

# Report to Congressional Addressees

**July 2022** 

FEDERAL SPENDING TRANSPARENCY

OIGs Identified a
Variety of Issues with
the Quality of
Agencies' Data
Submissions



Highlights of GAO-22-105427, a report to congressional addressees

#### Why GAO Did This Study

One of the purposes of the DATA Act is to increase accountability and transparency of federal spending. The act required OIGs to issue three reports evaluating the completeness, timeliness, quality, and accuracy of each agency's spending data and its implementation and use of applicable data standards.

The act also includes a provision for GAO to review the OIG reports and to assess and compare the completeness, timeliness, quality, and accuracy of federal agencies' submitted data and their implementation and use of data standards. This is the third GAO review of the OIG reports.

This report summarizes the results in the 57 reports OIGs issued on or before December 31, 2021, assessing the quality of agencies' federal spending data.

#### What GAO Recommends

In March 2022, GAO recommended that Congress consider amending the DATA Act to extend the requirement for OIGs to review the completeness, timeliness, quality, and accuracy of their agencies' data submissions periodically. GAO is not making recommendations in this report.

The Council of the Inspectors General on Integrity and Efficiency noted that GAO's report provides useful information on OIG efforts to meet oversight and reporting responsibilities under the DATA Act.

View GA0-22-105427. For more information, contact Paula M. Rascona at (202) 512-9816 or rasconap@gao.gov.

#### July 2022

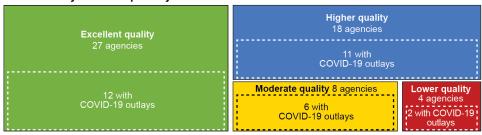
## FEDERAL SPENDING TRANSPARENCY

# OIGs Identified a Variety of Issues with the Quality of Agencies' Data Submissions

#### What GAO Found

Offices of Inspector General (OIG) reported a variety of issues with the quality of agencies' data submissions under the Digital Accountability and Transparency Act of 2014 (DATA Act). Most (45 of 57) OIGs reported that the overall quality levels of data agencies submitted were "excellent" or "higher" based on a combination of scores from statistical and non-statistical test results. Some OIGs reported that their agencies' overall data quality levels were "moderate" or "lower." Many (31 of 57) OIGs reported that their agencies had COVID-19 outlays, and 23 of these reported that their agencies' overall data quality levels were excellent or higher quality.

2021 OIG-Reported Overall Quality Levels of Data 57 Agencies Submitted under the Digital Accountability and Transparency Act of 2014



Excellent quality = score 95-100; higher quality = score 85-94.9; moderate quality = score 70-84.9; lower quality = score 0-69.9 Source: GAO analysis of Office of Inspector General (OIG) reports and scorecards. | GAO-22-105427

Based on the OIGs' statistical tests results, agencies' financial and award data were more complete than they were accurate or timely. Based on the non-statistical test results, most OIGs reported their agencies submitted data on time, but many reported issues with linking financial and award data. Some OIGs reported issues with the completeness of agencies' summary-level data (e.g., appropriations account balances, program activity, and object class) and with the completeness, accuracy, and timeliness of COVID-19 outlay data. In addition, 37 OIGs reported their agencies had accuracy errors in monetary data elements, such as *Obligation* and *Current Total Value of Award*, and 41 OIGs reported that some accuracy errors were not within their agencies' control. Most (45 of 57) OIGs reported their agencies properly implemented and used the Office of Management and Budget (OMB) and the Department of the Treasury data standards.

Most OIGs also reported control deficiencies, such as those related to data-entry errors, validation and reconciliation procedures, and senior accountable official certifications, among other issues. Forty-four made recommendations to help improve data quality, including for some agencies to develop controls over the submission process; revise data quality plans; maintain documentation; and to work with Treasury, OMB, and other external stakeholders to resolve identified issues.

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#### **Abbreviations**

CFDA Catalog of Federal Domestic Assistance
CFO Act Chief Financial Officers Act of 1990

CIGIE Council of the Inspectors General on Integrity and

Efficiency

DAIMS DATA Act Information Model Schema

DATA Act Digital Accountability and Transparency Act of 2014

FABS Financial Assistance Broker Submission

FAEC Federal Audit Executive Council

FFATA Federal Funding Accountability and Transparency Act of

2006

FPDS Federal Procurement Data System
FSRS FFATA Subaward Reporting System

FY fiscal year

IG Guide CIGIE FAEC Inspectors General Guide to Compliance

under the DATA Act

NAICS North American Industry Classification System

OIG Office of Inspector General

OMB Office of Management and Budget SAM System for Award Management SAO senior accountable official

TAS Treasury Account Symbol
Treasury Department of the Treasury

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July 12, 2022

#### Congressional Addressees

One of the purposes of the Digital Accountability and Transparency Act of 2014 (DATA Act) is to increase accountability and transparency of federal spending, which totaled \$10.1 trillion for fiscal year 2021.¹ The DATA Act required a series of three Office of Inspector General (OIG) oversight reports evaluating the completeness, timeliness, quality, and accuracy of each federal agency's spending data and its implementation and use of data standards.² The act also requires the Office of Management and Budget (OMB) and the Department of the Treasury to establish data standards that must generate agency data that are consistent and comparable to the extent reasonable and practicable.

Similar to our previous reviews and reports<sup>3</sup> on the DATA Act and the OIGs' 2017 and 2019 DATA Act reports, this report is intended to meet a provision in the act for GAO to review and issue a report on the 2021 OIG reports.<sup>4</sup> The DATA Act also includes a provision for GAO to assess and compare the completeness, timeliness, quality, and accuracy of the data submitted and the implementation and use of data standards by federal agencies. In November 2021, we issued our data quality report to fulfill

<sup>&</sup>lt;sup>1</sup>Pub. L. No. 113-101, 128 Stat. 1146 (May 9, 2014). The DATA Act amended the Federal Funding Accountability and Transparency Act of 2006 (FFATA). Pub. L. No. 109-282, 120 Stat. 1186 (Sept. 26, 2006), *codified at* 31 U.S.C. § 6101 note. We refer to language the DATA Act added to FFATA as DATA Act requirements.

<sup>&</sup>lt;sup>2</sup>The DATA Act defines "federal agency" by reference to section 105 of title 5 of the United States Code, as including each federal executive department, government corporation, and independent establishment.

<sup>&</sup>lt;sup>3</sup>We have issued several reports to fulfill our reporting mandate under the DATA Act. See GAO, *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), for our first report on our review of OIG reports, and GAO, *DATA Act: OIGs Report That Quality of Agency-Submitted Data Varied, and Most Recommended Improvements*, GAO-20-540 (Washington, D.C.: July 9, 2020), for our second report. See the Related GAO Products list at the end of this report for other reports we have issued as part of our ongoing monitoring of DATA Act implementation.

<sup>&</sup>lt;sup>4</sup>Some OIGs contracted with independent public accountants to review agency spending data, and some OIGs published reports for more than one agency. For purposes of this report, we refer to the reviews the OIGs or their contractors performed and the resulting reports collectively as OIG reports based on the number of agencies, unless otherwise noted.

our reporting mandate under the act.<sup>5</sup> In accordance with the DATA Act, the OIGs were also required to publish their third and final reports in November 2021.

The objective of this report is to describe what the OIGs reported to be the quality of agencies' DATA Act spending data and implementation and use of data standards. To address this objective, we obtained and reviewed 57 OIG DATA Act reports<sup>6</sup> that OIGs issued on or before December 31, 2021—24 Chief Financial Officers Act of 1990 (CFO Act) agencies and 33 non-CFO Act agencies.<sup>7</sup> In this report, we categorize the agencies into those the OIGs' reports identified as having COVID-19 outlays in the quarter tested and those that did not.<sup>8</sup> To characterize the 57 OIGs' reported results throughout this report, we defined the following modifiers to quantify the OIG-reported results:

- "all" represents 57 OIGs,
- "most" represents 43–56 OIGs,
- "many" represents 23–42 OIGs, and
- "some" represents 2–22 OIGs.

We developed and used a data-collection instrument to compile and summarize the results the OIGs reported on data quality based on the completeness, timeliness, accuracy, and quality of agencies' data

<sup>&</sup>lt;sup>5</sup>GAO, Federal Spending Transparency: Opportunities Exist to Further Improve the Information Available on USAspending.gov, GAO-22-104702 (Washington, D.C.: Nov. 8, 2021).

<sup>&</sup>lt;sup>6</sup>We obtained 60 OIG DATA Act reports published by December 31, 2021, including a report from GAO's OIG. We did not include the GAO OIG report in our review for independence reasons. The Treasury OIG and the Treasury Inspector General for Tax Administration performed separate audits and issued separate reports. The Treasury OIG also published a report that combined the two separate reports. We used the Treasury combined report for this review.

<sup>&</sup>lt;sup>7</sup>The CFO Act, Pub. L. No. 101-576, 104 Stat. 2838 (Nov. 15, 1990), among other things, established chief financial officer positions at major federal entities. As amended, the current list includes 24 entities, commonly referred to as CFO Act agencies, and is codified at section 901(b) of title 31, United States Code.

