 2019
DAIMS	<i>DATA Act Information Model Schema</i>
DATA Act	Digital Accountability and Transparency Act of 2014
FABS	Financial Assistance Broker Submission
FFATA	Federal Funding Accountability and Transparency Act of 2006
FISCAM	<i>Federal Information System Controls Audit Manual</i>
FPDS	Federal Procurement Data System
GTAS	Governmentwide Treasury Account Symbol Adjusted Trial Balance System
GSA	General Services Administration
IDD	Interface Definition Document
NIST	National Institute of Standards and Technology
OIG	Office of Inspector General
OMB	Office of Management and Budget
OPEN Government	Open, Public, Electronic and Necessary Government Data Act
Data Act	
SAM	System for Award Management
SAO	senior accountable official
Treasury	Department of the Treasury

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

November 8, 2021

Congressional Addressees

The Digital Accountability and Transparency Act of 2014 (DATA Act) expanded 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.¹ The DATA Act also calls for improving the quality of data submitted to USAspending.gov—a public-facing website and source of spending data for the federal government—by holding federal agencies accountable for the completeness and accuracy of the data submitted.

Federal agencies continue to refine their implementation efforts more than 7 years after the enactment of the DATA Act. The Office of Management and Budget (OMB) and the Department of the Treasury (Treasury) established a set of data standards to enable consistent reporting, tracking, and display of federal spending data on USAspending.gov. OMB and Treasury have continued to publish guidance to facilitate the use of these standards and improve the quality and scope of federal spending data made available to the public. Treasury also developed new website features and data displays for USAspending.gov that make use of newly collected data and increase the amount of information available to users.

Since its enactment in 2014, we have actively monitored the implementation of the DATA Act, and have issued a series of reports and numerous recommendations.² The DATA Act contains a provision that we

¹Pub. L. No. 113-101, 128 Stat. 1146 (2014). Enacted on 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 (2006), *codified at* 31 U.S.C. § 6101 note. We refer to language added to FFATA by the DATA Act as DATA Act requirements. On September 24, 2021, Congress passed and the President signed into law the Congressional Budget Justification Transparency Act of 2021 amending FFATA to require the budget justifications and appropriation requests of agencies be made publicly available. Pub. L. No. 117-40, 135 Stat. 337 (2021), *codified at* 31 U.S.C. § 6101 note.

²These reports and recommendations covered a range of issues regarding the quality of the data displayed on USAspending.gov and the need to more fully disclose known issues and limitations. For more information, see the Related GAO Products list at the end of this report.

report in 2017, 2019, and 2021 on the completeness, timeliness, quality, and accuracy of the data, as well as the implementation and use of data standards.³ This is our third assessment of the quality of data that agencies are required to report pursuant to the DATA Act.⁴ For this assessment, we define quality as encompassing timeliness, completeness, and accuracy. This report examines (1) the timeliness, completeness, and accuracy of the data displayed on USAspending.gov; (2) the business process controls over the completeness and accuracy of data received, processed, and displayed on USAspending.gov; (3) the implementation and use of data standards; (4) the disclosure of known data quality limitations; and (5) the status of agency efforts to develop a data governance structure over DATA Act reporting.

To assess the timeliness, completeness, and accuracy of the data displayed on USAspending.gov, we compared the data displayed on selected USAspending.gov web pages to (1) agencies' certified data—submitted to Treasury either monthly or quarterly; (2) data from other external sources, such as the Governmentwide Treasury Account Symbol Adjusted Trial Balance System; (3) the USAspending.gov database; and (4) data obtained through the website's Custom Account and Custom Award Data Download web pages.⁵

To determine the effectiveness of Treasury's business process controls for USAspending.gov, we evaluated relevant automated functions to help ensure the validity, timeliness, completeness, and accuracy of data during processing and output. To do this, we reviewed applicable Treasury documentation, system inventories, processes, and functions and interviewed agency officials. We based our evaluation on guidance within our *Federal Information System Controls Audit Manual* (FISCAM).⁶

³Pub. L. No. 113-101, § 3, 128 Stat. at 1151.

⁴See GAO, *DATA Act: Quality of Data Submissions Has Improved but Further Action Is Needed to Disclose Known Data Limitations*, [GAO-20-75](#) (Washington, D.C.: Nov. 8, 2019); and *DATA Act: OMB, Treasury, and Agencies Need to Improve Completeness and Accuracy of Spending Data and Disclose Limitations*, [GAO-18-138](#), (Washington, D.C.: Nov. 8, 2017).

⁵The USAspending.gov database is used to populate data displayed on USAspending.gov.

⁶GAO, *Federal Information System Controls Audit Manual* (FISCAM), [GAO-09-232G](#) (Washington, D.C.: Feb. 2009), contains the guidance for reviewing information system controls that affect the confidentiality, integrity, and availability of information and information systems.

To assess the implementation and use of data standards, we determined whether the values for selected data elements were consistent with data standards, schema, and validation rules that OMB and Treasury established. We also reviewed program activity information that agencies reported and determined whether it was consistent with OMB and Treasury guidance for that data element.

To assess the disclosure of known data quality limitations, we reviewed USAspending.gov and Treasury documentation made available to the public for information explaining inconsistencies or limitations to the data we tested. We also examined information Treasury made available to public users about linkages, including the Agency Submission Statistics web page and its Data Sources and Methodology web page. In addition, we interviewed Treasury officials about the information presented on the Agency Submission Statistics web page.

To describe the current status of agencies' progress in developing a data governance structure over DATA Act reporting, we reviewed relevant laws and guidance to identify requirements and milestones for federal agencies to establish data governance. We also reviewed the Federal Data Strategy and the 2020 Action Plan Progress dashboard used to track agency data governance progress and related supplemental documentation.⁷ We interviewed OMB staff to understand plans for continued tracking of agency progress in reaching data governance milestones. Additional details regarding our objectives, scope, and methodology are provided in appendix I.

We conducted this performance audit from January 2021 to November 2021 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.

⁷The Federal Data Strategy 2020 Action Plan Progress dashboard is available at: <https://strategy.data.gov/progress/#milestones>.

Background

The DATA Act

Congress enacted and the President signed the DATA Act into law in part to improve accountability and transparency of federal spending data.⁸ Among other things, one of the purposes of the DATA Act is to accurately display consistent, reliable, and searchable government-wide spending data on USAspending.gov. It requires federal agency expenditures to be disclosed and agency spending information to be linked to federal program activities so that policymakers and the public can more effectively track federal spending. The DATA Act expands on previous federal transparency legislation. It requires disclosing a greater variety of data related to federal spending by agencies, such as budget and financial information. The act gives OMB and Treasury responsibility for establishing government-wide financial data standards for reporting all federal funds made available to, or expended by, federal agencies and entities receiving federal funds.⁹

As OMB and Treasury implemented the DATA Act's requirement to create and apply data standards, they divided the overall data standardization effort into two distinct, but related, components: (1) establishing definitions that describe what is to be included in each data element with the aim of ensuring that information will be consistent, comparable and aligned with regulation and policy; and (2) creating a data exchange standard with technical specifications that describe the format, structure, tagging, and transmission of each data element.

OMB took principal responsibility for developing policies and establishing data definitions. Treasury took principal responsibility for the technical standards that express these definitions as part of the *DATA Act Information Model Schema* (DAIMS), which federal agencies use to report spending data for publication on USAspending.gov. Under the act, agencies are required to submit complete and accurate data to

⁸Pub. L. No. 113-101, § 2, 128 Stat. at 1146-1148.

⁹The 57 government-wide data standards established by OMB and Treasury pursuant to the DATA Act can be found at: <https://portal.max.gov/portal/assets/public/offm/DataStandardsFinal.htm>. Two additional data elements—the *National Interest Action Code* and *Disaster Emergency Fund Code*—are significant in promoting full and transparent reporting of spending related to Coronavirus Disease 2019 (COVID-19) and will be tested by inspectors general under the DATA Act.

USAspending.gov. Also, agency-reported award and financial information is required to comply with the data standards that OMB and Treasury established.

Furthermore, to meet the purpose of the DATA Act that federal spending information be linked, OMB guidance requires agencies to include specific fields in their data submitted to USAspending.gov so that account-level data, including obligations and outlays, can be linked to award-level data for publication.¹⁰ Whether a given award is linked or unlinked to its corresponding account-level data affects how much information about the award displays on USAspending.gov.

Process Overview and Sources of Data Available on USAspending.gov

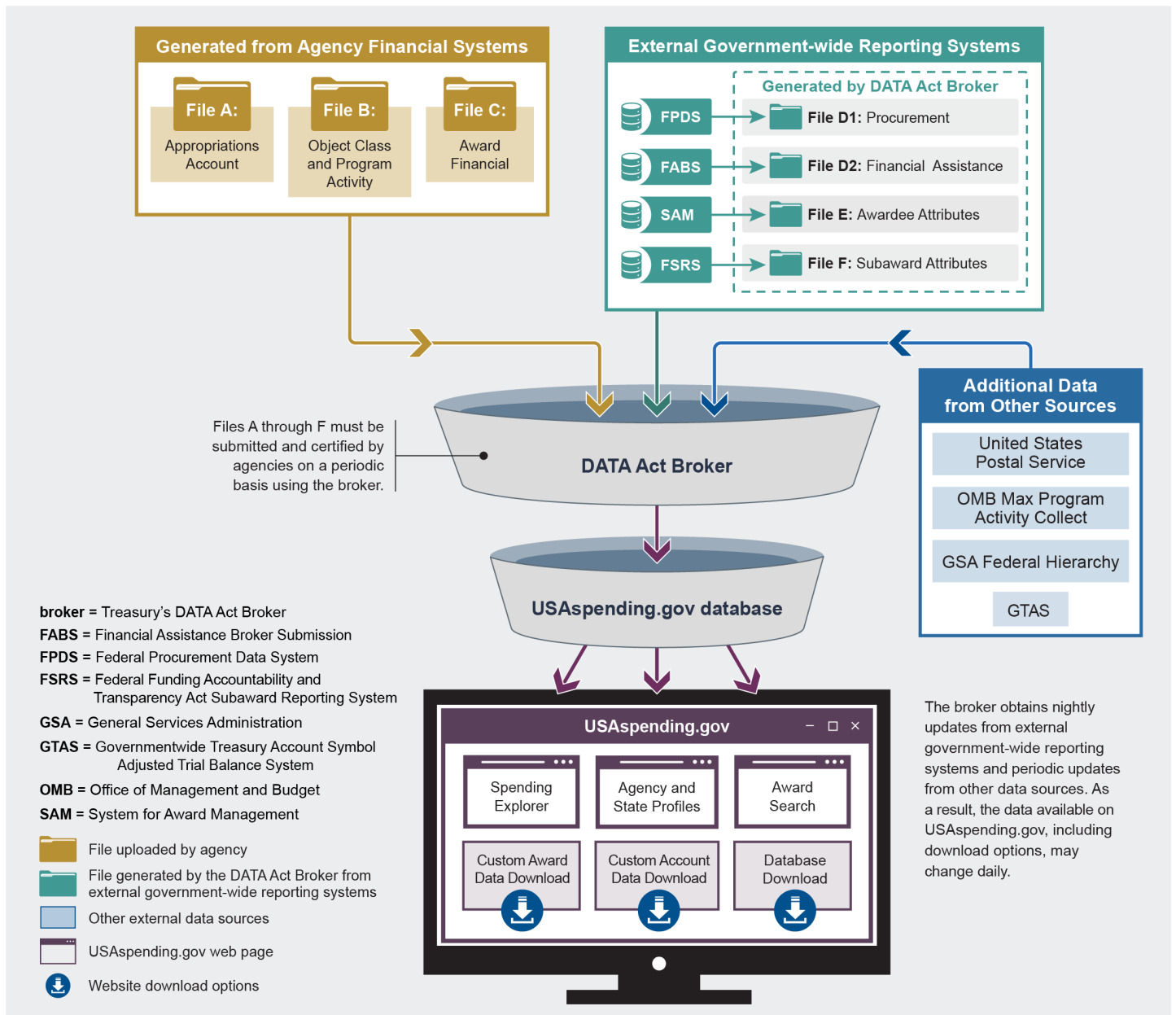
USAspending.gov integrates data from many sources, including data that agencies submit and certify and data from external government-wide reporting systems. Agencies are required to submit seven data files, sourced from agency financial management systems (Files A, B, and C) and external government-wide reporting systems (Files D1, D2, E, and F), either monthly or quarterly.¹¹ Treasury officials told us that certain derived data elements are added to the data pulled from external government-wide reporting systems as part of the file submission process. As seen in figure 1, agencies submit these files to Treasury’s DATA Act Broker (broker)—the system that collects and validates agency data—and agency senior accountable officials (SAO) attest to or certify the accuracy of the seven data files.¹² We use “agency-certified data” to refer to data that SAOs have attested to or certified as valid and reliable for use on USAspending.gov.

¹⁰Office of Management and Budget, *Appendix A to OMB Circular A-123, Management of Reporting and Data Integrity Risk*, OMB Memorandum M-18-16 (Washington, D.C.: June 6, 2018).

¹¹Office of Management and Budget, *Additional Guidance for DATA Act Implementation: Further Requirements for Reporting and Assuring Data Reliability*, OMB Memorandum M-17-04 (Washington, D.C.: Nov. 4, 2016). In April 2020, OMB changed the cadence of reporting requirements, with new deadlines introduced in two phases. In the first phase, beginning in period 9 (June) of fiscal year 2020, agencies that received COVID-19 supplemental funding were required to submit Files A, B, and C monthly. In phase two, quarterly submissions will shift to monthly submissions for all agencies beginning in quarter 1 of fiscal year 2022. Office of Management and Budget, *Implementation Guidance for Supplemental Funding Provided in Response to the Coronavirus Disease 2019 (COVID-19)*, OMB Memorandum M-20-21 (Washington, D.C.: Apr. 10, 2020). Appendix II contains a description of the seven files required for agency submissions.