<sup>&</sup>lt;sup>8</sup>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). Per OMB guidance, agencies were required to report a running total of outlays for all award records in File C containing a COVID-19–related *Disaster Emergency Fund Code*.

submissions, including scorecard information and COVID-19 outlay testing results, if applicable; agencies' implementation and use of data standards; and other information. We also followed up with OIGs for clarification and corroboration, as necessary. The results in this report cannot be directly compared with prior GAO or OIG reports because of differences in audit scope, methodologies and procedures, changes in the guidance and data standards that OMB and Treasury issued, and changes in Treasury's DATA Act Broker (broker). Appendix I provides additional details on our scope and methodology.

We conducted this performance audit from September 2021 to July 2022 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

# Background

## **DATA Act**

Congress enacted the DATA Act on May 9, 2014, to provide both policymakers and the public a means of more effectively tracking federal spending. The act's purposes include expanding on previous federal transparency legislation by requiring federal agencies to disclose expenditures and link agency spending information to federal program activities. The act aims to improve the quality of data agencies submit to USAspending.gov—a repository of spending data for the federal government—by holding them accountable for the completeness and accuracy of the data they submit.

Federal law identifies OMB and Treasury as the two agencies responsible for leading government-wide implementation of the act. <sup>10</sup> This responsibility includes establishing data standards that shall produce consistent, comparable, and searchable spending data for any federal funds made available to or expended by federal agencies. Under the act,

<sup>&</sup>lt;sup>9</sup>The broker is a Treasury system that collects and validates agency-submitted data prior to their publication on the USAspending.gov website.

<sup>&</sup>lt;sup>10</sup>See FFATA § 3, as amended by the DATA Act.

OMB and Treasury shall also ensure that the data standards are applied to the data made available on USAspending.gov.

Treasury issued guidance in 2016 for agencies to use when preparing for their first DATA Act submissions in 2017.<sup>11</sup> Additional guidance included steps for agencies for creating an inventory of data and associated business processes, systems, and applications and mapping those data to the DATA Act Information Model Schema (DAIMS).<sup>12</sup> According to Treasury guidance, agencies are expected to submit three data files with specific details and data elements to the broker.

- **File A: Appropriations account.** This includes summary information, such as the fiscal year cumulative federal appropriations account balances, and includes data elements such as the *Agency Identifier*, *Main Account Code*, and *Gross Outlay Amount*.
- File B: Object class and program activity. This includes summary data, such as the names of specific activities or projects as listed in the program and financing schedules of the annual budget of the U.S. government.
- File C: Award financial. This includes award transaction data, such as the obligation amounts for each federal financial award made or modified during the reporting quarter (e.g., October 1, 2021, through December 31, 2021).

Agencies also submit four files containing data that the broker extracts from government-wide award reporting systems. These systems—including the Federal Procurement Data System (FPDS), System for Award Management (SAM), Financial Assistance Broker Submission (FABS), and the FFATA Subaward Reporting System (FSRS)—compile information that agencies and federal award recipients report. For the

<sup>&</sup>lt;sup>11</sup>Department of the Treasury, *DATA Act Implementation Playbook, Version 2.0* (Washington, D.C.: June 24, 2016).

<sup>&</sup>lt;sup>12</sup>Treasury's DAIMS provides information on how to standardize the way federal financial assistance awards (e.g., grants and loans), contracts, and other financial and nonfinancial data are to be reported under FFATA, as amended by the DATA Act. Multiple versions of DAIMS were effective for quarter 3 of fiscal year (FY) 2020 to quarter 2 of FY 2021 submissions, and the *CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act* instructed auditors to use the current version of the DAIMS applicable to the quarter being tested.

agencies' submissions, the four files produced with information that the broker extracts from these systems are as follows:

- **File D1: Procurement.** This includes award and awardee attribute information (extracted from FPDS) on procurement (contract) awards and contains elements such as the *Federal Action Obligation*, *Current Total Value of Award*, and *Potential Total Value of Award*.
- **File D2: Financial assistance.** This includes award and awardee attribute information (extracted from FABS) on financial assistance (loan and grant) awards and contains elements such as the *Federal Award Identification Number*, the *Total Funding Amount*, <sup>13</sup> and the *Funding Agency Name*.
- File E: Additional awardee attributes. This includes additional information (extracted from SAM) on the award recipients and contains elements such as the Awardee or Recipient Unique Identifier, the Awardee or Recipient Legal Entity Name, and information on the award recipient's five most highly compensated officers.
- File F: Subaward attributes. This includes information (extracted from FSRS) on awards made to subrecipients under a prime award and contains data such as the subaward number and the subaward amount.

#### **OIG** Guidance

In 2005, the Federal Audit Executive Council (FAEC) was established to address issues affecting the federal audit community, with special emphasis on audit policy and operations of common interest to FAEC members. The Council of the Inspectors General on Integrity and Efficiency (CIGIE) established FAEC to aid in the accomplishment of their mission. The FAEC formed the DATA Act Working Group that consists of participating agency OIGs. In consultation with GAO, the working group developed and published a common audit methodology, the CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act (IG Guide)

<sup>&</sup>lt;sup>13</sup>Total Funding Amount represents the sum of the Federal Action Obligation and the Non-Federal Funding Amount.

for use in conducting mandated reviews. <sup>14</sup> The latest IG Guide for the 2021 OIG audits was revised and issued in December 2020. The IG Guide is intended to provide the IG community with a baseline framework for assessing the quality of agencies' data and reporting as required by the DATA Act.

As specified in the IG Guide, an OIG could choose to evaluate its agency's data submissions from one of four quarters across fiscal years 2020 and 2021. The IG Guide suggests that teams adhere, to the greatest extent possible, to the overall methodology, objectives, and audit procedures it outlines. The IG Guide identified three levels of agency data for the OIGs to test—element level, record level, and summary level. The element-level data are the individual data elements (fields) that make up a record of federal spending data. The record-level data are the aggregation of the data elements for a record. The summary-level data are the cumulative financial data that agencies report in Files A and B. The OIGs can use professional judgment to design alternative audit procedures but must document the reason for any deviations from the guide. Some of the key analyses in the IG Guide that we discuss in this report follow:

- An assessment of the overall quality level based on a combination of the OIGs statistical and non-statistical test results.<sup>16</sup>
- Error rates for individual data elements.<sup>17</sup>

<sup>&</sup>lt;sup>14</sup>Council of the Inspectors General on Integrity and Efficiency, Federal Audit Executive Council DATA Act Working Group, CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act, OIG-CA-21-008 (Washington, D.C.: Department of the Treasury, Office of Inspector General, Dec. 4, 2020). The FAEC DATA Act Working Group issued additional guidance, FY 2021 DATA Act Audit, Frequently Asked Questions, updated on May 11, 2021.

<sup>&</sup>lt;sup>15</sup>The OIGs had the option of selecting one of four FY quarters: FY 2020 third quarter, FY 2020 fourth quarter, FY 2021 first quarter, or FY 2021 second quarter. If COVID-19 outlays were included in the quarter selected the IG Guide suggests specific additional testing on these funds.

<sup>&</sup>lt;sup>16</sup>The statistical test results refer to the projected error rates for completeness, timeliness, and accuracy of the statistically selected sample, and account for 60 percent of the overall quality score. The non-statistical test results include timeliness of agency submission and record-level linkages, among others, and account for 40 percent of the overall quality score. App. II provides additional information about these tests.

<sup>&</sup>lt;sup>17</sup>According to the IG Guide, OIGs were to calculate but not project error rates for individual data elements of the statistically selected sample.

- The completeness of summary-level data in Files A and B and whether agencies submitted all required data.
- An assessment of whether File C is suitable for sampling, if not, OIGs should select a statistical sample from Files D1 and D2.
- COVID-19 outlay testing results, if the agency had COVID-19 outlays.
- An assessment of the agency's implementation and use of the data standards.
- Identification of errors attributable to third-party systems (e.g., FPDS, SAM, and FABS) included in the error rates.
- Identified control deficiencies.

According to the IG Guide, the OIGs were to use a scorecard to calculate an overall data quality score for their agencies by combining weighted scores for statistically selected sample test results and non-statistical test results. Appendix II provides a detailed explanation of the scorecard the OIGs used to measure overall data quality, and appendix III provides additional information on the OIGs' audit test results.

The IG Guide defines the aspects of quality as follows:

- **Quality of data:** Data are complete, accurate, and timely and are based on statistical and non-statistical testing results.
- **Completeness of agency submission:** Transactions and events that should have been recorded were recorded in the proper period.
- Timeliness of agency submission: Reporting of the agency monthly or quarterly DATA Act submission to the DATA Act broker was in accordance with the schedule the Treasury DATA Act Project Management Office established.
- Completeness of data elements: Each of the required data elements that should have been reported was reported in the appropriate Files A through D2.
- Timeliness of data elements: The required data elements that should have been reported were reported in accordance with the reporting schedules defined by the financial, procurement, and financial assistance requirements in the Federal Funding Accountability and Transparency Act of 2006 (FFATA), Federal Acquisition Regulation, FPDS, FABS, and DAIMS.
- Accuracy of data elements: Amounts and other data relating to reported transactions have been recorded in accordance with the

DAIMS Reporting Submission Specification and Interface Definition Document, and the online data dictionary, and agree with the original award documentation or contract file.

# OIGs Reported Varying Levels of Data Quality and Implementation and Use of Data Standards

According to the 57 OIG reports we reviewed, the data agencies submitted had varying levels of overall quality. Most (45 of 57) reported their agencies' data were of higher (18 of 57) or excellent (27 of 57) quality, while some reported their agencies' data were of lower (4 of 57) or moderate (8 of 57) quality. Most (54 of 57) also reported that agencies met their submission deadlines, but some (19 of 57) reported that agencies' submissions did not always contain all the required summary-level data. OIGs also reported at the data element level and found elements in the submissions that were not always complete, timely, or accurate. Most (45 of 57) also reported that agencies properly implemented and used the data standards, although some (12 of 57) reported that their agencies did not always do so. Most OIGs also reported control deficiencies (46 of 57) and made recommendations (44 of 57) to help improve the quality of their agencies' data.

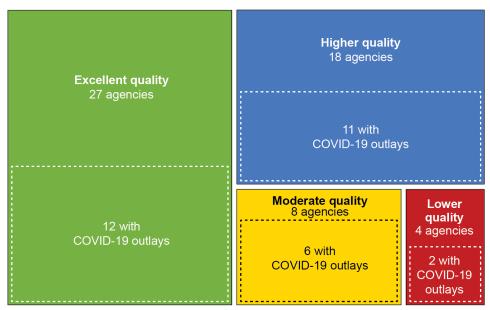
## OIGs Reported Varying Overall Data Quality Levels

All 57 OIGs reported an overall quality determination of the data their agencies submitted using the score ranges and the quality level descriptions. The IG Guide calls for OIGs to determine overall data quality based on the results of their statistical and non-statistical tests of agency-submitted data. The revised IG Guide defines overall quality using the total score ranges as follows:

- "lower" quality represents a total score from 0 to 69.999,
- "moderate" quality represents a total score from 70 to 84.999,
- "higher" quality represents a total score from 85 to 94.999, and
- "excellent" quality represents a total score from 95 to 100.

As shown in figure 1, many (27 of 57) OIGs reported the overall quality level of data agencies submitted was excellent quality, and some (18 of 57) reported their agencies' overall data quality was higher quality. Eight reported their agencies' overall data quality level was moderate quality, and four reported it was lower quality. Many (31 of 57) OIGs reported that their agency had COVID-19 outlays, 23 OIGs reported that their agencies' overall data quality level was excellent or higher quality, and eight reported that their agencies' overall data was moderate or lower quality.

Figure 1: 2021 OIG-Reported Overall Quality Levels of Data 57 Agencies Submitted under the Digital Accountability and Transparency Act of 2014



Excellent quality = score 95-100; higher quality = score 85-94.9; moderate quality = score 70-84.9; lower quality = score 0-69.9 Source: GAO analysis of Office of Inspector General (OIG) reports and scorecards. | GAO-22-105427

Note: One OIG reported that its agency does not submit award-level data (Files C through F), and, therefore, determined its agency's overall quality score and level based only on the results of the non-statistical tests.

See table 8 in appendix III for each agency's overall quality score and quality level descriptions. Appendix III also provides agency scores for the data quality attributes tested using statistical and non-statistical sampling methods. Appendix II provides additional information on these tests and a detailed explanation of the scorecard the OIGs used to measure overall data quality.

Most OIGs Reported Financial and Award Data Were More Complete Than They Were Accurate or Timely

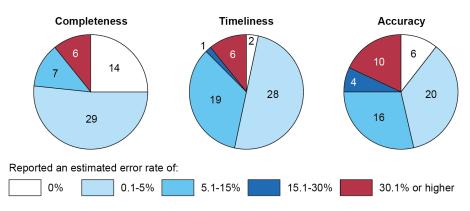
Most (56 of 57) OIGs reported error rates for data quality attributes of completeness, timeliness, and accuracy of the financial and award data sampled at the record level. According to the IG Guide, these error rates

represent the average error rate for each record tested. <sup>18</sup> Completeness, timeliness, and accuracy represented 60 percent of each agency's overall quality score. Most (46 of 57) OIGs tested a sample of award records and, therefore, calculated and reported projected error rates. Some (10 of 57) OIGs tested a full population of award records and, therefore, reported actual error rates. According to one OIG, its agency does not submit Files C through F because the agency concluded that it is not subject to the FFATA and DATA Act requirements for award data; consequently, the OIG did not test such data. Therefore, some results that follow only show results for 56 agencies. See table 7 in appendix II for details on the OIGs' scope and selection methodology, including the number of award records tested and the files from which they selected the award records tested.

As shown in figure 2, most (43 of 56) OIGs reported completeness error rates from 0 to 5 percent for their financial and award records tested. Many OIGs reported timeliness (30 of 56) and accuracy (26 of 56) error rates from 0 to 5 percent. In addition, a slightly higher number of OIGs reported error rates greater than 15 percent for accuracy and timeliness. See appendix III for the individual agency OIG testing results, including completeness, timeliness, and accuracy error rates in table 9.

<sup>&</sup>lt;sup>18</sup>The average error rate for each record tested was based on the total data elements required to be reported (including optional data elements the agency chose to report) for the corresponding record. Some data elements are not applicable to some records. For example, the *Parent Award Identification Number* is only applicable to procurement awards and would not be included in the calculation of the average error rate of financial assistance records.

Figure 2: 2021 OIG-Reported Estimated Error Rates for Record-Level Data Agencies Submitted under the Digital Accountability and Transparency Act of 2014 (DATA Act), by Range and Type of Error



Source: GAO analysis of Office of Inspector General (OIG) reports and scorecards. | GAO-22-105427

Note: We obtained and reviewed 57 OIG DATA Act reports. One OIG reported that its agency does not submit Files C through F, and, therefore, it did not test or report on the agency's financial and award data.

OIGs Reported Completeness, Timeliness, and Accuracy Error Rates for Individual Data Elements

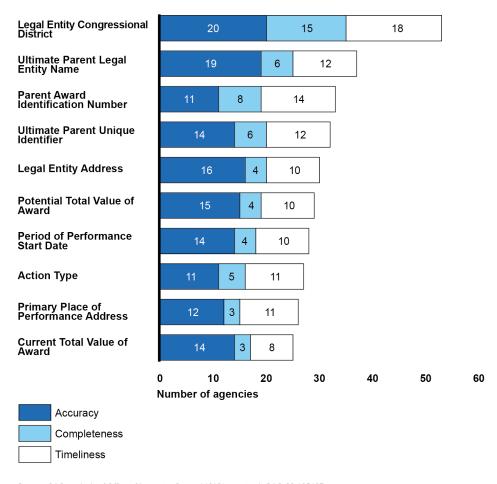
Most OIGs also reported completeness (48 of 56), timeliness (48 of 56), and accuracy (50 of 56) error rates of individual financial and award data elements. <sup>19</sup> The IG Guide suggests that OIGs test the completeness, timeliness, and accuracy of data elements related to financial and award data independently of each other, but they may overlap.

- Completeness errors indicate that the agency did not report a required data element.
- An accuracy error indicates that the value for the data element the agency submitted does not agree with the agency's supporting documentation and the originating source system for that data element. An incomplete data element is also determined to be inaccurate.
- A timeliness error indicates that an agency did not submit the data element within the required reporting time frame. For example, to be considered timely, procurement award data elements should be reported in FPDS no more than 3 business days after the award is made, and financial assistance award data elements should be reported in FABS no more than 30 days after the award is made.

<sup>&</sup>lt;sup>19</sup>According to the IG Guide, OIGs were to calculate but not project error rates for individual data elements.

While individual data element completeness error rates were generally lower than the error rates for timeliness and accuracy, some OIGs reported error rates greater than 15 percent for certain data elements. Appendix IV provides the completeness, timeliness, and accuracy error rates by data element and summarizes error rates greater than 15 percent for all data elements in figure 8. Figure 3 shows the 10 data elements for which the most OIGs reported accuracy, completeness, and timeliness error rates higher than 15 percent.

Figure 3: 2021 OIG-Reported Top 10 Data Elements with Error Rates Higher Than 15 Percent for Data Agencies Submitted under the Digital Accountability and Transparency Act of 2014 (DATA Act)



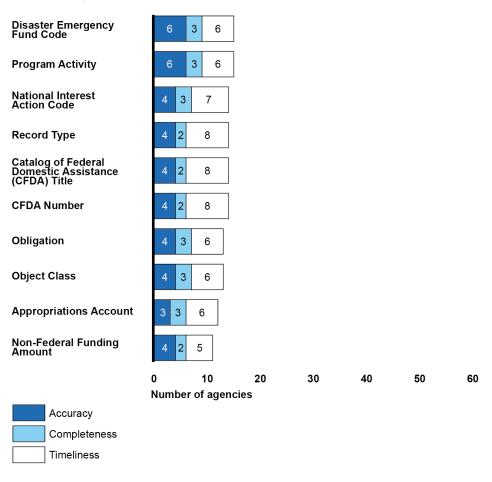
Source: GAO analysis of Office of Inspector General (OIG) reports. | GAO-22-105427

Note: For a given data element, we may count an OIG up to three times (i.e., once for each attribute). The number of OIGs reporting error rates for each individual data element varies depending on whether the data element is applicable to an agency's data submission, among other things. For

OIGs reporting multiple error rates for one data element, we used the highest error rate for the figure above. We obtained and reviewed 57 OIG DATA Act reports. One OIG reported that its agency does not submit Files C through F, and, therefore, it did not test or report on the agency's financial and award data.