¹²Monthly submissions of Files A, B, and C, must be attested to by the SAO or financial representative designee for COVID-19-related funding.

Figure 1: Process Overview and Sources of Data Displayed on USAspending.gov



Source: GAO analysis of USAspending.gov. | GAO-22-104702

Definition of Terms Used on USAspending.gov

Award – Funding for contracts, grants, loans, insurance, and direct payments.

Federal account – Refers to the set of Treasury spending accounts that are grouped under a given “Federal Account Symbol” identified on USAspending.gov by agency identifier and Main Account code.

Budgetary resources – Amounts available to incur obligations in a given year. Budgetary resources consist of new budget authority and unobligated balances of budget authority provided in recent years.

Obligation – A legally binding agreement that will result in outlays, immediately or in the future. An agency incurs an obligation, for example, when it places an order, signs a contract, awards a grant, or purchases a service.

Outlays – Payments made to liquidate an obligation.

Object class – A way to classify obligations by the type of goods or services purchased (such as personnel compensation, supplies and materials, and equipment).

Budget function – Categories in the federal budget that organize federal spending into topics based on the major purpose the spending serves, for example, National Defense, Transportation, and Health.

Source: USAspending.gov and GAO. | GAO-22-104702

As depicted in figure 1, the broker also obtains award and subaward data and information from external government-wide reporting systems on a nightly basis to update USAspending.gov. This nightly update process also integrates new agency-certified data files after each monthly or quarterly submission due date. Additional data from other external sources is periodically updated in the broker and reflected on USAspending.gov. As we have previously reported, according to Treasury officials, a series of computer program instructions or scripts transfer and map the data in the broker to the USAspending.gov database, the central source for information on the website. According to Treasury officials, it takes 1 day for agency-certified data and data published in the Financial Assistance Broker Submission to be incorporated into USAspending.gov, and 2 days for USAspending.gov to reflect data published in other external government-wide reporting systems. For a more detailed discussion of the sources, timing, and processes for displaying data on USAspending.gov, see appendix II.

USAspending.gov integrates agency-certified data and data available in external government-wide reporting systems into displays and data available for download. Some of the different web pages and tools for exploring federal spending data include the following:

- **Individual Award Profile** web pages display information about the award recipient, the awarding agency, the award amount, an award description, the relevant federal accounts, any related subawards, and individual transactions for the award over time.
- **Agency Profile** web pages display information about the agency’s budgetary resources, obligations, and outlays, and provide a breakdown of the agency’s obligations by object class and federal account.
- **State Profile** web pages display the total amount of federal awards made to states and information on the award types, awarding federal agencies, and award recipients in the states.
- **Spending Explorer** web page enables users to explore federal spending by budget function, agency, or object class.
- **Advanced Award Search** tool allows users to search for federal awards meeting designated criteria, such as when the contract or grant was awarded, the location where federal money was spent, and other award or recipient characteristics.
- **Custom Award Data Download** tool allows users to download detailed prime and subaward data for both procurement and financial

assistance awards. Users can search awards by type, agency and subagency, location, and date range.

- **Custom Account Data Download** tool allows users to download account information for all spending data for a range of time periods, including nonaward spending.¹³
- **USAspending.gov Application Programming Interface** tool makes it easy for computer programs to request and receive information from USAspending.gov in a format they can understand.

Business Process Controls Used on USAspending.gov

The reliability of computerized data and of the systems that process, maintain, and report data is a major concern to government entities. Information system controls help reduce the risk of errors, fraud, and other incidents that cause the data or systems to be unavailable. Information system controls include both general and application controls. General controls are the policies and procedures that apply to all or a large segment of an entity's information systems, including security management, access controls, and configuration management. In November 2021, we reported on general controls over USAspending.gov and made 10 recommendations to Treasury in a limited official use only report.¹⁴

Business process application controls, commonly referred to as application controls, are controls to help ensure the completeness, accuracy, validity, confidentiality, and availability of transactions and data during application processing.

Business process controls, a category of application controls, typically cover the structure, policies, and procedures during application processing and operate over individual transactions or activities across business processes. These business process controls include automated controls over transaction data input, processing, and output functions. Transaction data input controls ensure that all data input is performed in a controlled manner and is complete, accurate, and valid; the confidentiality of data is adequately protected; and that incorrect data are identified, rejected, and corrected. Transaction data processing controls ensure the completeness, accuracy, validity, and confidentiality of data as they are processed within the application. Transaction data output controls are

¹³Unlike award data, account data includes spending that is not tied to an award, such as operational costs and employee salaries.

¹⁴GAO, *Federal Spending Transparency: Treasury Should Enhance Security Controls over USAspending.gov*, GAO-22-104428SU (Washington, D.C.: Nov. 5, 2021).

used to ensure that transaction data outputs are complete, accurate, valid, confidential, and distributed timely.

GAO Reports on Data Quality and Data Governance

Since the DATA Act's enactment in 2014, we have issued a series of reports and made recommendations based on our ongoing monitoring of DATA Act implementation.¹⁵ In 2017 and 2019, we issued our first and second reports on data quality.¹⁶ These reports identified significant data quality issues and made recommendations, including that Treasury disclose known data quality issues and limitations on USAspending.gov. In addition, the DATA Act requires us to review federal agencies' Office of Inspector General (OIG) reports. We reported in 2018 and 2020 on our reviews of the OIG reports on the quality of agencies' data.¹⁷ We found that the OIGs reported various levels of data quality and most made recommendations to address issues they identified.

Our prior work examining the quality of federal spending data made available to the public under the DATA Act also identified the need for a data governance structure to ensure the integrity of data standards over time.¹⁸ We recommended that OMB establish a governance structure consistent with key data governance practices. This includes delineating clear roles and responsibilities for decision-making and accountability, and developing policies and procedures for enforcing the consistent use of data standards across the federal government. In response, OMB issued guidance that set out key aspects of the governance process for developing and maintaining interagency data standards. OMB also further clarified how the data standards established under the DATA Act would

¹⁵Open recommendations related to implementation of the DATA Act will be updated as part of our 2022 priority recommendation letter process. To check the current status of DATA Act recommendations, use the links included in the Related GAO Products.

¹⁶[GAO-18-138](#) and [GAO-20-75](#).

¹⁷GAO, *DATA Act: OIGs Reported That Quality of Agency-Submitted Data Varied, and Most Recommended Improvements*, [GAO-20-540](#) (Washington, D.C.: July 9, 2020); and *DATA Act: Reported Quality of Agencies' Spending Data Reviewed by OIGs Varied Because of Government-wide and Agency Issues*, [GAO-18-546](#) (Washington, D.C.: July 23, 2018).

¹⁸Data governance is the framework or structure for ensuring that an agency's data assets are transparent, accessible, and of sufficient quality to support its mission; improve the efficiency and effectiveness of agency operations; and provide useful information to the public. Effective data governance practices help agencies maintain and improve the quality and transparency of federal government data. See GAO, *DATA Act: OMB Needs to Formalize Data Governance for Reporting Federal Spending*, [GAO-19-284](#) (Washington, D.C.: Mar. 22, 2019).

be governed. In December 2020, we reported on the status of agencies' progress in establishing data governance over DATA Act reporting. We recommended that the selected agencies develop their data governance structures further.¹⁹

Data Files Submitted by Agencies Were Generally Timely but Sometimes Incomplete, and USAspending.gov Displays of Data Were Largely Consistent

Most agencies submitted and certified their data files by the Treasury-established deadlines. However, not all of the files contained agencies' data. Also, some agencies disclosed in comments accompanying their submissions that certain spending data were not reported to USAspending.gov. In addition, while data displayed on USAspending.gov web pages were largely consistent with agency-certified data submissions or with the USAspending.gov database, we found some instances where information displayed on the website may differ from the information submitted by agencies.

Most Agencies Submitted Their Data on Time

For the period ending March 31, 2021, 83 of 101 agencies submitted their data on time. Specifically, of the 44 agencies that submitted data quarterly, 42 submitted and certified their data files on time. Two agencies submitted and certified their data after the deadline. Of the 57 agencies that submitted their data monthly, 41 submitted their data on time, and 16 submitted their data after the submission deadline. In addition, 50 of the 57 agencies certified their data on time, while seven agencies certified their data after the deadline.

Agencies were subject to varied deadlines based on whether they received Coronavirus Disease 2019 (COVID-19) relief funding. Specifically, effective for the June 2020 reporting period, OMB required agencies that received COVID-19 relief funding to submit their data monthly, instead of quarterly.²⁰ Regardless of whether an agency submits data monthly or quarterly, OMB requires that an agency SAO certify certain agency-submitted data each quarter—that is, provide assurance that the linkages among the files are valid and reliable and that the

¹⁹GAO, *Data Governance: Agencies Made Progress in Establishing Governance, but Need to Address Key Milestones*, [GAO-21-152](#) (Washington, D.C.: Dec. 16, 2020).

²⁰OMB M-20-21.

agency's internal controls support the reliability and validity of the data.²¹ The submission due date for agencies that submitted monthly was April 29, 2021; agencies were to certify these submissions by May 17, 2021. For agencies that submitted quarterly, the submission and certification due date was May 17, 2021. Starting in fiscal year 2022, all agencies that report under the DATA Act will be required to submit Files A, B, and C monthly.

More Agencies Submitted Data than in Prior Years, but Some Did Not Report All Spending Data

Completeness of data on USAspending.gov is, in part, determined by the number of agencies that submit DATA Act files and whether those files contain data. We reviewed agencies' DATA Act file submissions for the reporting periods ending March 31, 2021, and determined that 101 agencies submitted data files. This number is slightly higher than what we found in our prior reviews. In November 2019, we reported that 96 agencies had submitted data files for the period we reviewed.²² In November 2017, we reported that 78 agencies had submitted data files that covered data for 91 federal entities, including smaller units such as commissions, boards, and foundations.²³

File C data are important to oversight and transparency because they link budget data to the relevant award data, as required by the DATA Act.²⁴ For the reporting periods ending March 31, 2021, 19 of 101 agencies submitted the file that is to link budget and award information (i.e., File C), and 30 agencies submitted the file that is to contain procurement data (i.e., File D1) with no data in it.²⁵ Similarly, in November 2019, we reported that 17 of the 96 agencies that submitted data submitted a blank File C, and 34 agencies submitted a blank File D1.²⁶ We did not follow up with agencies during this review, but in November 2019 we reported that agencies told us reasons for blank files could include (1) an agency's data was submitted and comingled with their shared service provider's submission, (2) they did not have award activity to report or award activity was below the micro-purchase threshold for reporting, and (3) they do not

²¹OMB M-17-04.

²²[GAO-20-75](#).

²³[GAO-18-138](#).

²⁴Pub. L. No. 113-101, §§ 2(1), 3(2), 128 Stat. at 1146, 1148.

²⁵Of the 19 agencies that submitted a blank File C, one submitted a File D1 with data in it.

²⁶[GAO-20-75](#).

use FPDS or their systems were unable to produce the data necessary to create the files.²⁷ Submitting Files C or D1 without data prevents linkage of budget and award data that may be needed by policymakers and the public to effectively track federal spending.

For the period ending March 31, 2021, USAspending.gov displayed an estimated “unreported data” amount of about \$11.1 billion in obligations, which accounted for about 0.22 percent of the obligations reported for that period. According to USAspending.gov, data are considered unreported when an agency reports incomplete data, has a submission deadline extension, or is not required to submit certain data elements. In addition, according to USAspending.gov, unreported data also includes several accounts that represent a small percentage of overall federal spending that do not report to Treasury but are included in the President’s budget, and new agency submission updates that may still be in progress. The unreported data amount represents the difference between the total obligated amount reported by agencies in the Report on Budget Execution and Budgetary Resources (excluding financing accounts) and the total obligated amounts that agencies reported to USAspending.gov in File B.

Further, some agencies reported in comments accompanying their data submissions that certain data were not reported. For example:

- One agency reported that it did not provide a File C for three programs because of system limitations.
- Another agency reported that one of its components was unable to submit COVID-19 outlays, and the agency was working to fix this issue.
- A third agency reported that the total outlays for 25 awards were not included in File C for the current submission. This agency added that it is reviewing the awards and will work to include them in future submissions.

²⁷[GAO-20-75](#).

Selected Award Data Displayed on USAspending.gov Were Largely Consistent with Agency Submissions, Custom Data Downloads, and Selected USAspending.gov Web Pages

One of the purposes of the DATA Act is to provide consistent, reliable, and searchable government-wide spending data that are displayed accurately for taxpayers and policymakers on USAspending.gov.²⁸ We found that while selected data displayed on the website was largely consistent with the data submitted by agencies, some data that agencies submitted differed from the data displayed on certain USAspending.gov web pages.

Accuracy of USAspending.gov Display of Financial Data

For the period ending March 31, 2021, we found that selected financial data—specifically, obligation amounts—displayed on USAspending.gov were not always consistent with the data that agencies submitted, data in the Custom Account Data Downloads, and data in the Governmentwide Treasury Account Symbol Adjusted Trial Balance System (GTAS). We reviewed obligation amounts for 93 agencies and found that amounts the agencies submitted were not always consistent across all sources. For example, the total amount of obligations submitted by these 93 agencies in their File A differed from the total amount in their Agency Profile pages by about 0.2 percent, and differed from the amounts in GTAS by about 0.5 percent.

Obligation amounts displayed on USAspending.gov come from agency file submissions, including from File A and File B. The web pages that display high-level spending, including sections of the Agency Profile web pages, use obligation data from File A. Those that break spending down into program activities or object classes, such as Spending Explorer web pages, use obligation data from File B. The obligation amounts reported by the 93 agencies in their File A differed from the amounts reported in their File B by about 0.5 percent.