On the other hand, figure 4 shows the 10 data elements for which the fewest OIGs reported accuracy, completeness, and timeliness error rates higher than 15 percent. For more detailed information, see tables 11 through 13 in appendix IV for a listing of individual data elements and the completeness, timeliness, and accuracy error rate ranges that OIGs reported for the 52 data elements tested using a statistical sample.

Figure 4: 2021 OIG-Reported Top 10 Data Elements with Fewest Error Rates Higher Than 15 Percent for Data Agencies Submitted under the Digital Accountability and Transparency Act of 2014 (DATA Act)



Source: GAO analysis of Office of Inspector General (OIG) reports.  $\mid$  GAO-22-105427

Note: For a given data element, we may count an OIG up to three times (i.e., once for each attribute). The number of OIGs reporting error rates for each individual data element varies depending on whether the data element is applicable to an agency's data submission, among other things. For OIGs reporting multiple error rates for one data element, we used the highest error rate for the figure above. We obtained and reviewed 57 OIG DATA Act reports. One OIG reported that its agency does not submit Files C through F, and, therefore, it did not test or report on the agency's financial and award data.

## OIGs Reported Varying Results for Non-Statistical Tests

The IG Guide includes guidance for non-statistical tests representing 40 percent of each agency's overall quality score. The non-statistical tests were timeliness of agency submission (including certification); completeness of summary-level data (Files A and B); and suitability of File C for sample selection, record-level linkages (Files C and D1/D2), and, if applicable, COVID-19 outlay testing. Table 1 shows the summary results of each non-statistical test for all 57 agencies. We summarized the OIG-reported results based on the number of agencies that scored points in the ranges of full points (0 percent error rate), partial points (1–99 percent error rate), or no points (100 percent error rate). See table 10 in appendix III for each agencies' non-statistical score results.

	Timeliness	Suitability of File			
Points scored	of agency submission	Completeness of summary-level data	C for sample selection <sup>a</sup>	Record-level linkages <sup>a</sup>	COVID-19 outlay testing
Agencies with COVII	D-19 outlays				
Full	31	17	11	9	20
Partial	0	14	19	21	7
None	0	0	1	1	4
Agencies without CO	OVID-19 outlays				
Full	23	21	12	10	Not applicable
Partial	2	5	13	14	Not applicable
None	1	0	0	1	Not applicable
Total	57	57	56	56	31

Legend: DATA Act = Digital Accountability and Transparency Act of 2014; full = 0 percent error rate; partial = 1-99 percent error rate; none = 100 percent error rate.

Source: GAO analysis of Office of Inspector General (OIG) reports and scorecards. | GAO-22-105427

<sup>a</sup>One OIG reported that its agency does not submit award-level data (Files C through F); therefore, the OIG did not perform tests that involved those files.

# Timeliness of Agency Submission

The IG Guide suggests that OIGs test the timeliness of agency submission by determining whether the agency submitted and certified its data within 45 days of a quarter's end. For agencies that received COVID-19 funds, the timeliness test consisted of whether an agency

submitted its data on a monthly basis by the end of the month following the reporting period and certified it within 45 days after the end of the corresponding quarter.

Most (54 of 57) OIGs reported their agencies met their submission deadline. Of the 31 OIGs for agencies that had COVID-19 outlays, all reported their agencies submitted and certified data by the Treasury-established deadlines. For the 26 agencies that did not have COVID-19 outlays, 23 OIGs reported their agencies submitted and certified data by the established deadlines. Of the three OIGs whose agencies did not receive full points for timeliness, one of the OIGs explained that its agency certified its submission after the due date. Another OIG did not explain why its agency received partial points for timeliness of the submission. The third OIG reported its agency did not meet the requirements for timeliness (i.e., scored zero points on this test) because the agency resubmitted its files 1 month after the due date to address completeness issues.

## Completeness of Summary-Level Data

The IG Guide suggests that OIGs test the completeness of summary-level data by comparing agency appropriation account data submitted in File A to the Treasury Account Symbols (TAS) reported in the Governmentwide Treasury Account Symbol Adjusted Trial Balance System SF-133, except for Loan Financing Accounts. The OIGs evaluated whether the amounts and TAS reported in File A matched the amounts and TAS in File B. In addition, the OIGs determined whether all object class codes from File B matched codes defined in Section 83 of OMB Circular No. A-11, *Preparation, Submission, and Execution of the Budget*, and program activity names and codes from File B matched agency authoritative source documentation, as required.

Many (38 of 57) OIGs reported their agencies' summary-level data were complete and assigned full points, while some (19 of 57) OIGs reported their agencies received partial points because of errors. Comparing the agencies with COVID-19 outlays and without COVID-19 outlays, many OIGs (17 COVID-19 and 21 non-COVID-19) reported the data were complete and some (14 COVID-19 and five non-COVID-19) reported the data were not complete.

# Suitability of File C for Sample Selection

The IG Guide suggests that OIGs test the suitability of File C for sample selection by assessing an agency's process for determining whether File C is complete, contains all required transactions, and resolved validation warnings between Files C and D1/D2. The OIGs were also instructed to

determine whether certain data elements were present in Files B, C, and D1/D2.<sup>20</sup>

Many (23 of 56) OIGs reported their agencies received full points on the test to determine whether File C was suitable for sample selection, while a higher number of OIGs (32 of 56) reported partial scores for their agencies on this test. Partial scores meant that there were issues with the agencies' File C that may have precluded some OIGs from selecting a statistical sample of records to test from File C. In addition, one OIG reported its agency received zero points on this test.<sup>21</sup> Based on our summary of OIG sampling methodology, most (46 of 56) OIGs selected their sample from File C, and some (10 of 56) selected their sample from Files D1, D2, or both.

#### Record-Level Linkages

The IG Guide suggests that OIGs test the linkages between records by determining whether the award identification numbers from the samples selected from File C and the corresponding transaction obligation amounts matched the identification numbers and obligation amounts in Files D1 and D2 or vice versa. This test could also determine whether the agency reported intragovernmental transactions in accordance with OMB guidance.<sup>22</sup>

Some (19 of 56) OIGs reported their agencies did not have issues with linkages (i.e., received full points for this test). Many (35 of 56) reported their agencies had some issues with establishing linkages and assigned

<sup>&</sup>lt;sup>20</sup>The IG Guide instructed OIGs to exclude outlays from this test because, among other things, outlays do not have a corresponding linkage to Files D1/D2, and there was no statistically viable method to test both obligations and outlays together. The guide instructed OIGs to test COVID-19 outlays in a different test discussed later in this report.

<sup>&</sup>lt;sup>21</sup>One other OIG did not report whether its agency's File C was suitable for sample selection because its agency did not have a File C. According to the OIG, Files C through F are not applicable to the agency because the agency's federal awards do not involve the use of funds obtained through the appropriations process.

<sup>&</sup>lt;sup>22</sup>Office 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).

partial points. Two OIGs reported their respective agencies did not establish record-level linkages, resulting in zero points assigned.<sup>23</sup>

#### COVID-19 Outlay Testing

The IG Guide suggests that OIGs test the COVID-19 outlays of agencies that received COVID-19 relief funding. Specifically, the OIGs of the 31 agencies with COVID-19 outlays were to select a non-statistical sample of outlay records from the 3rd month of the quarter in the scope of their audit. They were to test the completeness, timeliness, and accuracy of the Parent Award Identification Number, Procurement Instrument Identifier/Federal Award Identification Numbers, Object Class, Appropriations Account, Program Activity, Outlay, and Disaster Emergency Fund Code data elements. This non-statistical sample design did not allow OIGs to project the test results to the universe from which they selected the samples.

Many (20 of 31) OIGs reported their agencies COVID-19 outlay information was complete, accurate, and timely, thus receiving full points for this test. Some (seven of 31) OIGs reported their agencies had issues with its COVID-19 outlay information and assigned partial points. In addition, four OIGs reported their agencies' COVID-19 outlay data were incomplete, inaccurate, and untimely, resulting in zero points assigned. See appendix V for COVID-19 outlay testing results, including completeness, timeliness, and accuracy error rates by agency.

# Most OIGs Reported Agencies Properly Implemented and Used Data Standards

The DATA Act required each OIG to assess and report on the agency's implementation and use of the data standards OMB and Treasury established. Most (45 of 57) OIGs reported their agencies properly implemented and used the data standards. Five reported their agencies did not properly implement and use the data standards. In addition, seven reported their agencies did not fully or consistently implement and use the standards. Some of the issues OIGs found in their agencies' implementation and use of data standards include

- agencies not implementing the data standards required to ensure timely reporting of COVID-19 outlay data;
- an agency's lack of effective controls resulting in inconsistent use of data standards;

<sup>&</sup>lt;sup>23</sup>One other OIG did not report whether its agency's File C was suitable for sample selection because its agency did not have a File C. According to the OIG, Files C through F are not applicable to the agency because the agency's federal awards do not involve the use of funds obtained through the appropriations process.

- an agency improperly used the data standard for the *Transaction Obligated Amount* to report deobligations; and
- a senior accountable official (SAO) not certifying that the agency implemented and used the standards to report certain data, as required.

# Many OIGs Reported Agencies' Monetary Data Elements Had Accuracy Errors

The IG Guide suggests OIGs determine and report on the accuracy of dollar value—related data elements based on the summed absolute value of errors for those elements. The IG Guide emphasized that these amounts provide additional information about the magnitude of errors in those monetary data elements but are not projectable because the statistical sample design focused on estimation of nonfinancial attributes and not on monetary amounts.

Many (37 of 57) OIGs reported that the statistical sample item test results identified accuracy errors on certain monetary data elements. Based on our review of OIG reports, the *Potential Total Value of Award* and *Current Total Value of Award* monetary data elements had the highest absolute dollar amount of errors. Table 2 shows the number of OIGs that reported monetary data elements with errors and the combined absolute dollar value of errors. Certain OIGs reported some of the monetary data elements errors were caused by external third-party systems. For example, some OIGs reported errors in the monetary data elements *Current Total Value of Award* and *Potential Total Value of Award* because of known calculation issues within FPDS. According to guidance issued by the FAEC DATA Act Working Group, award modifications may be inconsistent with the data reported in File D1 because of the way FPDS calculates award amounts.<sup>24</sup>

<sup>&</sup>lt;sup>24</sup>Federal Audit Executive Council DATA Act Working Group, *FY 2019 DATA Act Audit Frequently Asked Questions* (Sept. 27, 2019).

Table 2: 2021 OIG-Reported Errors in Monetary Data Elements and Absolute Dollar Values of Errors in Data Agencies Submitted under the Digital Accountability and Transparency Act of 2014 (DATA Act)

Monetary data elements	Number of OIGs reporting errors	Reported absolute dollar value of errors
Procurement awards		
Potential Total Value of Award	26	\$828,464,250,023
Current Total Value of Award	25	7,008,967,549
Obligation	15	358,363,033
Federal Action Obligation	15	64,469,238
Financial assistance awards		
Obligation	9	373,256,197
Federal Action Obligation	13	69,023,636
Amount of Award	12	42,413,353
Non-Federal Funding Amount	6	33,614,977

Source: GAO analysis of Office of Inspector General (OIG) reports. | GAO-22-105427

Note: We obtained and reviewed 57 OIG DATA Act reports. One OIG reported that its agency does not submit Files C through F, and, therefore, it did not test or report on the agency's financial and award data.

## Many OIGs Attributed Some Accuracy Errors to Third Parties

The IG Guide suggests that OIGs analyze errors in data elements not attributable to the agencies. Some errors can be caused by an entity other than the agency, such as instances in which Treasury's DATA Act broker extracts the wrong field from a source system. The agency may have recorded the correct information in the source system, but because of an external third party extracting the incorrect field, the data were not reported accurately. Many (41 of 57) OIGs reported errors for certain data elements resulted from external third parties and were not attributable to their agencies. These third-party errors included issues with systems, such as SAM, which contains data that originate from federal award recipients; FPDS; FABS; and Treasury's DATA Act broker, as well as errors caused by the data universal numbering system (DUNS), 25 a shared service provider and other unnamed third parties. Table 3 summarizes the number of OIGs reporting third-party errors.

<sup>&</sup>lt;sup>25</sup>The DUNS number was the unique identification number for an awardee or recipient, which was a nine-digit number that Dun & Bradstreet assigned. In April 2022, Treasury replaced the DUNS number with the unique entity identifier.

Table 3: 2021 OIG-Reported Sources of Third-Party Errors in Data Agencies Submitted under the Digital Accountability and Transparency Act of 2014 (DATA Act)

Third-party error sources	Number of OIGs reporting errors
System for Award Management	25
Federal Procurement Data System	16
Unnamed third-parties	10
Financial Assistance Broker Submission	9
Department of the Treasury's DATA Act Broker	4
Data Universal Numbering System	2
Shared service provider	1

Source: GAO analysis of Office of Inspector General (OIG) reports. | GAO-22-105427

Note: We obtained and reviewed 57 OIG DATA Act reports. One OIG reported that its agency does not submit Files C through F, and, therefore, it did not test or report on the agency's financial and award data.

The IG Guide instructs OIGs to include these accuracy errors in the statistical results and to report additional information to help the reader put into perspective the errors that are within the agency's control. Certain recipient information is derived or extracted from SAM, FPDS, and FABS and, therefore, may not be within the agency's control. For example, some OIGs reported that errors in congressional district codes sometimes occurred because the broker did not properly extract them from FPDS. Another OIG reported that some inaccuracies related to *Ultimate Parent* Legal Entity Name and Ultimate Parent Unique Identifier occurred because the third-party system did not properly populate the agency file submission using the correct external system data field. According to the OIG report, agency officials said that errors can also occur when data are changed in one external system and the corresponding data in another external system are not also updated. Table 4 shows the data elements for procurement and financial assistance awards with the most OIGs reporting errors attributable to third parties.

Table 4: 2021 OIG-Reported Award Data Elements with the Most Errors Attributable to Third Parties in Data Agencies Submitted under the Digital Accountability and Transparency Act of 2014 (DATA Act)

Data elements	Number of OIGs reporting errors
Procurement awards	
Legal Entity Congressional District	24
Ultimate Parent Legal Entity Name	22
Legal Entity Address	18
Awardee/Recipient Legal Entity Name	17
Ultimate Parent Unique Identifier	16
Financial assistance awards	
Ultimate Parent Legal Entity Name	11
Ultimate Parent Unique Identifier	10
Legal Entity Congressional District	8
Legal Entity Address	7
Awardee/Recipient Legal Entity Name	5
Primary Place of Performance Congressional District	5

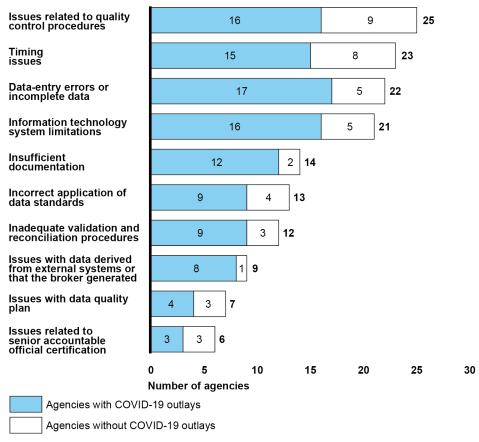
Source: GAO analysis of Office of Inspector General (OIG) reports. | GAO-22-105427

Note: We obtained and reviewed 57 OIG DATA Act reports. One OIG reported that its agency does not submit Files C through F, and, therefore, it did not test or report on the agency's financial and award data.

# Most OIGs Reported Control Deficiencies

Most (46 of 57) OIGs reported agencies had control deficiencies that affected the quality of their DATA Act submissions. We compiled and categorized these deficiencies (as defined below), and identified the number of OIGs that reported deficiencies in each category. As shown in figure 5, we summarized this information by agencies that had COVID-19 outlays and agencies that did not. Based on our analysis of OIG reports, quality control procedures were the deficiency the OIGs reported most frequently (25 of 46). Of the 31 OIGs for agencies that had COVID-19 outlays, 28 reported agencies had control deficiencies; data-entry errors or incomplete data was the deficiency OIGs most frequently reported.

Figure 5: 2021 OIG-Reported Deficiencies for Agency Submissions under the Digital Accountability and Transparency Act of 2014 and Number of OIGs Reporting Each Deficiency



Broker - Department of the Treasury DATA Act broker

Source: GAO analysis of Office of Inspector General (OIG) reports. | GAO-22-105427

Note: The figure presents the number of OIGs reporting a deficiency in each category. Eleven of the 57 agency OIGs did not identify any deficiencies in their reports, while 46 OIGs reported one or more deficiencies. Individual OIGs could have reported deficiencies in multiple categories; therefore, the total number of OIGs reporting deficiencies across all of the categories presented is greater than 46.

**Issues related to quality control procedures.** Many agencies did not design or implement standard operating procedures to review data submissions. For example, some OIGs reported that their agencies did not have procedures in place or that the procedures were insufficient to identify missing, duplicate or inaccurate data in their submissions. In addition, some OIGs reported that agencies did not maintain adequate data inventories or mapping to help ensure that they obtained the correct fields or used the appropriate systems of record.

**Timing issues.** Many agencies did not submit data to the broker or did not review or report data to internal financial management systems and third-party external systems within established time frames, which resulted in errors in the data submitted. For example, some OIGs reported agencies did not enter procurement and financial assistance awards information within the established time frames.

**Data entry errors or incomplete data.** Some agencies' controls to identify and correct data entry errors or incomplete data in internal or third-party external systems were deficient. For example, some OIGs reported agencies made data input errors, such as incorrect performance and action dates, contract and obligation amounts, address information, and certain codes. One OIG also reported that its agency did not report some award transactions because the *Award Identification Number* was missing.

Information technology system limitations. Some agencies had issues related to information technology systems controls, including systems integration and configuration to incorporate DATA Act standards, and the lack of effective automated systems controls, such as those to help ensure proper system user access or data accuracy and completeness. For example, some OIGs reported agencies' systems did not have the capability to capture certain data elements or that system issues and configuration settings caused errors in some data elements. Some OIGs also identified access issues and lack of integration among different agency financial and award systems used for reporting award data.