When agencies submit their data, the broker will provide warnings when File A and File B data do not match. Treasury discloses differences, if any, between obligations reported in Files A and B for each agency and submission period on the Agency Submission Statistics web page on USAspending.gov. Treasury created the Agency Submission Statistics web page in May 2021 in response to user feedback requesting greater transparency into the completeness of agency data available on

²⁸Pub. L. No. 113-101, § 2(2), 128 Stat. at 1146.

USAspending.gov. Agencies can explain the discrepancies in their comments that accompany their submissions.

Spending Explorer web pages allow users to explore federal spending by budget function, agency, or object class. We found that the net amount of obligations for the 93 agencies on both the Spending Explorer—Agency web page and the net amount displayed on the Spending Explorer—Object class web page nearly matched the net amounts in the agencies' File B submissions.

Accuracy of USAspending.gov Display of Award Data

In addition to examining the accuracy of USAspending.gov displays of obligation information, we also examined the extent to which the award data displayed on State Profile and Individual Award Profile web pages were consistent with the following sources: agency-certified data submissions, the USAspending.gov database, and the Custom Award Data Download. While most information displayed on the website was largely consistent with these sources, we identified inconsistencies in the data displayed on the website for some award data elements.²⁹

State Profile Web Pages. These profile web pages display selected information on federal spending by individual state. We examined how USAspending.gov aggregates data for display on its web pages, such as the total number of awards made to each state on the State Profile web pages for the same period. In this analysis, we were unable to produce the same results from the relevant source as that displayed on the State Profile web pages. According to agency officials, Treasury does not provide guidance for replicating these values on USAspending.gov because the data change each day and Treasury would need to update its documentation to reflect these changes. It was beyond the scope of this review to fully explore these inconsistencies and the potential underlying causes.

Individual Award Profile Web Pages. The Individual Award Profile web pages display selected information about individual awards that users can search for using a unique award identifier. We examined the accuracy of seven selected data elements for a non-generalizable sample of 120 awards displayed on the Individual Award Profile web pages. We compared the displayed values with agency-certified data, the

²⁹We compared the values for selected data elements as displayed on the State Profile and Individual Award Profile web pages to the values for the same data elements in agency-certified data for fiscal year 2021 through the end of quarter 2.

USAspending.gov database, and data available through the Custom Award Data Download (see table 1).³⁰

Table 1: Consistency of Information Displayed for Six Selected Award Data Elements Displayed on Individual Award Profile Web Pages with Agency-Certified Data, the USAspending.gov Database, and the Custom Award Data Download (N=120)

Data element	Number of awards displaying information consistent with agency-certified data	Number of awards displaying information consistent with USAspending.gov database	Number of awards displaying information consistent with Custom Award Data Download
Awarding Agency Name	120	120	120
North American Industrial Classification System Code	120	120	120
Catalog of Federal Domestic Assistance Program Number	120	120	120
Recipient Name	120	120	120
Primary Place of Performance – State	112	119	113
Primary Place of Performance – Congressional District	112	112	112

Source: GAO analysis of selected information displayed on USAspending.gov, agency-certified data, the USAspending.gov database, and the Custom Award Data Download. | GAO-22-104702

Note: The USAspending.gov database is used to populate data displayed on USAspending.gov. We compared selected data from the Individual Profile web pages with a snapshot of data from agency-certified data, the USAspending.gov database, and the Custom Award Data Download as of March 31, 2021.

As illustrated in table 1, we found that the information for selected data elements displayed on the Individual Award Profile web pages was largely consistent with agency-certified data, the USAspending.gov database, and the Custom Award Data Download for four of the six data

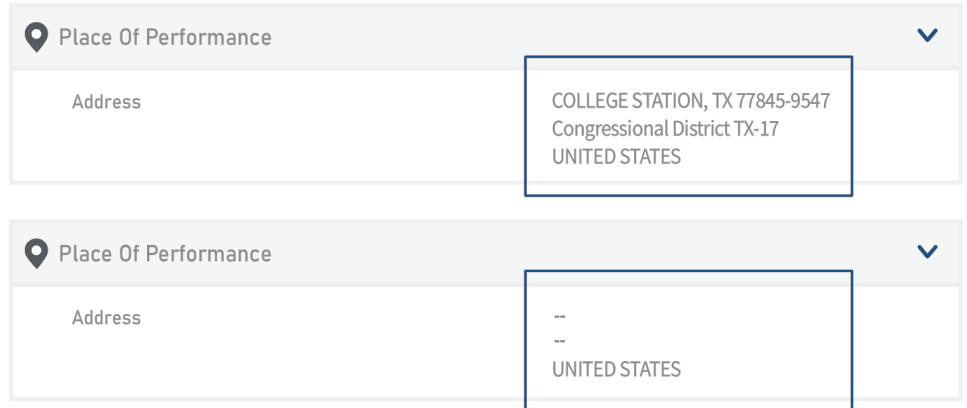
³⁰Using agency-certified data for the submission period ending March 31, we selected the five highest dollar value awards for each of the 24 Chief Financial Officers Act of 1990 (CFO Act) agencies, for a total of 120 selected awards. We selected seven data elements that were consistently available on Individual Award Profile web pages: *Awarding Agency Name*, *Recipient Name*, *Award Description*, *Primary Place of Performance – State*, *Primary Place of Performance – Congressional District*, *Catalog of Federal Domestic Assistance Program Name*, and *North American Industrial Classification System Code*. We then compared the values for these data elements in the agency-certified data to the values displayed on each award’s Individual Award Profile web page. The results of our review of a selection of 120 awards are not representative of all awards, but they provide examples of the discrepancies between agency-submitted data and what is displayed on USAspending.gov, across different parts of the website, and with data standards. The CFO Act, Pub. L. No. 101-576, 104 Stat. 2838 (1990), among other things, established chief financial officer positions at major federal entities. The current list of 24 included entities, commonly referred to as CFO Act agencies, is *codified at* section 901 of title 31, United States Code. The 24 CFO Act agencies submit data monthly. We used the agency-certified data for period 6, which contained data for March 1, 2021 through March 31, 2021.

elements we examined. The *Awarding Agency Name*, *North American Industrial Classification System Code*, *Catalog of Federal Domestic Assistance Program Number*, and *Recipient Name* was consistent across all sources. We identified specific causes for the inconsistencies for the remaining two data elements.

Primary Place of Performance – State. We found the value of *Primary Place of Performance – State* displayed on Individual Award Profile web pages was consistent with agency-certified data for 112 of the 120 awards we examined. We compared the value for *Primary Place of Performance - State* to the USAspending.gov database and found all but one value for this element was consistent. For some of the awards we examined, the Individual Award Profile web pages displayed a blank value for *Primary Place of Performance – State* while the agency-certified data contained a value of “multi-state” for the same award. Treasury officials informed us that, while the data to populate these fields accurately are available, the data were not displaying properly due to a problem with the display code. They have submitted a development request ticket to resolve the issue.

Primary Place of Performance – Congressional District. We found the value of *Primary Place of Performance – Congressional District* was consistent with agency-certified data, the USAspending.gov database, and the Custom Award Data Download for 112 of the 120 awards we examined. However, for some awards we examined, the Individual Award Profile web pages displayed a blank value for *Primary Place of Performance – Congressional District*, while the agency-certified data and USAspending.gov database contained a value of “90” that is used when an award covers multiple congressional districts (see figure 2). Treasury officials informed us that, while the data to populate these fields accurately are available, the data were not displaying properly due to a problem with the display code. They have submitted a development request ticket to resolve the issue.

Figure 2: Screenshots of Individual Award Profile Web Page on USAspending.gov Showing Complete and Blank Primary Place of Performance Information



Source: USAspending.gov. | GAO-22-104702

In addition to the six data elements reviewed in table 1, we also examined the values for *Award Description* for the 120 selected awards. We found that values for *Award Description* displayed on Individual Award Profile web pages were consistent with agency-certified data for only 74 out of the 120 awards we examined. We obtained similar results with comparisons made to the descriptions listed in the USAspending.gov database and the Custom Award Data Download. According to Treasury officials, the *Award Description* displayed on an Individual Award Profile web page reflects the description of the award associated with the originating (base) award transaction. These officials told us that under the Federal Funding Accountability and Transparency Act of 2006 (FFATA), agencies are required to provide a description of the reason for an award modification. Thus, when agencies submit subsequent transactions or modifications to that award, the *Award Description* is likely to reflect the description of the transaction or modification rather than the description of the base award.

As illustrated in figure 3, the displayed value for *Award Description* comes from the base award. Transactions and modifications to the base award can have their own descriptions, which may differ from the description of the base award. Treasury discloses this to users through a pop-up box that appears when users hover over the information icon next to the Description field.

Figure 3: Screenshot of Individual Award Profile Web Page with Base Award Description and Transaction Award Descriptions

The screenshot displays the Individual Award Profile Web Page with several key sections highlighted by callouts:

- Base award description:** A callout box points to the 'Description' field in the 'Award Amounts' section, which contains the text: "FY 2021 ASSESSED CONTRIBUTION FOR THE CY 2020 UN REGULAR BUDGET." The award amount is \$493.1 M.
- Transaction descriptions:** A callout box points to the 'Description' field in the 'Transaction History' table, which lists four transactions with descriptions: "FY 2021 ASSESSED CONTRIBUTION FOR THE CY 2020 UN REG...", "ADDITIONAL PAYMENT FOR CY 2020", "ANOTHER PAYMENT FOR CY 2020.", and "ADDITIONAL FUNDS THE THE NEXT PAYMENT FOR CY 2020.".

The background interface includes the following sections:

- Award Amounts:** Shows \$493.1 M Obligated Amount and \$493.1 M Total Funding.
- Description:** Displays the base award description.
- Transaction History:** A table with columns: Modification Number, CFDA Number, Action Date, Amount, Action Type, and Description.
- Federal Accounts:** Shows a summary of all federal accounts used by this award, including Total Funding Obligated (\$493,058,685.00) and Total Count of Funding Agencies (1).

Modification Number	CFDA Number	Action Date	Amount	Action Type	Description
001	19.700	11/05/2020	\$175,000,000	A: New	FY 2021 ASSESSED CONTRIBUTION FOR THE CY 2020 UN REG...
002	19.700	12/18/2020	\$175,000,000	C: Revision	ADDITIONAL PAYMENT FOR CY 2020
003	19.700	03/01/2021	\$100,000,000	C: Revision	ANOTHER PAYMENT FOR CY 2020.
004	19.700	04/26/2021	\$43,058,685	C: Revision	ADDITIONAL FUNDS THE THE NEXT PAYMENT FOR CY 2020.

Source: GAO analysis of USAspending.gov. | GAO-22-104702

Both the base award description and transaction or modification description use the same *Award Description* data element field. Thus, it is sometimes unclear whether the value displayed in agency-certified data, the USAspending.gov database, and the Custom Award Data Download

describes the base award or a subsequent transaction or modification to the base award. As a result, users may obtain a different value for *Award Description* depending on how and where they access the information on USAspending.gov.

The DATA Act requires OMB and Treasury to establish data standards that, among other things, produce consistent and comparable data. The act also requires OMB and Treasury to ensure that the data standards established under the act are applied to the data made available on USAspending.gov.³¹ Moreover, Treasury's *Information Quality Guidelines* state that, when disseminating information to the public, information should be presented within the proper context to disseminate information in an accurate, clear, complete, and unbiased manner.³²

Agencies using one data element field for two separate but related purposes may affect a user's ability to understand the information being presented, and limit the comparability of these data over time. Treasury could reduce this effect by providing additional information about the award in agency-certified data, the USAspending.gov database, and the Custom Award Data Download. For example, Treasury could add a data element for award transaction or modification descriptions so that users could view information describing both the purpose of the award and the reason for any modification transactions to the award. Alternatively, Treasury could add a data element that distinguishes whether an entry in agency-certified data, the USAspending.gov database, and the Custom Award Data Download is a base award or a subsequent transaction or modification. This would inform the user whether to expect the base award description or a modification description in the *Award Description* data element field. Without clearly distinguishing whether the description of the base award or a subsequent transaction or modification to the award is displayed, users may inadvertently draw inaccurate information or conclusions from the data or may choose not to rely on the data.

³¹Pub. L. No. 113-101, §§ 2(2), 3(1) 128 Stat. at 1146, 1149.

³²Treasury's *Information Quality Guidelines* can be found at <https://home.treasury.gov/department-of-the-treasury-information-quality-guidelines>. Accessed September 28, 2021.

**Deficiencies in
Business Process
Controls for
USAspending.gov
Increase the Risk of
Incomplete and
Inaccurate Data**

We identified two opportunities for Treasury to strengthen its business process controls to support the completeness and accuracy of its data processing and data output functions.³³

**USAspending.gov
Database Included
Unlinked Award Data**

To present and link financial and award information on USAspending.gov, Treasury extracts data from various sources and has implemented certain file validations to help ensure the completeness and accuracy of the data. However, we identified over 5 million unlinked records in the USAspending.gov database that contain financial and award information. As a result, the USAspending.gov database used to generate the website's display includes incomplete and inaccurate data. According to Treasury officials, most of the unlinked data we found were the result of agencies submitting data that did not contain the correct or necessary data elements to establish the linkage between financial and award data from external government-wide reporting systems (e.g., FABS and FPDS). At the time of the submission, the broker notifies agencies about unlinked data in their files. However, after the original submission, there is no routine or periodic process to inform the agencies that unlinked data remains unresolved.

National Institute of Standards and Technology (NIST) guidance recommends that agencies configure their information systems to check the validity of organization-defined information inputs, including the validity of syntax and semantics of information system inputs (e.g., character set, length, numerical range, and acceptable values). The guidance also recommends that agencies verify that inputs match

³³Data processing is defined as the computerized preparation of documents and the flow of data contained in these documents through the major steps of recording, classifying, and summarizing. Data output is defined as data or information produced through computer processing, such as graphic display on a terminal or hard copy.

specified definitions for format and content to ensure accurate and correct inputs to the information system.³⁴

The information in the USAspending.gov database used to populate the website could be more complete and accurate by reconciling the data from external government-wide reporting systems (e.g., FABS and FPDS) with the data that the application processes from agency submissions.

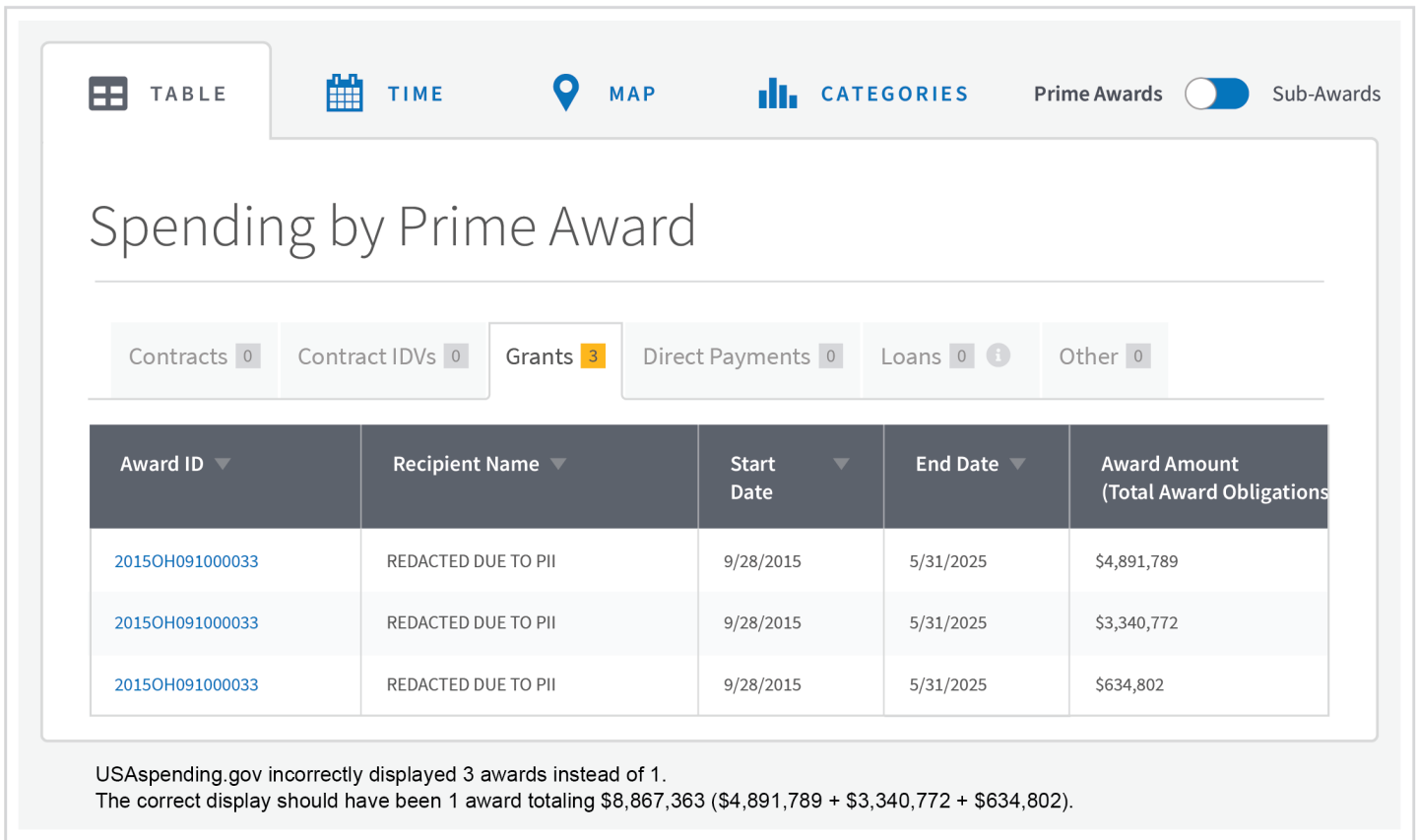
Design of Unique Award Keys Resulted in Incomplete and Inaccurate Display

Treasury uses a unique award key to link and display financial assistance award data with related financial information on USAspending.gov. The unique award key for financial assistance awards is a combination of the type of award (i.e., aggregate or nonaggregate), the award ID, and the awarding subtier agency code. However, the awarding subtier agency code is not an appropriate field to use as part of the unique award key because, according to OMB staff, multiple subtier agencies may be associated with a single award.

USAspending.gov incorrectly displayed information for some financial assistance awards that had more than one awarding subtier agency involved as if they were multiple awards. Specifically, it displayed an overstated number of awards, fragmented the total dollar amount of awards, and displayed incomplete award and financial information for some financial assistance awards. For example, as shown in figure 4, the data displayed on the Award Search web page for an award incorrectly returns what appears to be three different grant awards that should have been presented as one award.

³⁴National Institute of Standards and Technology, *Security and Privacy Controls for Information Systems and Organizations*, Special Publication 800-53, Revision 4 (April 2013, includes updates as of January 2015).

Figure 4: Example of an Inaccurate Display of a Financial Assistance Award



Source: GAO analysis of USAspending.gov. | GAO-22-104702

NIST guidance directs agencies exchanging information to determine whether data element naming schemes, such as the award IDs, used by agencies exchanging information, are compatible, or whether new databases must be normalized (i.e., combined, correlated, analyzed, and reported consistently).³⁵ Additionally, NIST directs agencies to determine how to identify and resolve potential data element naming conflicts. Further, the DATA Act states that Treasury should be able to aggregate data without double counting.³⁶

³⁵National Institute of Standards and Technology, *Managing the Security of Information Exchanges*, Special Publication 800-47, Revision 1 (July 2021).

³⁶Pub. L. No. 113-101, § 3, 128 Stat. at 1147.

According to Treasury officials, the awarding subtier agency code is part of the unique award key for ensuring that financial assistance awards (1) align with the contract data approach, which uses the agency identifier; (2) correctly display financial assistance awards that share an award ID with other distinct awards; and (3) do not restrict agency award ID choice because OMB policy does not provide any criteria to ensure that a Federal Award Identification Number or a Unique Record Identifier is unique. However, the *DAIMS Practices and Procedures Manual* indicates that the unique award key for contracts included the agency identifier rather than the awarding subtier agency code. In their comments, Treasury officials stated that the agency identifier used in the unique award key for contracts is not an element captured by DAIMS, so it may capture either a top level or subtier level agency code.

The financial assistance award information presented on USAspending.gov could be more accurate and complete by ensuring that the identifiers and database keys used, such as the unique award key, result in the intended and correct display outputs.

Challenges Remain with the Implementation and Use of Data Standards

Award Data Were Not Always Consistent with Established Data Standards

In our review of the validity of selected data elements, we found that Treasury has not designed and implemented controls to ensure that the data it collects from federal agencies (including from external government-wide reporting systems) and makes available on USAspending.gov are consistent with the data standards required to be established under the DATA Act. We also found inconsistencies in the requirements for certain data elements within the guidance. Specifically, Treasury has some cross-file validation rules that will trigger warnings or errors for agencies to address as part of the DATA Act submission process. However, Treasury did not disclose that it does not validate award data fields that it collects from external government-wide reporting systems, including the *Period of Performance Start Date*, the *Period of Performance Current End Date*, and *Award Description*, or communicate these errors in the data back to the agencies during the submission process.

We found instances where the *Period of Performance Start Date* was later than the *Period of Performance Current End Date* for procurement award data downloaded as well as financial assistance award data displayed on USAspending.gov. Treasury's *DAIMS Broker Validation Rules* and the *General Services Administration (GSA) FPDS Data Validation Document* state that the systems (i.e., Financial Assistance Broker Submission and Federal Procurement Data System (FPDS)) have rules in place to validate that the start date must be on or prior to the end date.³⁷ However, the errors we found could indicate to a user that these rules were ineffective in ensuring that the end date of an award was the same as or later than the start date.

Treasury officials explained that the USAspending.gov display uses the *Period of Performance Start Date* from the earliest transaction by *Action Date* and the *Period of Performance Current End Date* from the latest transaction by *Action Date*. Therefore, these display errors might occur if an agency enters a start date in its earliest transaction that was after the end date of the latest transaction. Treasury officials also told us that there is insufficient OMB policy for comparing period of performance across transactions and the DAIMS validation process does not attempt to do so.

In addition, we found inconsistencies in the requirements outlined in the various guidance documents for *Award Description*. DATA Act guidance directs agencies to report an award description for procurement and financial assistance awards that briefly describes the purpose of the award.³⁸ The guidance also specifies that the description should be in plain language, consistent with the Federal Acquisition Regulation and OMB guidance.³⁹ Treasury's *DAIMS Interface Definition Document (IDD)* summarizes the requirements for award data and sets a maximum length of 18,000 characters for the *Award Description* for all awards, while the *DAIMS Practices and Procedures Manual* sets a maximum length of 4,000 characters for this field for financial assistance awards. In contrast,

³⁷Treasury, *DAIMS Validation Rules*, version 2.0.2, Broker Rules, Rule FABS34.1 (Dec. 14, 2020) and General Services Administration, *FPDS Data Validation Document*, version 1.5, Element 2C Rule 2 (Oct. 31, 2020).

³⁸Office of Management and Budget, *Federal Spending Transparency Data Standards* (Aug. 31, 2015). Available at: <https://portal.max.gov/portal/assets/public/offm/DataStandardsFinal.htm>.

³⁹OMB M-20-21.

since June 28, 2019, FPDS limits the length of the *Award Description* field to 250 characters for procurement awards.

According to Treasury officials, the inconsistencies between the *DAIMS Practices and Procedures Manual* and the IDD guidance were an oversight in revising the DAIMS manual after the *Award Description* field length was updated from 4,000 characters to 18,000 characters in DAIMS version 1.2. They also told us that they plan to correct this inconsistency in the next update to the manual. Regarding the inconsistency between the maximum number of characters allowed by DAIMS and FPDS, Treasury officials told us that they could revise the DAIMS documentation to update the maximum number of award description characters for procurements from 18,000 to 250 characters.

Our review of all the award records in the USAspending.gov database identified many records with award descriptions that do not meet the established requirements. For example, thousands of procurement records submitted after June 28, 2019, had award descriptions that exceeded the FPDS 250-character limit. We also found award descriptions for almost 8,000 procurement award records submitted after agencies' DATA Act submissions began in 2017, and almost 45,000 financial assistance award records submitted after May 18, 2018—when *Award Description* became required for all types of financial assistance awards—that do not describe the purpose of the award and are not in plain language. Examples of the values for these descriptions included NONE, TBD, N?A, and symbols only (e.g., &, - - -, and !), numeric characters only (e.g. 482 and 22209), and combinations of letters and numbers (e.g., CH33).

According to Treasury officials, the validation rules in external government-wide reporting systems are working as written because they prevent award descriptions with no values (i.e., a blank field). They also told us that errors related to the period of performance dates and the award descriptions are the responsibility of the agency. They told us that these can occur in USAspending.gov because OMB policy limits Treasury's ability to design and implement controls, such as validation checks, over the data it collects from external government-wide reporting systems and displays on the website. However, this is not currently disclosed on USAspending.gov.

The DATA Act requires OMB and Treasury to ensure that the data available on USAspending.gov are accurately displayed and conform to

the data standards required under the act.⁴⁰ In addition, OMB Memorandum M-19-15 directs agencies to collect and create information in a way that supports secondary and downstream use of data—that is, for purposes other than the primary one for which it was collected and displayed on the USAspending.gov website.⁴¹ Further, Treasury's *Information Quality Guidelines* require that it maximize the quality of the information that it disseminates to the public by reasonably ensuring that the information is accurate.

USAspending.gov does not disclose that there are no controls to help ensure that the agency-provided award data fields conform to the established guidance and requirements. As a result, and because of the inconsistencies between guidance documents, users have limited assurance that USAspending.gov receives, validates, and makes available award description and period of performance information from external government-wide reporting systems that is complete and accurate.

Taking steps to ensure that OMB and Treasury policies, guidance, and procedures are consistent with each other, and that Treasury discloses that the data it imports and displays on USAspending.gov may not always conform to the established data standards, definitions, and requirements, could help users of the website understand the extent to which the data are comparable and reliable.

⁴⁰Pub. L. No. 113-101, § 3(2), 128 Stat. at 1149. Under the DATA Act, OMB and Treasury are required to establish government-wide financial data standards and issue guidance to federal agencies on those data standards. The data standards are required to, among other things, include unique identifiers for federal awards and entities receiving federal awards that can be consistently applied government-wide, and produce consistent and comparable data, including across program activities. Pub. L. No. 113-101, § 3, 128 Stat. at 1148-49, codified at 31 U.S.C. § 6101 note. As Treasury and OMB implemented the DATA Act's requirement to create and apply data standards, the overall data standardization responsibility has been divided into two distinct, but related, components. As we previously reported, OMB has primary responsibility for (1) establishing definitions which describe what is included in each data element with the aim of ensuring that information will be consistent and comparable; and Treasury has primary responsibility for (2) creating a data exchange standard with technical specifications that describe the format, structure, tagging, and transmission of each data element.

⁴¹Office of Management and Budget, *Improving Implementation of the Information Quality Act*, OMB Memorandum M-19-15 (Washington, D.C.: Apr. 24, 2019).

Program Activity Data Were Not Always Consistent with OMB and Treasury Guidance

We reviewed program activity information included in files that agencies submitted and found that the data were inconsistent with OMB and Treasury guidance. According to the definitions in the OMB and Treasury DATA Act guidance, program activity information reported to USAspending.gov should reflect the activities included in the program and financing schedules of the annual President's Budget.⁴² According to OMB staff, OMB collects a list of account and program activity combinations from agencies as part of their DATA Act submissions to provide agencies an opportunity to identify program activities that did not exist at the time that the President's Budget was published. According to Treasury officials, the broker relies on OMB's program activity list as the authoritative source for validating account and program activity information included in agency-certified data. However, the list of program activity and account combinations that OMB provided to us included over 400 accounts with the program activity code 0000 or Unknown/Other, for the period ending March 31, 2021.