Insufficient documentation. Some agencies provided underlying source documentation that was incomplete, did not agree with or did not fully support their DATA Act submissions. For example, some OIGs reported agencies' documentation did not support the information submitted, such as dates, or did not explain why there were differences between the agency records and USAspending.gov data.

Incorrect application of data standards. Some agencies inappropriately used or interpreted data element definitions or standards. For example, some OIGs reported agencies applied definitions to certain data elements that were inconsistent with the DAIMS definitions. Data elements for which this occurred included *Award Description*, *Business* 

Types, Action Date, Object Class, Program Activity, and Original Loan Subsidy Cost.<sup>26</sup>

**Inadequate validation and reconciliation procedures.** Some agencies' data and file validation controls, processes, and reconciliation procedures were inadequate, including the agencies' resolution of broker errors and warnings. For example, some OIGs reported agencies did not review or resolve broker warnings prior to agency submission or certification, and some did not perform reconciliations or explain the variances identified in their reconciliations.

**Issues with data derived from external systems or that the broker generated.** Some agencies had issues with the completeness, timeliness, and accuracy of data derived from external third-party systems or that the Treasury broker generated. For example, some OIGs reported the broker and other systems external to the agencies provided inaccurate data, such as congressional district and recipient information, used to populate agency file submissions.

**Issues with data quality plan.** Some agencies' data quality plans were inadequate, outdated, or incomplete. For example, some OIGs reported agencies' data quality plans did not address OMB reporting requirements, such as the requirement to track and report outlays associated with COVID-19, did not include all identified risks, or were not finalized.

**Issues related to SAO certification.** Some agencies' controls over the SAO certifications that OMB required were deficient, including the lack of documentation of an SAO's review.<sup>27</sup> For example, some OIGs reported that agencies' SAOs did not certify or provide statements of assurance over certain data and that some SAOs did not disclose known issues or limitations with the data.

Most OIGs Made Recommendations for Improving Data Quality

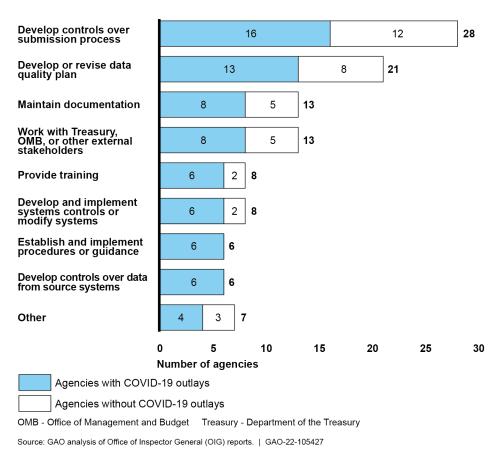
Most (44 of 57) OIG reports included recommendations to agencies for improving data quality. We compiled and categorized the recommendations (as defined below), and identified the number of OIGs that made recommendations in each category. As shown in figure 6, we

<sup>&</sup>lt;sup>26</sup>The *Original Loan Subsidy Cost* is the equivalent of the *Amount of Award* data element for loans or loan guarantees.

<sup>&</sup>lt;sup>27</sup>Office of Management and Budget, *Additional Guidance for DATA Act Implementation: Implementing Data-Centric Approach for Reporting Federal Spending Information*, OMB Management Procedures Memorandum No. 2016-03 (Washington, D.C.: May 3, 2016).

summarized this information by agencies with and without COVID-19 outlays. Based on our analysis, the recommendations the OIGs made most frequently (28 of 44) were for agencies to develop controls over the submission process. These recommendations were most frequent for both agencies with and without COVID-19 outlays. Thirty-nine OIG reports stated that agency management agreed with all of their recommendations, and two OIG reports stated that agency management partially agreed with the OIG recommendations. One OIG report stated that agency management disagreed with its recommendations, and two OIG reports did not indicate whether agency management agreed with the recommendations. Of the 31 OIGs for agencies that had COVID-19 outlays, 28 included recommendations for agencies.

Figure 6: 2021 OIG-Reported Recommendations for Agency Submissions under the Digital Accountability and Transparency Act of 2014 and Number of OIGs Reporting Each Recommendation



Note: The figure presents the number of OIGs that made a recommendation in each category. Thirteen of the 57 OIGs did not make any recommendations, while 44 made one or more types of recommendations. Individual OIGs could have made recommendations in multiple categories; therefore, the total number of OIGs reporting recommendations across all of the categories presented is greater than 44.

Develop controls over submission process. Many OIGs reported agencies should establish or improve controls or processes over agency data submissions, including procedures to conduct reconciliations and address broker-reported errors and warnings. For example, some OIGs recommended that their agencies strengthen their internal controls to align with OMB guidance to address differences with summary-level data, implement controls to detect changes to the DATA Act reporting requirements, or implement a process to review and document justifications or corrections for broker errors and warnings prior to the quarterly certification.

**Develop or revise data quality plan.** Some OIGs reported agencies should develop or update the data quality plan and related controls over the plan. For example, OIGs recommended that agencies revise or finalize and implement their data quality plans to be consistent with federal guidance, and update their standard operating procedures to assess the quality of the data submitted.

**Maintain documentation.** Some OIGs reported agencies should update or retain documentation of their performance of procedures, controls, and assigned roles and responsibilities supporting DATA Act submissions. For example, OIGs recommended that their agencies establish and implement effective internal controls to maintain adequate documentation and ensure that reconciliations are complete and properly documented.

Work with Treasury, OMB, or other external stakeholders. Some OIGs reported their agencies need to work with Treasury, OMB, or other external stakeholders (e.g., a shared service provider or contractor) to resolve identified issues. For example, OIGs recommended that agencies report system errors to Treasury to ensure that derivable data elements are correctly reported, seek clarification from OMB and Treasury to ensure the appropriate interpretation of DATA Act standards, and work with their shared service provider to ensure the correct *Object Class* and *Program Activity* codes are used.

**Provide training.** Some OIGs reported agencies should develop, complete, or document training for agency personnel and communicate or reinforce existing guidance and requirements. For example, OIGs

recommended that agencies train staff to improve the consistency of data entry for data elements such as the *Primary Place of Performance Address* and *Award Description*, ensure that contracting officers have a consistent understanding of the data element definitions and requirements, and better prepare personnel for future emergency funding events. One OIG also recommended that its agency identify areas where it could develop training to prevent and detect accuracy issues.

**Develop and implement systems controls or modify systems.** Some OIGs reported agencies should develop, implement, or evaluate automated systems controls to help ensure that they meet agency objectives for data quality. For example, some OIGs recommended that their agencies update their systems to generate data that align with the data standards, and develop and implement solutions to ensure compliance with OMB guidance for reporting COVID-19 outlays each month and linking spending to appropriations through the *Disaster Emergency Fund Code* data element.

Establish and implement procedures or guidance. Some OIGs reported agencies should establish and implement DATA Act—related procedures or guidance to help ensure data quality and implementation of corrective actions to address audit findings. For example, some OIGs recommended that their agencies develop and implement policies and procedures to ensure that they communicate new guidance to their components and reinforce their award approval procedures to ensure that all contracts are signed and dated. They also recommended that their agencies fully implement planned enhancements to verify record-level linkage differences between Files C and D2.

**Develop controls over data from source systems.** Some OIGs reported agencies should establish or improve controls or processes and resolve quality issues in data derived from source systems. For example, OIGs recommended that agencies enhance their controls over verifying awardee information in SAM, such as *Legal Entity Name* and *Legal Entity Address*, with awardee information in the grants and contract systems at the time of award and update information as needed.

**Other.** Some OIGs reported agencies should correct award data issues identified during audits, improve data quality disclosures, and identify the root causes of errors. For example, OIGs recommended that agencies resolve discrepancies in *Program Activity Codes* between financial systems, or determine the root causes of identified errors in agency data and take necessary corrective actions.

In a March 17, 2022, testimony, we highlighted the importance of the OIG reports and the recommendations 44 OIGs made for improving the accuracy, completeness, and timeliness of data reported to USAspending.gov.<sup>28</sup> The DATA Act's requirement for agency OIGs to review and report on their agencies' data submissions has now expired. We recommended that Congress amend the DATA Act to extend the previous requirement for agency inspectors general to review the completeness, timeliness, quality, and accuracy of their respective agencies' data submissions periodically. Extending the requirement for ongoing OIG oversight through periodic reviews could help ensure that the quality of agency data submissions to USAspending.gov continues to improve. The data included in USAspending gov help provide transparency to policymakers and the public about where federal dollars are being spent. According to the OIG community, OIGs will follow up on prior DATA Act recommendations, but few OIGs plan to continue to review and report on this information without further requirements.

# **Agency Comments**

We provided a draft of this report to CIGIE for review and comment. We received written comments from CIGIE that are reproduced in appendix VI and summarized below. CIGIE also provided technical comments, which we incorporated as appropriate.

In its written comments, CIGIE stated that the report provides useful information on OIG efforts to meet oversight and reporting responsibilities under the DATA Act. CIGIE also noted that the IG Guide allowed for flexibility and the application of each inspector general's professional judgment to meet oversight and reporting requirements.