According to OMB staff, OMB Circular No. A-11 does not allow for program activity code 0000 as an option for reporting on the President's Budget. In addition, Treasury's *DAIMS Practices and Procedures Manual* indicates that the program activity code 0000 or Unknown/Other is only appropriate when there are no obligations or outlays associated with the accounts, as may be the case for brand-new accounts. It also explains that a program activity of 0000 or Unknown/Other is never appropriate to provide for awards that have been linked to financial accounts since obligations have, by definition, already occurred if an award has been issued. However, OMB allowed agencies to include Unknown/Other program activity in its list. Treasury officials explained that, since the broker validation relies on OMB's list, if an account is associated with the

⁴²Office of Management and Budget, *Federal Spending Transparency Data Standards* (Aug. 31, 2015), and Treasury, *DAIMS Reporting Submission Specifications (RSS)*, (Dec. 14, 2020).

program activity 0000 Unknown/Other on the OMB list, the information will be accepted by the DATA Act broker during agency submission.⁴³

Allowing agencies to report data using a program activity code that was not appropriate resulted in agencies reporting an Unknown/Other program activity for over 120 accounts with an absolute value of \$366.1 billion in obligations and over 170 accounts with an absolute value of \$214.6 billion in outlays during the first half of fiscal year 2021. We also found that agencies reported an Unknown/Other program activity for awards linked to over 75 accounts with an absolute value over \$166.9 billion in transaction obligated amounts. These inconsistencies result in inappropriate and incomplete reporting of spending data and undermine the usefulness and reliability of the data. The completeness and usability of spending information available on USA Spending.gov could be improved by developing and implementing a process to help ensure that agency submitted program activity information properly aligns with the requirements established by OMB and Treasury.

⁴³Under the DATA Act, OMB and Treasury are required to establish government-wide financial data standards and issue guidance to federal agencies on those data standards. The data standards are required to, among others, include unique identifiers for federal awards and entities receiving federal awards that can be consistently applied government-wide, and produce consistent and comparable data, including across program activities. Pub. L. No. 113-101, § 3, 128 Stat. at 1148-49, codified at 31 U.S.C. § 6101 note. As Treasury and OMB implemented the DATA Act's requirement to create and apply data standards, the overall data standardization responsibility has been divided into two distinct, but related, components. As we previously reported, OMB has primary responsibility for (1) establishing definitions which describe what is included in each data element with the aim of ensuring that information will be consistent and comparable; and Treasury has primary responsibility for (2) creating a data exchange standard with technical specifications that describe the format, structure, tagging, and transmission of each data element.

Disclosures of Known Data Limitations Increased, but Opportunities Remain for Additional Disclosures

Disclosures of Some Known Data Limitations Improved on USAspending.gov

In response to our recommendations, Treasury took steps to improve the disclosure of known data limitations, including providing additional information about the 90-day delay for displaying Department of Defense (DOD) procurement data, as well as information on how the primary place of performance data are reported for Medicare payments.⁴⁴ These disclosures were added to a number of web pages on USAspending.gov including the About the Data web page, Custom Award Data Download web page, Spending Explorer web pages, and the COVID-19 Spending Profile web page.

In addition, Treasury improved its disclosures of known data limitations by adding the Agency Submission Statistics web page. This page provides additional data about agency submissions by agency, fiscal year, and reporting period and data on unlinked awards. Treasury officials told us that the goal of this new web page is to provide users with additional information about the data available on USAspending.gov and to better disclose some limitations of the data to users already somewhat familiar with it.

Treasury Does Not Fully Disclose Impacts of Changing Guidance and Standards

Since 2017, OMB has issued multiple guidance documents for reporting federal spending data, and Treasury has released eight versions and several interim updates of DAIMS. These documents have resulted in, among other things, changes to the information that is required to be reported, the cadence of agency reporting, and the cross-file validation rules that Treasury applies to the data.

⁴⁴In [GAO-20-75](#), we identified two specific data limitations that were not fully disclosed to users of USAspending.gov: 1) a 90-day delay causing DOD procurement data displayed on USAspending.gov to lag behind similar data from other agencies; and 2) how the locations of Medicare payments were reported. We recommended that these be disclosed to users of the site. Treasury implemented these recommendations by posting both pieces of information under the “About USAspending” link accessible on the USAspending.gov landing web page.

Since its launch in December 2007, USAspending.gov has stored and displayed award information from as far back as the late 1990s. Data submitted at different times over the years followed different guidance. Therefore, not all data available on the website have been subject to the same standards, requirements, validations, and reviews, such as the data definitions and inspector general reviews that the DATA Act requires, which may affect the availability and comparability of the data.

We found that Treasury does not disclose on the USAspending.gov website that the completeness and comparability of the data available may vary because of changes in the standards, requirements, validations, and reviews over the years. For example, while a user is able to search for award data from fiscal years 2008 through 2021 for any given agency, there is no information about how the quality of that data may differ because of changes in guidance and requirements over time.

Some award data submitted prior to 2017—when agencies were required to begin their DATA Act submissions—and available on the USAspending.gov website were not consistent with the requirements included in the current data definitions. For example, the Treasury DAIMS IDD specifies that *Legal Entity Congressional District Code* should be a two-digit code, but about 57 percent of the values for that code for all procurement awards in the database had more than two digits in that field. Most of these exceptions contained four digits—a combination of the state abbreviation and congressional district code—such as “VA08,” where the value should have been “08” based on the DAIMS guidance.

Other examples of changes in the guidance that have affected the information available to users include the addition of new data elements, such as those related to

- award amounts and place of performance address in 2015,
- the addition of state-wide and foreign aggregate financial assistance records in 2017,
- changing the *Award Description* for aggregate financial assistance awards from optional to required in 2018, and
- introducing a requirement for agencies to report the running total of outlays for awards associated with the COVID-19 disaster and emergency appropriations in 2020.

According to OMB guidance, federal agencies must be transparent about the quality of information and identify the limitations of the data they

disseminate to the public.⁴⁵ Further, Treasury's *Information Quality Guidelines* states that when disseminating information to the public, information should be presented within the proper context so that it is disseminated in an accurate, clear, complete, and unbiased manner.⁴⁶

Treasury officials acknowledged that they do not currently disclose that changes in the guidance and requirements over time affect the completeness, consistency, and quality of specific data elements, but that they could add a disclosure about this on the website.

Until Treasury transparently communicates that changes in the guidance and requirements over time may affect the completeness, consistency, and quality of specific data elements, users could overestimate the comparability of the data or may inadvertently expect historical data, which agencies are not required to correct and update, to conform to present-day data standards. This may lead users of USAspending.gov to draw inaccurate conclusions based on these data.

Treasury's Disclosure of Unlinked Awards Is Unclear

One of the purposes of the DATA Act is to link federal spending information to federal program activities to enable taxpayers and policymakers to track federal spending more effectively.⁴⁷ OMB implementation guidance requires that appropriations account summary-level financial data reported quarterly to USAspending.gov include associated federal accounts for each award, to enable the linking of financial and award data.⁴⁸

Whether a given award is linked or unlinked affects how much information about the award is made available to users on USAspending.gov. As illustrated in figure 5, when users look for a particular award on USAspending.gov, they are directed to that award's Individual Award Profile web page, which contains all the data known to be associated with that award. If users are looking at an unlinked award, they may notice the absence of account information in certain places. However, there is no

⁴⁵Office of Management and Budget, *Policies for Federal Agency Public Websites and Digital Services*, OMB Memorandum M-17-06 (Washington, D.C.: Nov. 8, 2016).

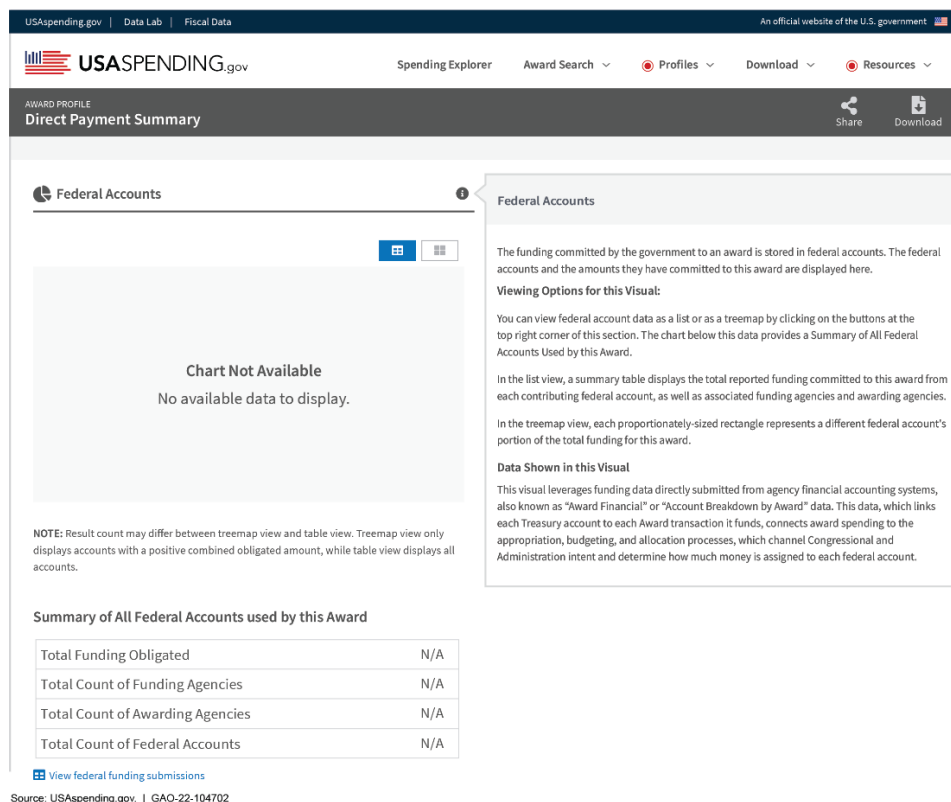
⁴⁶See <https://www.treasury.gov/about/organizational-structure/offices/Mgt/Pages/infoguide.aspx>. Accessed September 28, 2021.

⁴⁷Pub. L. No. 113-101, § 2, 128 Stat. at 1146.

⁴⁸OMB MPM-16-03, M-17-04, and M-18-16.

information on the web page to indicate that the award is unlinked and that therefore certain information about the award is unavailable.

Figure 5: Screenshot of an Unlinked Award’s Individual Award Web Page on USAspending.gov



Note: One of the purposes of the Digital Accountability and Transparency Act of 2014 is to link federal spending information to federal awards to enable taxpayers and policymakers to track federal spending more effectively. Office of Management and Budget Memorandum M-15-12, superseded by M-18-16, directs agencies to link award spending and account information using a unique award identifier. Awards that are “linked” can therefore be associated with their federal accounts in USAspending.gov. As shown here, when an award is unlinked, information about the federal account or accounts associated with the award is not displayed.

Treasury provides information about unlinked awards on the Agency Submission Statistics web page, which includes counts of unlinked financial assistance and procurement awards by federal agency, as depicted in figure 6. The Agency Submission Statistics web page also links to a Data Sources and Methodology web page, which explains why an award might be unlinked and what this means for the availability of

information about the award.⁴⁹ However, that information is not located on the Individual Award Profile web pages, which is where users access information about the award. Moreover, the Agency Submission Statistics web page, which is linked to the Resources web page on USAspending.gov landing web page, might not be intuitive for users to locate, even if they know to look for additional information about “unlinked” awards.

⁴⁹See <https://www.usaspending.gov/submission-statistics/data-sources>. Accessed August 20, 2021.

Figure 6: Screenshot of Agency Submission Statistics Web Page with Counts of Unlinked Awards on USAspending.gov

Agency Submission Statistics

About These Statistics

In accordance with the 2014 DATA Act, federal agencies submit financial data on a quarterly and/or monthly basis to USAspending.gov. The table below shows information about the status and content of these submissions. It will be updated as agencies publish/certify new submissions or republish/recertify existing submissions. For more information about the data in this table, visit [the Data Sources and Methodology page](#).

Statistics by Submission Period
Updates by Fiscal Year

FISCAL YEAR: **FY 2021** ▼
 PERIOD: **Q2 / P06** ▼
 AGENCY NAME:

Agency Name	Number of Unlinked Contract Awards	Number of Unlinked Assistance Awards
Department of the Treasury (TREAS)	103	0
Department of Health and Human Services (HHS)	477	1,215
Department of Defense (DOD)	46,618	1,441
Social Security Administration (SSA)	187	0
Department of Labor (DOL)	38	5
Department of Agriculture (USDA)	5	38

Source: USAspending.gov. | GAO-22-104702

Note: One of the purposes of the Digital Accountability and Transparency Act of 2014 is to link federal spending information to federal awards to enable taxpayers and policymakers to track federal spending more effectively. The Agency Submission Statistics web page shown here provides the counts of unlinked awards by agency and award type. Users can click on a cell of the table to see additional data in a pop-up window.

Standards for federal websites like USAspending.gov are required by law to be established and include key practices. Federal agencies that made websites available to the public after the enactment of the 21st Century Integrated Digital Experience Act, such as Treasury's USAspending.gov, are required to comply with certain website standards that the General Services Administration's (GSA) Technology Transformation Services established.⁵⁰ The U.S. Web Design System is a design system for the federal government that makes it easier to build accessible, mobile-friendly government websites. It includes a toolkit of principles, guidance, and code that conforms to using human-centered design principles, including considering website users' expectations and needs when making design and content decisions. The system was collaboratively created with guidance from GSA and other agencies. Moreover, we have previously identified key practices that managers of open government data programs can consider to help ensure the transparent presentation of their data.⁵¹ These include fully describing the data and facilitating data discovery.