We are sending copies of this report to relevant congressional committees, the Chairperson and Vice Chairperson of the Council of the Inspectors General on Integrity and Efficiency, and other interested parties. In addition, the report is available at no charge on the GAO website at <a href="https://www.gao.gov">https://www.gao.gov</a>.

If you or your staffs have any questions about this report, please contact me at (202) 512-9816 or rasconap@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on

<sup>&</sup>lt;sup>28</sup>GAO, Emergency Relief Funds: Significant Improvements Are Needed to Ensure Transparency and Accountability for COVID-19 and Beyond, GAO-22-105715 (Washington, D.C.: Mar. 17, 2022).

the last page of this report. GAO staff who made key contributions to this report are listed in appendix VII.

aula M Rascona

Paula M. Rascona

Director

Financial Management and Assurance

#### 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: Objective, Scope, and Methodology

The Digital Accountability and Transparency Act of 2014 (DATA Act) includes a provision for GAO to review agencies' Office of Inspector General (OIG) mandated reports assessing the completeness, timeliness, quality, and accuracy of agency data submissions and the implementation and use of data standards.¹ It also includes a provision for GAO to produce, and issue our own report assessing and comparing the completeness, timeliness, accuracy, and quality of the data that federal agencies submit under the act and their implementation and use of data standards.² This is the third GAO review of the OIG reports.

The objective of this report is to describe the quality of agencies' DATA Act spending data and implementation and use of data standards that OIGs reported in 2021.<sup>3</sup> To address our objective, we obtained and independently reviewed 57 OIG reports on agencies' data submissions that the OIGs issued on or before December 31, 2021.<sup>4</sup> These reports included those of the 24 Chief Financial Officers Act of 1990 (CFO Act) agencies and 33 non-CFO Act agencies.<sup>5</sup> Thirty-one of the 57 OIGs tested COVID-19 outlays that their agencies reported during the quarter included in the scope of their audits and reported on their agencies'

<sup>&</sup>lt;sup>1</sup>Pub. L. No. 113-101, 128 Stat. 1146, 1151 (May 9, 2014). The DATA Act amended the Federal Funding Accountability and Transparency Act of 2006 (FFATA). Pub. L. No. 109-282, 120 Stat. 1186 (Sept. 26, 2006), *codified at* 31 U.S.C. § 6101 note. We refer to language added to FFATA by the DATA Act, as DATA Act requirements.

<sup>&</sup>lt;sup>2</sup>The DATA Act defines "federal agency" by reference to section 105 of title 5 of the United States Code, as including each federal executive department, government corporation, and independent establishment.

<sup>&</sup>lt;sup>3</sup>The OIGs defined quality data as data that are complete, accurate, and timely and include statistical and non-statistical testing results.

<sup>&</sup>lt;sup>4</sup>We obtained 60 OIG DATA Act reports published by December 31, 2021, including a report from GAO's OIG. We did not include the GAO OIG report in our review for independence reasons. The Department of the Treasury OIG and the Treasury Inspector General for Tax Administration performed separate audits and issued separate reports. The Treasury OIG also published a report that combined the two separate reports. We used the Treasury combined report for this review.

<sup>&</sup>lt;sup>5</sup>The CFO Act, Pub. L. No. 101-576, 104 Stat. 2838 (Nov. 15, 1990), among other things, established chief financial officer positions at major federal entities. As amended, the current list includes 24 entities, commonly referred to as CFO Act agencies, and is codified at section 901(b) of title 31, United States Code.

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COVID-19 outlay testing results.<sup>6</sup> Additional agencies may have received COVID-19 funding and may have had COVID-19 outlays, but some OIGs reported they did not test this area because their agencies did not have COVID-19 outlays during the quarter that was tested.

The 57 agencies whose OIG reports we reviewed are listed in table 5 and sorted alphabetically by agencies with and without COVID-19 outlays during the quarters the OIGs selected for testing. Thirty-four OIGs reported that they contracted with independent public accountants to perform the reviews, and some OIGs published reports for more than one agency. For purposes of this report, we refer to the reviews the OIGs or their contractors performed and the resulting reports collectively as OIG reports based on the number of agencies, unless otherwise noted.

<sup>&</sup>lt;sup>6</sup>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). Per Office of Management and Budget guidance, agencies were required to report a running total of outlays for all award records in File C containing a COVID-19–related *Disaster Emergency Fund Code*.

Ag	gencies with COVID-19 outlays		Agencies without COVID-19 outlays		
1.	Department of Agriculture	32.	AmeriCorps		
2.	Department of Commerce	33.	Bureau of Consumer Financial Protection		
3.	Department of Defense	34.	Commodity Futures Trading Commission		
4.	Department of Education	35.	Consumer Product Safety Commission		
5.	Department of Energy	36.	Court Services and Offender Supervision Agency for the		
6.	Department of Health and Human Services		District of Columbia		
7.	Department of Homeland Security		Defense Nuclear Facilities Safety Board		
8.	Department of Housing and Urban Development		Denali Commission		
9.	Department of the Interior		District of Columbia Courts		
10.	Department of Justice	40.	Equal Employment Opportunity Commission		
11.	Department of Labor		Export-Import Bank of the United States		
12.	Department of State		Federal Deposit Insurance Corporation		
13.	Department of Transportation		Federal Election Commission		
14.	Department of the Treasury		Federal Labor Relations Authority		
15.	Department of Veterans Affairs		Federal Maritime Commission		
16.	Election Assistance Commission	46.	Federal Trade Commission		
17.	Environmental Protection Agency	47.	Gulf Coast Ecosystem Restoration Council		
18.	Federal Communications Commission	48.	Inter-American Foundation		
19.	General Services Administration	49.	International Trade Commission		
20.	National Aeronautics and Space Administration	50.	3 - 1		
21.	National Archives and Records Administration	51.	National Credit Union Administration		
22.	National Endowment for the Arts	52.	National Labor Relations Board		
23.	National Science Foundation	53.	Pension Benefit Guaranty Corporation		
24.	Nuclear Regulatory Commission	54.	Securities and Exchange Commission		
	Office of Personnel Management		U.S. African Development Foundation		
26.	Peace Corps		U.S. Agency for Global Media		
	Railroad Retirement Board	57.	U.S. Chemical Safety and Hazard Investigation Board		
28.	Small Business Administration				
	Social Security Administration				

Sources: Offices of Inspector General (OIG) and Oversight.gov. | GAO-22-105427

30. U.S. Agency for International Development

31. U.S. Army Corps of Engineers

Note: We reviewed 57 OIG reports; out of those, 31 OIGs tested and reported on the quality of COVID-19 outlays that agencies reported during the quarters included in the scope of their audits.

We did not obtain or review data quality reports for 54 of 111 entities that submitted spending data during the audit period because reports were not publicly available by our December 31, 2021, cutoff date. These 54 entities, many of which do not have a statutory OIG that would be subject

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to the DATA Act's reporting requirement, are listed in table 6 and sorted alphabetically.

#### Table 6: Entities That Submitted Data to USAspending.gov but Did Not Have a 2021 Data Quality Report (as of December 31, 2021)

1	Administrative	Conference	of the	United States

- 2. Advisory Council on Historic Preservation
- 3. American Battle Monuments Commission
- 4. Appalachian Regional Commission
- 5. Armed Forces Retirement Home
- Barry Goldwater Scholarship & Excellence in Education Foundation
- Commission for the Preservation of America's Heritage Abroad
- 8. Commission of Fine Arts
- 9. Commission on Civil Rights
- Committee for Purchase from People Who Are Blind or Severely Disabled<sup>a</sup>
- 11. Corporation for Travel Promotion
- 12. Council of the Inspectors General on Integrity and Efficiency
- 13. Delta Regional Authority
- 14. Executive Office of the President
- 15. Farm Credit System Insurance Corporation
- Federal Financial Institutions Examination Council Appraisal Subcommittee
- 17. Federal Mediation and Conciliation Service
- 18. Federal Mine Safety and Health Review Commission
- 19. Federal Permitting Improvement Steering Council
- 20. Harry S. Truman Scholarship Foundation
- Institute of American Indian and Alaska Native Culture and Arts Development
- Institute of Museum and Library Services
- 23. James Madison Memorial Fellowship Foundation
- 24. Japan-United States Friendship Commission
- 25. John F. Kennedy Center for the Performing Arts

- 26. Judicial Branch
- 27. Legislative Branch Boards and Commissions
- 28. Marine Mammal Commission
- 29. Merit Systems Protection Board
- 30. Morris K. Udall and Stewart L. Udall Foundation
- 31. National Capital Planning Commission
- 32. National Council on Disability
- 33. National Endowment for the Humanities
- 34. National Mediation Board
- 35. National Transportation Safety Board
- 36. Northern Border Regional Commission
- 37. Nuclear Waste Technical Review Board
- 38. Occupational Safety & Health Review Commission
- 39. Office of Government Ethics
- 40. Office of Navajo & Hopi Indian Relocation
- 41. Office of Special Counsel
- 42. Overseas Private Investment Corporation<sup>b</sup>
- 43. Patient-Centered Outcomes Research Trust Fund
- 44. Presidio Trust
- 45. Privacy and Civil Liberties Oversight Board
- 46. Public Buildings Reform Board
- 47. Selective Service System
- 48. Surface Transportation Board
- 49. U.S. Access Board
- 50. U.S. Court of Appeals for Veterans Claims
- 51. U.S. Enrichment Corporation Fund
- 52. U.S. Interagency Council on Homelessness
- 53. U.S. International Development Finance Corporation<sup>c</sup>
- 54. U.S. Trade and Development Agency

Source: GAO analysis of Office of Inspector General (OIG) and USAspending.gov information. | GAO-22-105427

<sup>&</sup>lt;sup>a</sup>The OIG for the Committee for Purchase from People Who Are Blind or Severely Disabled published a data quality report on March 17, 2022, which was past our cutoff date of December 31, 2021.