Treasury officials told us that USAspending.gov does not currently indicate if an award is unlinked on the Individual Award Profile web page because doing so might imply fault on the part of the agencies in instances where linkages are not required, such as loans with zero or negative subsidy cost, which they said OMB policy prohibits from being linked. Furthermore, according to OMB staff, the law does not require awards made prior to the passage of the DATA Act to be linked. These awards are displayed on USAspending.gov, consistent with Federal Funding Accountability and Transparency Act of 2006 requirements, and OMB guidance at the time of the award.

Treasury officials also told us that users can infer that an award is unlinked if its Individual Award Profile web page lacks account information. However, less experienced data users might not draw that conclusion when they encounter incomplete information about an individual award. Without clearly disclosing that an award is unlinked and why account information is unavailable for some awards on Individual Award Profile web pages, users might have an incomplete and inaccurate

⁵⁰Pub. L. No.115-336, § 3(e), 132 Stat. 5025, 5026 (2018), *codified at* 44 U.S.C. § 3501 note.

⁵¹GAO, *Open Data: Treasury Could Better Align USAspending.gov with Key Practices and Search Requirements*, [GAO-19-72](#) (Washington, D.C.: Dec.13, 2018).

picture of individual awards displayed on USAspending.gov and may be unable to effectively track federal spending throughout its life cycle.

Agencies Disclosed Some Data Limitations

In addition to the disclosures about data limitations that Treasury provides on USAspending.gov, some agencies have reported issues or limitations with their data. Our analysis of agencies' fiscal year 2020 performance and accountability reports and agency financial reports (AFR) and comments submitted with agencies' data submissions for the period ending March 31, 2021, identified issues related to DATA Act reporting and the quality of agency data. For example, in its fiscal year 2020 AFR, one agency reported control weaknesses related to the current financial management systems environment and the ability to match award data to financial data.

Some agencies reported issues in the comments that accompanied their file submissions. For example, one agency reported that the *Disaster Emergency Fund Code* is inconsistent in one of its agency component's File C. Another agency reported that some contracts are awarded by its shared service provider and do not appear in its File D1.

We reviewed comments that accompanied the data submissions for the 101 agencies that submitted data. Of these 101 agencies, 28 reported specific issues with their data, and nine agencies included only comments related to general known issues that may not specifically affect that agency, such as a submission not including awards below the micropurchase threshold; any classified, sensitive, or personally identifiable information; or both. One agency specifically affirmed that its internal controls support the validity and reliability of the data submitted. The remaining 63 agencies did not include any comments with their submissions. Treasury officials told us that they do not have a formal interpretation of a blank comment but that in their view it would be reasonable to infer that if the SAO certified or attested this way, then there are no issues with the quality of the data that need to be reported.

Federal Agencies Made Progress Establishing Data Governance

Congress, the administration, and federal agencies have taken steps to establish governance over federal spending data. Among other steps, Title II of the Foundations for Evidence-Based Policymaking Act of 2018, the Open, Public, Electronic and Necessary Government Data Act (OPEN Government Data Act), required federal agencies to designate chief data

officers (CDO) and outlined the roles and functions of that position.⁵² Several of these functions are related to data governance, including life cycle data management and engagement with agency employees, the public, and contractors in using public data assets, among others.

The law also requires that CDOs serve as members of the government-wide Federal Chief Data Officers Council (CDO Council) to, among other things, establish best practices for the use, protection, dissemination, and generation of data and identify ways in which agencies can improve in producing evidence for policy making.⁵³ In 2021, the CDO Council reported several activities that support CDOs as they develop data governance frameworks at the agency level. These activities include establishing goals to develop a learning community to ensure CDOs have resources to lead data-driven change, develop the CDO profession, and facilitate strategic engagement across federal policy and evidence-building activities.⁵⁴

In June 2019, OMB issued the *Federal Data Strategy*, which contained 10 operating principles to guide the federal government in leveraging data to better serve the public.⁵⁵ The December 2020 Action Plan operationalized the Federal Data Strategy. It included 20 actions that agencies were either required or encouraged to complete during the first year of implementing the Federal Data Strategy, three of which are related to

⁵²Pub. L. No. 115-435, tit. II, § 202(e), 132 Stat. 5529, 5541-42 (2019), *codified at* 44 U.S.C. § 3520.

⁵³The OPEN Government Data Act established the CDO Council within OMB. It also requires the CDO Council to promote and encourage data sharing agreements between agencies, consult with the public, and engage with private users of government data and other stakeholders on how to improve access to the federal government's data assets, and identify and evaluate new technology solutions for improving the collection and use of data. Pub. L. No. 115-435, tit. II, § 202(f), 132 Stat. 5529, 5542-43 (2019), *codified at* 44 U.S.C. § 3520A.

⁵⁴See <https://www.cdo.gov/news/fy-2021-cdoc-goals/>. Accessed July 8, 2021.

⁵⁵Office of Management and Budget, *Memorandum for the Heads of the Executive Departments and Agencies: Federal Data Strategy – A Framework for Consistency*, OMB Memorandum M-19-18 (Washington, D.C.: June 2019). For more information, see: <https://strategy.data.gov/>. Accessed April 23, 2021.

establishing data governance.⁵⁶ Specifically, the 2020 Action Plan directs agencies to

- constitute a diverse data governance body,
- assess data and related infrastructure maturity, and
- identify opportunities to increase data skills among staff.

We previously found that while selected agencies made overall progress in establishing data governance, key milestones in the 2020 Action Plan were missed.⁵⁷ For example, we found that Chief Financial Officers Act of 1990 (CFO Act) agencies have made more progress in completing data governance milestones than non-CFO Act agencies. The most recent data available on agency progress in meeting data governance milestones are from January 2021. The data reflects agency progress in implementing the required data governance milestones as of the end of calendar year 2020.⁵⁸ OMB officials told us that they only monitored progress on the initial implementation of the Federal Data Strategy through calendar year 2020. Officials recently issued the 2021 Action Plan and are considering future efforts to monitor agency progress in meeting action plan milestones.

A data governance framework is critical in ensuring that data are of a sufficient quality for their intended use by providing the structure for processes and procedures to identify and appropriately respond to data quality issues in a timely manner. For example, one data governance activity—establishing data standards—contributes to data quality by ensuring that data are collected and reported consistently and comparably. We have previously found that a data governance structure,

⁵⁶Federal Data Strategy Development Team, *President's Management Agenda: Federal Data Strategy 2020 Action Plan* (Washington, D.C.: Dec. 2019). The 2020 Action Plan states that it incorporates requirements of the Evidence Act, the Geospatial Data Act of 2018, and Executive Order 13859 on Maintaining American Leadership in Artificial Intelligence. Pub. L. No. 115-435, 132 Stat. 5529 (2019); Pub. L. No. 115-254, 132 Stat. 3186 (2018); 84 Fed. Reg. 3967 (Feb. 11, 2019). The laws incorporated in the 2020 Action Plan vary in scope and applicability. For example, certain statutory provisions only apply to CFO Act agencies. Where not required by statute, the 2020 Action Plan encourages agencies to complete its actions.

⁵⁷[GAO-21-152](#).

⁵⁸Agency progress implementing data governance and other milestones related to the 2020 Federal Data Strategy and Action Plan can be found at <https://strategy.data.gov/progress/#milestones>. Accessed July 26, 2021.

if properly implemented, would greatly increase the likelihood that the spending data made available to the public through USASpending.gov will be consistent and comparable.⁵⁹ The issues we found with data completeness and accuracy during this review, and the need for increased transparency regarding data limitations, reinforce the importance of continued progress by OMB and agencies to develop a robust and transparent data governance structure.

Conclusions

In the 7 years since enactment of the DATA Act, OMB, Treasury, and federal agencies have made significant strides in addressing the many technical and policy challenges presented by the act's requirements. In the last two years, Treasury has taken actions to improve the disclosure of known data limitations on USASpending.gov, in response to user feedback and our recommendations. To continue this progress toward greater federal spending transparency, more can be done to improve the completeness and accuracy of key data elements, design and implementation of business process controls, and implementation and use of data standards. Similarly, additional efforts to disclose known data limitations can help users of the data made available on USASpending.gov understand the extent to which the data are timely, complete, accurate, and comparable over time. All of these issues further demonstrate the importance of building on progress made to develop a robust and transparent data governance structure to ensure consistent application and use of the data standards required by the DATA Act.

Recommendations for Executive Action

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

The Secretary of the Treasury should take steps to help ensure that users are able to distinguish whether an award description describes the purpose of the base award or the purpose of a transaction or modification to the award on USASpending.gov. (Recommendation 1)

The Secretary of the Treasury should design and implement a process to periodically inform agencies about unlinked data to help agencies reconcile and resolve data linkage differences between transaction and submission data on USASpending.gov. (Recommendation 2)

The Secretary of the Treasury should ensure that identifiers and database keys (e.g., unique award key) used for financial assistance awards result

⁵⁹[GAO-20-75](#).

in display outputs on USAspending.gov that are accurate and complete. (Recommendation 3)

The Secretary of the Treasury should ensure that the department's documented DATA Act and USAspending.gov guidance related to the maximum number of characters for procurement and financial assistance award descriptions is consistent with established policy. (Recommendation 4)

The Director of OMB, in collaboration with the Secretary of the Treasury, should ensure that their policies, guidance, and procedures related to DATA Act and USAspending.gov (e.g., maximum number of characters for award descriptions) are consistent with each other. (Recommendation 5)

The Secretary of the Treasury, in consultation with the Director of OMB, should disclose on USAspending.gov that it does not validate the data it collects from external government-wide reporting systems (e.g., FPDS) and displays on USAspending.gov and, therefore, the imported data may not always align with the data standards, definitions, and requirements established in the OMB and Treasury guidance. (Recommendation 6)

The Director of OMB, in collaboration with the Secretary of the Treasury, should develop and implement a process to help ensure that disallowed program activities are not included in its list of program activity and accounts combinations used for validating DATA Act submissions to USAspending.gov. (Recommendation 7)

The Secretary of the Treasury should disclose on USAspending.gov that changes in the data submission and reporting guidance and requirements over time may affect the completeness, consistency, and quality of specific data elements. (Recommendation 8)

The Secretary of the Treasury should disclose on USAspending.gov web pages that display information on individual awards when an award is unlinked and why federal account information is unavailable for that award. (Recommendation 9)

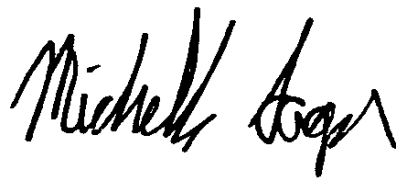
Agency Comments and Our Evaluation

We provided a draft of this report to Treasury, OMB, and GSA. OMB concurred with our recommendations. OMB also provided technical comments, which we incorporated as appropriate. GSA did not have any comments on the report.

After reviewing our draft report, Treasury provided substantive and technical comments, as well as additional information that clarified its authority, roles, and responsibilities for making certain policy and technical revisions to the data on USAspending.gov. In response, we adjusted five of our recommendations to ensure the actions we recommended were consistent with the department's authority. We also consolidated two other recommendations into one to reflect the responsibility for modifying DATA Act reporting requirements. Treasury concurred with our updated recommendations and its written comments are reproduced in appendix III.

We are sending copies of this report to relevant congressional committees; the Secretary of the Treasury; the Director of the Office of Management and Budget; and the Administrator of the General Services Administration. In addition, the report is available at no charge on the GAO website at <http://www.gao.gov>.

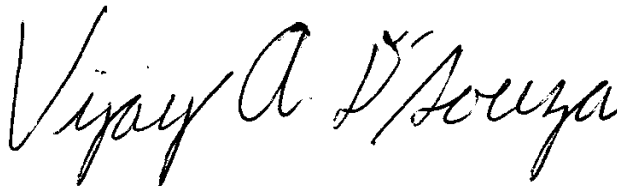
If you or your staff have any questions about this report, please contact Michelle Sager at (202) 512-6806 or sagerm@gao.gov, Paula M. Rascona at (202) 512-9816 or rasconap@gao.gov, or Vijay A. D'Souza at (202) 512-6240 or dsouzav@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix IV.



Michelle Sager
Managing Director, Strategic Issues



Paula M. Rascona
Director, Financial Management and Assurance



Vijay A. D'Souza
Director, Information Technology and Cybersecurity

List of Addressees

The Honorable Gary C. Peters
Chairman
The Honorable Rob Portman
Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Carolyn B. Maloney
Chairwoman
The Honorable James Comer
Ranking Member
Committee on Oversight and Reform
House of Representatives

The Honorable Gerald E. Connolly
Chairman
The Honorable Jody Hice
Ranking Member
Subcommittee on Government Operations
Committee on Oversight and 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) includes a provision 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. This is our third assessment of the quality—defined as encompassing the concepts of timeliness, completeness and accuracy—of data agencies were required to report pursuant to the DATA Act.¹

Specifically, this report examines (1) the timeliness, completeness, and accuracy of the data displayed on USAspending.gov; (2) the business process controls over the completeness and accuracy of data received, processed, and displayed on USAspending.gov; (3) the implementation and use of data standards; (4) the disclosure of known data quality limitations; and (5) the status of agency efforts to develop a data governance structure over DATA Act reporting.

To assess the timeliness, completeness, accuracy, and quality of the data displayed on USAspending.gov, and the implementation and use of data standards, we analyzed agency-certified data, data obtained from the Custom Account and Custom Award Data Downloads, data from the USAspending.gov database, and data displayed on selected USAspending.gov web pages. In addition, we reviewed applicable Office of Management and Budget (OMB) and Department of the Treasury (Treasury) guidance, as well as internal Treasury documents. We conducted interviews with Treasury officials about the data sources and the processes that generate figures and values displayed on the site, and we performed an automated collection of data from the following USAspending.gov web pages: Spending Explorer, Agency Profile, State Profile, and Individual Award Profile. We selected these web pages to capture the key data elements we selected for analysis.

We obtained all of the data from the Custom Account and Custom Award Data Downloads web pages and agency-certified data on the date after the close of the submission window for the second quarter of fiscal year

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

2021.² We also obtained and analyzed a report from the Governmentwide Treasury Account Symbol Adjusted Trial Balance System (GTAS) that Treasury uses for DATA Act reporting. The report includes data on obligations and outlays, as of and for the 6-month period ended March 31, 2021. As part of our fieldwork, we conferred with Treasury officials regarding different aspects of USAspending.gov and incorporated their responses as appropriate.

Timeliness. To assess whether agencies submitted and certified their data by the monthly and quarterly deadlines, we obtained the USAspending.gov database containing the data as of and for the three months ending March 31, 2021. From this database, which includes details about agencies' submissions, we extracted submission and certification dates for agency submissions for the periods ending March 31, 2021. We performed a manual test of the agencies that had not submitted by May 17, 2021, to identify other agencies that submitted or certified their data after the deadlines.

For monthly reporters, the due date for submissions for the month of March 2021 was April 29, 2021, and the due date for certifications was May 17, 2021. For quarterly reporters, the due date for submissions and certifications for the period January through March 2021 was May 17, 2021.

Completeness. To assess completeness, we reviewed agency submissions for the periods we reviewed—the month of March 2021 and the quarterly period January through March 2021—including those agencies that submitted after their applicable deadlines, to determine the number of agencies that submitted data. We compared this number to the

²Data from the Custom Account and Custom Award Data Downloads web pages and agency-certified data were obtained for the second quarter submission window on May 18, 2021. Due to a technical issue experienced by Treasury's data updating procedure on the night of May 18, some of the second quarter data were not updated until the following day. We obtained those data on May 19, 2021. According to Treasury officials, the Agency Submission Statistics web page was added to USAspending.gov on May 4, 2021. We obtained the information displayed on that web page for fiscal year 2021, second quarter or period 6 (March 31, 2021) on July 6, 2021.

numbers of agencies we determined submitted data as shown in our 2017 and 2019 reviews.³

We determined whether the files that agencies submitted contained data by performing an automated count of the number of records in each file from agency-certified data files as of May 17, 2021. We performed a manual test of the agencies that had not submitted by May 17, 2021, to identify other agencies that submitted files with no data in them for the periods we reviewed.

We also determined whether the files that agencies submitted were complete by reviewing the agency comments on each file included in their submissions to identify any agency components, programs, or activities that may not have been included in the data submitted.

Accuracy. To determine which data elements we would analyze to test accuracy, we considered a number of factors, including the data elements that the DATA Act required and the 57 data standards that OMB and Treasury established.⁴ Additionally, we included data elements that help achieve the transparency goals of the DATA Act, such as those describing an award's amount, the purpose of the award, the recipient of the award, the period of performance of the award, and the place of performance. We focused our analysis on the fields necessary to reproduce the values and figures displayed on the web pages we selected to analyze.

To assess the accuracy of the USAspending.gov display of obligation data on selected web pages, we compared the displayed data to agency-certified data, data obtained through the Custom Account Data Download, and data from a GTAS report, as of March 31, 2021. Specifically, we performed automated data collection of obligation data from the Agency Profile, Spending Explorer–Agency, and Spending Explorer–Object Class

³GAO, *DATA Act: Quality of Data Submissions Has Improved but Further Action Is Needed to Disclose Known Data Limitations*, [GAO-20-75](#), (Washington, D.C.: Nov. 8, 2019); and *DATA Act: OMB, Treasury, and Agencies Need to Improve Completeness and Accuracy of Spending Data and Disclose Limitations*, [GAO-18-138](#), (Washington, D.C.: Nov. 8, 2017).

⁴The 57 government-wide data standards were established by OMB and Treasury pursuant to the DATA Act and can be found here: <https://portal.max.gov/portal/assets/public/offm/DataStandardsFinal.htm>. Two additional data elements—the *National Interest Action Code* and *Disaster Emergency Fund Code*—are significant in promoting full and transparent reporting of spending related to the Coronavirus Disease 2019 and will be tested by inspectors general under the DATA Act.

web pages on USAspending.gov. We compared these amounts to the amounts obtained through the Custom Account Data Download web page, and the data we obtained from the GTAS report.

To assess the accuracy of award data displayed on the website, we compared selected award data elements to agency-certified data, the USAspending.gov database, and data obtained through the Custom Account and Custom Award Data Download web pages. We attempted to re-create the information contained in the Individual Award Profile web pages, and the State Profile web pages, using data collected through an automated web page data collection process.

We selected the five highest dollar value awards for each of the 24 Chief Financial Officers Act of 1990 (CFO Act) agencies, for a total of 120 awards. We compared the values for selected data elements displayed on Individual Award Profile web pages to values for the same data elements in agency-certified data and the USAspending.gov database. We also assessed whether the website pages were internally consistent by comparing the values for these selected data elements to the values for the same data elements in the Custom Award Data Download data.

The results of our review of the 120 awards are not representative of all awards, but they provide examples of the discrepancies between agency-submitted data and what is displayed on USAspending.gov, across different parts of the website, and with data standards.

Business process controls. We selected and evaluated business process controls that Treasury implemented, and we determined whether the controls effectively ensure the validity, completeness, accuracy, and timeliness of data during processing and output. To do this, we analyzed Treasury documentation, interviewed Treasury officials, and reviewed Treasury's inventory of systems, processes, and functions that support USAspending.gov, as well as previous Treasury Office of Inspector General and GAO reports related to the DATA Act and USAspending.gov.

Our evaluation was based on our *Federal Information System Controls Audit Manual (FISCAM)*,⁵ which contains guidance for reviewing information system controls that affect the confidentiality, integrity, and

⁵GAO, *Federal Information System Controls Audit Manual (FISCAM)*, [GAO-09-232G](#) (Washington, D.C.: Feb. 2009).

availability of information and information systems; our *Standards for Internal Control in the Federal Government*,⁶ and National Institute of Standards and Technology (NIST) guidance.⁷ Based on this guidance, we identified, selected, and tested certain application controls for validity, completeness, accuracy, and timeliness of data transactions.

We did not assess any external government-wide reporting systems, such as the Federal Procurement Data System, the Financial Assistance Broker Submission portal, the Federal Funding Accountability and Transparency Act of 2006 Subaward Reporting System, the System for Award Management, and agency financial management systems.

Implementation and use of data standards. To assess the implementation and use of data standards, we obtained data from the agency-certified data and the USAspending.gov database. We determined whether the values for certain data elements were consistent with data standards, schema, and validation rules that OMB and Treasury established, and interviewed Treasury officials about the requirements for those data elements, as needed. The standards and schema specify, for example, the data element definitions, the maximum number of digits or characters a value can contain and whether values should be numeric or alphabetic. Specifically, we reviewed program activity information reported by agencies and determined whether it was consistent with OMB and Treasury guidance for that data element and whether *Period of Performance Start Date* is before *Period of Performance Current End Date*.

Disclosure of known data limitations. We reviewed USAspending.gov for information explaining inconsistencies or limitations to the data we tested. We also reviewed Treasury documentation available to the public for explanatory text about identified inconsistencies.

To assess the quality of Treasury's disclosures related to linkages, we examined information Treasury made available to public users about linkages, including the Agency Submission Statistics web page and its Data Sources and Methodology web page. We also examined Individual

⁶GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 2014).

⁷National Institute of Standards and Technology (NIST) Special Publication 800-53 Revision 4, *Security and Privacy Controls for Federal Information Systems and Organizations* (April 2013), and NIST Special Publication 800-47 Revision 1, *Managing the Security of Information Exchanges* (July 2021).

Award Profile web pages for known linked and unlinked awards. Lastly, we discussed the information presented on the Agency Submission Statistics web page with Treasury officials.

To identify agency-reported data limitations, we reviewed agencies' fiscal year 2020 performance and accountability reports and agency financial reports. We also reviewed senior accountable officials' comments submitted with agencies' data submissions for the periods ending March 31, 2021.

Data governance. To describe the current status of OMB efforts to develop data governance for DATA Act reporting and progress that agencies made in meeting data governance milestones established under the 2020 Federal Data Strategy, we reviewed specific requirements and milestones for federal agencies to establish data governance in the following:

- the Open, Public, Electronic and Necessary Government Data Act;
- OMB guidance in *Phase I Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Learning Agendas, Personnel, and Planning Guidance*; and
- the *2020 Federal Data Strategy and Action Plan*.⁸

To review agency progress in meeting these milestones, we examined relevant documents, the 2020 Action Plan Progress dashboard used to track agency progress meeting 2020 Action Plan milestones, and supplemental files.⁹ We also interviewed OMB staff about their plans to continue tracking agency progress in implementing data governance milestones as defined in the 2020 Action Plan.

⁸Pub. L. No. 115-435, tit. II, 132 Stat. 5529, 5534–5544 (2019); Office of Management and Budget, *Phase I Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Learning Agendas, Personnel, and Planning Guidance*, OMB Memorandum M-19-23 (Washington, D.C.: July 10, 2019).

⁹See: <https://strategy.data.gov/progress/#milestones>. Accessed September 30, 2021.¹In April 2020, the Office of Management and Budget (OMB) changed the cadence of reporting requirements, with new deadlines introduced in two phases. In the first phase, beginning in period 9 (June) of fiscal year 2020, agencies that received Coronavirus Disease 2019 supplemental funding were required to submit their files monthly. In phase two, quarterly submissions will shift to monthly submissions for all agencies beginning in quarter 1 of fiscal year 2022. OMB M-20-21.

Appendix II: Process Overview, Timing, and Sources of Data Displayed on USAspending.gov

Process Overview for Agency Submissions

USAspending.gov integrates data from many sources, including data obtained directly from agency systems and data pulled or derived from external government-wide reporting systems. Agencies are required to submit seven files, which together constitute their agency-certified data, either monthly or quarterly.¹ As part of the file submission process, the Department of the Treasury's (Treasury) DATA Act Broker (broker) pulls data from external government-wide reporting systems and adds certain derived elements to the agency data. Filing deadlines for these submissions are roughly 30 days or 45 days (depending on whether the report is monthly or quarterly) from the close of the period, but only include data through the end of the period. For example, for this report, we focused on data submitted through the end of period 6 or quarter 2, both of which ended on March 31, 2021. Agencies were required to submit data on April 29 (monthly reporters) or May 17 (quarterly reporters), but in both cases, the data only include transactions through March 31.

The seven files contain information about accounts and awards sourced from agency systems and data pulled or derived from external government-wide reporting systems. Three of the files are sourced from agency financial management systems (Files A, B, and C). The broker then extracts award and subaward information from external government-wide reporting systems and adds certain derived data elements to build four files (Files D1, D2, E, and F) that include procurement information and information on federal assistance awards, such as grants and loans.² These external government-wide reporting systems include:

- the Federal Procurement Data System (FPDS), which collects information on contract actions for File D1;
- the Financial Assistance Broker System (FABS), the platform used by federal agencies to report financial assistance data for File D2;

¹In April 2020, the Office of Management and Budget (OMB) changed the cadence of reporting requirements, with new deadlines introduced in two phases. In the first phase, beginning in period 9 (June) of fiscal year 2020, agencies that received Coronavirus Disease 2019 supplemental funding were required to submit their files monthly. In phase two, quarterly submissions will shift to monthly submissions for all agencies beginning in quarter 1 of fiscal year 2022. OMB M-20-21.

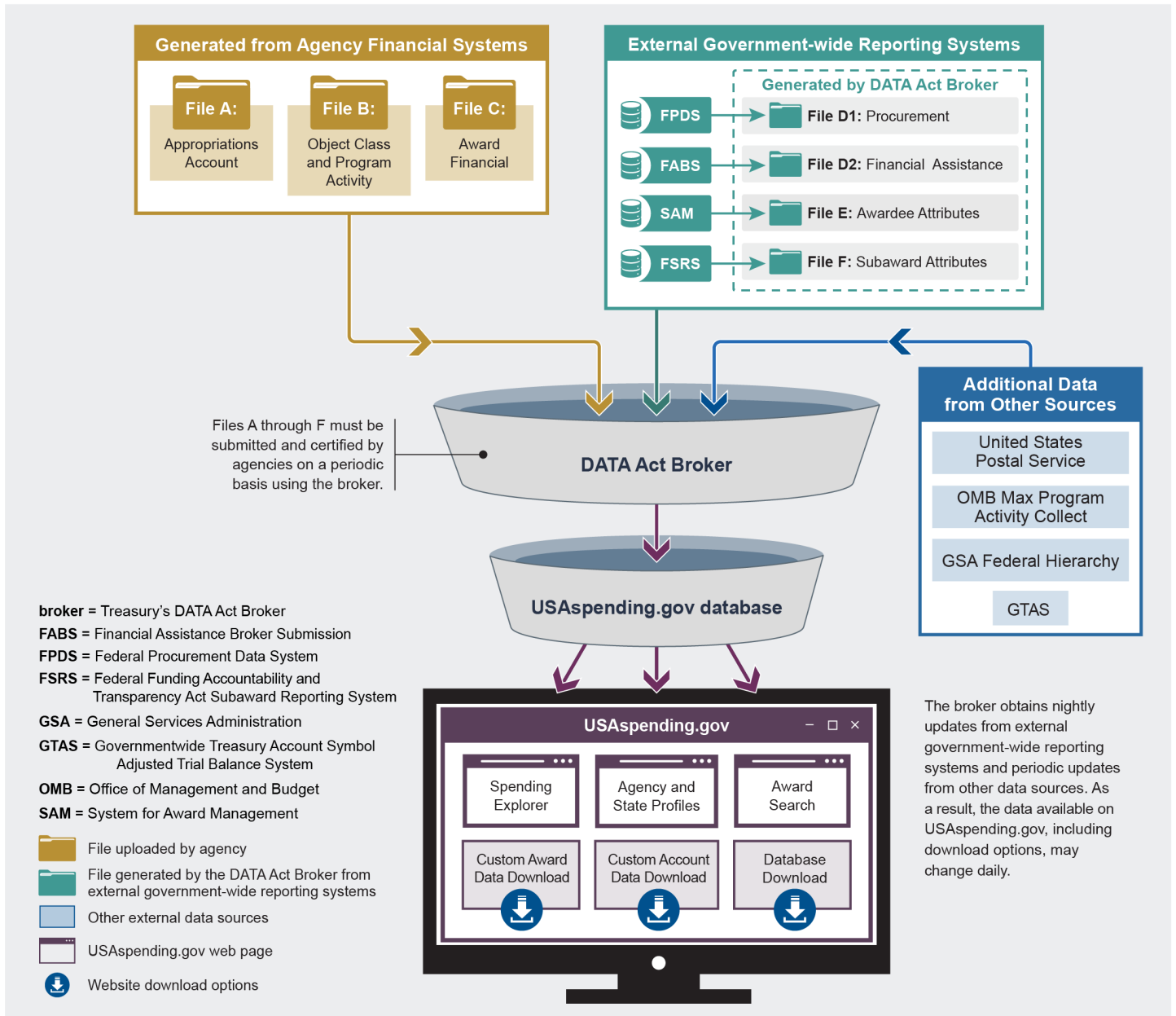
²The listed files contain the following: File A (appropriations account), File B (object class and program activity), File C (award financial), File D1 (procurement), File D2 (financial assistance), File E (awardee attributes), and File F (subaward attributes).

- the 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 for File E; and
- the Federal Funding Accountability and Transparency Act Subaward Reporting System (FSRS), which provides data on first-tier subawards that prime grant and contract recipients report for File F.

Agencies review files D1 and D2, which are generated using the broker, and then submit these and files A, B, and C to the broker (see figure 7) for validation. Files E and F are generated by the broker and submitted after the other files have undergone validation.

Appendix II: Process Overview, Timing, and Sources of Data Displayed on USAspending.gov

Figure 7: Process Overview and Sources of Data Displayed on USAspending.gov



Source: GAO analysis of USAspending.gov. | GAO-22-104702

The broker runs a series of validations, including cross-file validations, and produces warnings and error reports for agencies to review.³ Errors must be corrected before agencies can successfully submit their files for the time period. In contrast, warnings will not prevent the agencies from submitting, but may alert the agency to possible issues needing further review.

Agency senior accountable officials (SAO) must also prepare certifications in the broker each quarter to assure that the interconnectivity across all the data in Files A, B, C, D1, D2, E, and F are valid and reliable, and that the data submitted in Files A, B, and C are valid and reliable. These certifications may also provide comments that qualify information about their data submissions as well as limitations, if any. If an agency is submitting monthly, the SAO must attest to the quality of the data each month, and then certify the data for the past three months by each quarterly submission date.

According to Office of Management and Budget (OMB) guidance, the purpose of the SAO certifications is to provide reasonable assurance that their agencies' 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.

After agencies successfully attest to or certify and submit their data for the time period, Treasury officials told us that a sequence of computer program instructions or scripts are run during the next overnight pipeline to transfer and map the financial data from DATA Act broker data tables, to tables set up in the USAspending.gov database, which is the central source for the information on the website.

This process includes steps such as linking financial data to award data, and adding unique award keys to financial data based on that linkage, and calculating or deriving additional fields based on submitted fields. The

³The broker runs individual file validations for File A, File B, and File C. The broker runs cross-file validations between Files A and B, Files B and C, Files C and D1, and Files C and D2. Data contained in File D2 are validated previously when they are submitted to FABS. According to Treasury officials, data contained in Files D1, E, and F are not validated by the broker, per OMB policy, with the exception of the cross-validation between Files C and D1.

processed data are reflected in the data available for download on the Custom Account Data Downloads web page of the website.

There is a separate process for award data. This process begins on the night the data are received, either from FABS or the FSRs or FPDS data feeds. The processed data are reflected in the data available for download on the Custom Award Data Downloads web page of the website.

Data Processing Timelines

Data displayed on USAspending.gov are updated each night during an overnight “pipeline” process. These updates may include agency-certified data following submission deadlines or updated data from external government-wide reporting systems. This means that the data displayed are always the most current available and that any particular web display could change from day to day as new data are incorporated.

According to Treasury officials, it takes one day for agency-certified data and data published in the Financial Assistance Broker Submission to be incorporated into the web pages on USAspending.gov. These web pages integrate data from both broker-submitted files and external government-wide reporting systems. Therefore, if a monthly submission due date falls on a Wednesday, it may take until Thursday for the web pages on USAspending.gov to reflect the submitted agency-certified data from Wednesday. According to Treasury officials, if data are published in other external government-wide reporting systems, such as FPDS or FSRs, on Wednesday, it will take until Friday for the web pages on USAspending.gov to reflect those data because these systems do not make the new data available to USAspending.gov until Thursday.

Data Available on USAspending.gov

USAspending.gov provides several different web pages and tools for exploring federal spending data. The USAspending.gov database is the centralized source for the information available on USAspending.gov.

Data Displayed on Web Pages or Available for Download

- **Individual Award Profile** web pages provide information on an individual contract, grant or financial assistance award. An award’s profile includes information about the award recipient, the awarding agency, the award amount, an award description, the relevant federal

account, subawards, and modifications to the award over time, among other things.

- **Agency Profile** web pages display information about the agency's budgetary resources, obligations, and outlays, among other things. It also breaks down the agency's obligations by object class and federal account.
- **State Profile** web pages summarize federal spending for all awards with that state listed as the primary place of performance. These web pages include the total amount awarded to that state for a selected time period and a table that breaks down the award amounts by type of award. This table also provides the number of awards in that state for each type of award. Among other things, the State Profile web pages contain a map breaking down the data by county or congressional district and a section called "Top 5." This section contains six categories: Awarding Agencies, Recipients, Catalog of Federal Domestic Assistance, North American Industrial Classification System Codes, Counties, and Congressional Districts. For each section, the web page lists the five entities with the largest awarded amount for that state. For example, in the Awarding Agencies category, the table includes the five agencies that awarded the most money within that state. In the Counties category, the table includes the five counties in which the most money was awarded.
- **Spending Explorer** web page enables users to explore federal spending by three "starting points": budget function, agency and object class. Depending on the selected starting point, it also allows a user to explore by budget sub-function, federal account, program activity, recipient, and federal award.
- **Advanced Award Search tool** allows users to search for awards meeting designated criteria, such as a keyword, when the contract or grant was awarded, the location where federal money was spent, and other award or recipient characteristics.
- **Custom Award Data Download** tool that allows users to download agencies' award data, with added derivations based on those data, with details about all prime and subawards awarded in a particular time period, by a particular agency, with a specific location or primary place of performance, or with a specific action or last modified date.
- **Custom Account Data Download** tool that allows users to download agencies' account-level spending data, with added derivations based on that data, including spending by Federal Account or Treasury Account for a particular time period, for a particular agency, or by a particular budget function, among other things. The download can

include account balances for all federal accounts; an account breakdown by program activity and object class; or an account breakdown by award.

- **USAspending.gov Application Programming Interface (API)** tool makes it easy for computer programs to request and receive information from USAspending.gov via automation. The API's endpoints return the same data, though sometimes with additional content or filter options, available on various web pages on USAspending.gov. The API directly powers the USAspending.gov website in that the data a user sees on the site are generated via the web pages making API calls to the relevant endpoints and displaying the resulting data.

Appendix III: Comments from the Department of Treasury



DEPARTMENT OF THE TREASURY WASHINGTON, D.C.

October 29, 2021

Michelle Sager
Director, Strategic Issues
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Ms. Sager:

Thank you for the opportunity to review the Government Accountability Office's (GAO) draft report entitled *Federal Spending Transparency: Opportunities Exist to Further Improve the Information Available on USAspending.gov* (the Draft Report). The Draft Report examines the Department of the Treasury's (Treasury) work under the Digital Accountability and Transparency Act of 2014 (DATA Act) and discusses the quality of data reported by agencies and posted on USAspending.gov as well as the design of USAspending itself. The report also addresses the work of the Office of Management and Budget (OMB) and Treasury in establishing and maintaining data standards and progress made in developing a data standards governance structure consistent with leading practices.

We are pleased the Draft Report finds that Treasury, OMB, and federal agencies have made significant strides over the past seven years in addressing the many technical and policy challenges presented by the DATA Act's requirements. In the last two years alone, Treasury has made major enhancements to USAspending and the DATA Act Information Model Schema (DAIMS) which included adding outlay data at the award level, adding the ability to track supplemental appropriations through the disaster emergency fund code (DEFC), and moving all agencies to a monthly submission cadence from quarterly. Treasury also recently launched a new page to track COVID-19 spending, released v2.0 of our Award Summary pages, and added extensive data source and methodology sections to several pages, along with disclosures about known data limitations.

GAO provided Treasury with several recommendations designed to improve the information and data disclosures available on USAspending.gov and in DAIMS. Treasury agrees that more can be done to disclose the context of transactional award descriptions, to work with agencies, OMB, and GSA to increase the completeness and accuracy of agency data and ensure a unified award display, and to disclose additional information about unlinked awards and how changes in guidance over time affect the data. Therefore, Treasury accepts all recommendations for which it is responsible in the Draft Report.

Thank you again for the opportunity to review and comment on the Draft Report. We look forward to continuing to work with GAO as we fulfill our ongoing commitment to provide the public with accurate and timely financial information.

Sincerely,

A handwritten signature in cursive script that reads "Amy E Holmes".

Amy Edwards Holmes
Deputy Assistant Secretary
Accounting Policy and Financial Transparency

Appendix IV: GAO Contacts and Staff Acknowledgments

GAO Contacts

Michelle Sager, (202) 512-6806 or sagerm@gao.gov

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

Vijay A. D'Souza, (202) 512-6240 or dsouzav@gao.gov

Staff Acknowledgments

In addition to the above contacts, Mark Canter, Peter Del Toro, Kathleen Drennan, and Michael LaForge (Assistant Directors); Kerstin Meyer (Analyst-in-Charge); Diane Morris (Auditor-in-Charge); Michelle Bacon; Carl Barden; Michael Bechetti; Maria Belaval; Jenny Chanley; Dennis Clarke; Kevin Cotter; Thomas Hackney; Sherrice Kerns; Samantha Lalisan; Sailaja Ledalla; Krista Loose; Heena Patel; Andrew J. Stephens; Daniel Swartz; and Lisa Zhao made significant contributions to this report.

Related GAO Products

Data Governance: Agencies Made Progress in Establishing Governance, but Need to Address Key Milestones. [GAO-21-152](#). Washington, D.C.: December 16, 2020.

DATA Act: OIGs Reported That Quality of Agency-Submitted Data Varied, and Most Recommended Improvements. [GAO-20-540](#). Washington, D.C.: July 9, 2020.

DATA Act: Quality of Data Submissions Has Improved but Further Action Is Needed to Disclose Known Data Limitations. [GAO-20-75](#). Washington, D.C.: November 8, 2019.

DATA Act: Customer Agencies' Experiences Working with Shared Service Providers for Data Submissions. [GAO-19-537](#). Washington, D.C.: July 18, 2019.

DATA Act: Pilot Effectively Tested Approaches for Reducing Reporting Burden for Grants but Not for Contracts. [GAO-19-299](#). Washington, D.C.: April 30, 2019.

DATA Act: OMB Needs to Formalize Data Governance for Reporting Federal Spending. [GAO-19-284](#). Washington, D.C.: March 22, 2019.

Open Data: Treasury Could Better Align USAspending.gov with Key Practices and Search Requirements. [GAO-19-72](#). Washington, D.C.: December 13, 2018.

DATA Act: Reported Quality of Agencies' Spending Data Reviewed by OIGs Varied Because of Government-wide and Agency Issues. [GAO-18-546](#). Washington, D.C.: July 23, 2018.

DATA Act: OMB, Treasury, and Agencies Need to Improve Completeness and Accuracy of Spending Data and Disclose Limitations. [GAO-18-138](#). Washington, D.C.: November 8, 2017.

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.

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

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

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

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

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

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

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

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

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

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

Government Efficiency and Effectiveness: Inconsistent Definitions and Information Limit the Usefulness of Federal Program Inventories. [GAO-15-83](#). Washington, D.C.: October 31, 2014.

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

Federal Data Transparency: Opportunities Remain to Incorporate Lessons Learned as Availability of Spending Data Increases. [GAO-13-758](#). Washington, D.C.: September 12, 2013.

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

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

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through our website. Each weekday afternoon, GAO posts on its [website](#) newly released reports, testimony, and correspondence. You can also [subscribe](#) to GAO's email updates to receive notification of newly posted products.

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, <https://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

Connect with GAO

Connect with GAO on [Facebook](#), [Flickr](#), [Twitter](#), and [YouTube](#).
Subscribe to our [RSS Feeds](#) or [Email Updates](#). Listen to our [Podcasts](#).
Visit GAO on the web at <https://www.gao.gov>.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact FraudNet:

Website: <https://www.gao.gov/about/what-gao-does/fraudnet>

Automated answering system: (800) 424-5454 or (202) 512-7700

Congressional Relations

A. Nicole Clowers, Managing Director, ClowersA@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548

Strategic Planning and External Liaison

Stephen J. Sanford, Managing Director, spel@gao.gov, (202) 512-4707
U.S. Government Accountability Office, 441 G Street NW, Room 7814,
Washington, DC 20548