<sup>&</sup>lt;sup>b</sup>The Overseas Private Investment Corporation dissolved in December 2019 but continued to report financial data to USAspending.gov through the end of fiscal year 2020.

<sup>&</sup>lt;sup>c</sup>The OIG for the U.S. International Development Finance Corporation published a data quality report on March 8, 2022, which was past our cutoff date of December 31, 2021.

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Most of the OIGs performing agency data quality reviews made their third and final mandated report publically available in November 2021. As specified in the December 4, 2020, CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act (IG Guide), each OIG was required to select and evaluate one of its agency's data submissions from either fiscal year (FY) 2020 third quarter, FY 2020 fourth quarter, FY 2021 first quarter, or FY 2021 second quarter.

The December 2020 IG Guide revision included a scorecard for OIGs to use in assessing the overall quality of data based on a combination of the statistical and non-statistical test results.<sup>8</sup> Appendix II provides a detailed explanation of the scorecard the OIGs used to measure overall data quality and the scores for each test. Based on these scores, auditors determined an overall quality level of excellent, higher, moderate, or lower based on score ranges the IG Guide defines. We used the OIG reports and the scorecards for summarizing the results of the statistical and non-statistical tests. The scores may differ from the test results discussed in the OIG reports.

Based on the reporting requirements in the DATA Act and the IG Guide, we developed and used a data-collection instrument to compile and summarize the audit procedures performed, results and findings, and recommendations included in the OIG reports. Specifically, we identified information in the OIG reports and scorecards related to the

- completeness, timeliness, accuracy, and quality of agencies' data submissions;
- FY quarter selected for testing;
- error rates related to the completeness, timeliness, and accuracy of agencies' COVID-19 outlay data submissions;

<sup>&</sup>lt;sup>7</sup>Council of the Inspectors General on Integrity and Efficiency, Federal Audit Executive Council DATA Act Working Group, *CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act*, OIG-CA-21-008 (Washington, D.C.: Department of the Treasury, Office of Inspector General, Dec. 4, 2020). The FAEC DATA Act Working Group issued additional guidance, *FY 2021 DATA Act Audit, Frequently Asked Questions*, updated on May 11, 2021.

<sup>&</sup>lt;sup>8</sup>The statistical test results refer to the projected error rates for completeness, timeliness, and accuracy of the statistically selected sample. The non-statistical test results include timeliness of agency submission and record-level linkages, among others. App. II provides additional information about these tests.

- agencies' implementation and use of data standards;
- audit methodologies; and
- error rates for individual data elements.

In instances where OIGs reported multiple error rates, we used the highest error rate. We also summarized information OIGs reported related to agencies' internal controls, including their data quality plans.<sup>9</sup>

We also used a data-collection instrument to compile and categorize information on control deficiencies the OIGs reported and any recommendations the OIGs made to agencies to address them. We analyzed the information and developed 10 categories representing themes in the deficiencies that OIGs reported and nine categories of recommendations. We assigned each deficiency and recommendation to one category. During this process, analysts worked in teams of three to obtain a consensus on how to categorize the deficiencies and recommendations with one analyst initially assigning a category and the other analysts providing additional levels of review. In the event of conflicts in the application of categories, the analysts worked together to reach a consensus.

We primarily used and relied on data included in the OIG reports and scorecards. We contacted some agency OIGs, as needed, to obtain their scorecards or clarification where data were missing or appeared inconsistent with other data in their reports. We also provided the OIGs with a statement of facts to verify the information we summarized from their reports and incorporated their comments in this report, as appropriate.

The results in this report cannot be directly compared with prior GAO or OIG reports primarily because of differences in the scopes of the OIG audits, sampling populations and methodologies, and audit procedures performed, as well as data elements required to be reported, changes in the guidance and data standards that the Office of Management and

<sup>&</sup>lt;sup>9</sup>Office of Management and Budget, *Appendix A to OMB Circular No. A-123, Management of Reporting and Data Integrity Risk*, OMB Memorandum M-18-16 (Washington, D.C.: June 6, 2018), requires DATA Act reporting agencies to implement a Data Quality Plan effective fiscal year 2019 through fiscal year 2021 at a minimum. The Data Quality Plan should cover significant milestones and major decisions pertaining to organizational structure for spending reporting, management's responsibility to supply quality data to meet the reporting objectives for the DATA Act in accordance with OMB Circular No. A-123, testing plan and identification of high-risk reported data, and actions taken to manage identified risks, among other things.

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Budget and Department of the Treasury issued, and Treasury data validation rules. Appendix II shows the sample selection methodologies each OIG used and the files tested. Furthermore, not all of the agency data submitted were subjected to an independent data quality audit and the amount of financial and nonfinancial data that should have been submitted but was not submitted has not been quantified. Therefore, we did not calculate a combined or government-wide average error rate at the data element or government-wide level because it would not be reliable.

We conducted this performance audit from September 2021 to July 2022 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.

#### **Updated CIGIE Guidance**

The December 4, 2020, CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act (IG Guide) identified three levels of agency data for the Offices of Inspector General (OIG) to test—element level, record level, and summary level.¹ The element-level data are the individual fields that make up a record of federal spending data. The record-level are the aggregation of the data element results for a record. The summary-level data are the cumulative financial data that are reported in File A (i.e., appropriations account data) and File B (i.e., object class and program activity data).

The IG Guide added a quality scorecard designed to provide government-wide consistency in measuring data quality. The overall quality score combines weighted scores for both the non-statistical and the statistical testing results and could be a maximum of 100 points.

As shown in figure 7, the weight of non-statistical points varied depending on whether an agency had COVID-19 outlays.<sup>2</sup> The non-statistical criteria are timeliness of agency submission; completeness of summary-level data; suitability of File C for sample selection; record-level linkages; and COVID-19 outlay testing, if reported, for a total maximum of 40 points. For the COVID-19 outlay testing, auditors selected a non-statistical (judgmental) sample of outlays from the 3rd month of the quarter selected for their Digital Accountability and Transparency Act of 2014 (DATA Act) review, if reported. Auditors assessed and reported on the completeness, timeliness, and accuracy of the COVID-19-related outlays. The statistical testing includes completeness, timeliness, and accuracy of record-level financial and award data sampled, for a total maximum of 60 points. According to the IG Guide, OIGs were to test individual data elements of the statistically selected sample and calculate but not project the error rates. The data element results are not factored into the scorecard results for determining quality. The IG Guide also provides details on what each of the non-statistical and statistical criteria entail.

<sup>&</sup>lt;sup>1</sup>Council of the Inspectors General on Integrity and Efficiency, Federal Audit Executive Council DATA Act Working Group, *CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act*, OIG-CA-21-008 (Washington, D.C.: Department of the Treasury, Office of Inspector General, Dec. 4, 2020).

<sup>&</sup>lt;sup>2</sup>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). Per Office of Management and Budget guidance, agencies were required to report a running total of outlays for all award records in File C containing a COVID-19–related *Disaster Emergency Fund Code*.

Figure 7: Fiscal Year 2021 Digital Accountability and Transparency Act of 2014 (DATA Act) Quality Scorecard Template

	Enter Agency Na	Maximum Points Possible		
	FY 2021 DATA A Quality Scoreca	Without Outlays (No COVID-19	With Outlays (COVID-19	
	Criteria	Score	Funding)	Funding)
	Timeliness of Agency Submission	5.0	5.0	5.0
stical	Completeness of Summary Level Data (Files A & B)	10.0	13.0	10.0
Statis	Suitability of File C for Sample Selection	10.0	13.0	10.0
Non-Statistical	Record-Level Linkages (Files C & D)	7.0	9.0	7.0
	COVID-19 Outlay Testing Judgmental Sample	8.0	0.0	8.0
- E	Completeness	15.0	15.0	15.0
Statistical	Accuracy	30.0	30.0	30.0
St	Timeliness	15.0	15.0	15.0
Quality Score	Excellent	100.0	100.0	100.0

Source: Council of the Inspectors General on Integrity and Efficiency (CIGIE). | GAO-22-105427

The IG Guide suggests that OIGs determine and report the overall quality of data based on the total score using the following ranges:

- "lower" quality represents a total score from 0 to 69.999,
- "moderate" quality represents a total score from 70 to 84.999,

- "higher" quality represents a total score from 85 to 94.999, and
- "excellent" quality represents a total score from 95 to 100.

The IG Guide instructs OIGs to select a statistical sample or test the entire population, from File C (award financial) if the OIGs determined the file was suitable for sampling. If it was not, the OIGs were to select a sample from Files D1 (procurement) and D2 (financial assistance). Table 7 summarizes the DATA Act statistical sample audit scope and methodologies used by the 57 OIGs and disclosed in the reports and scorecards we reviewed. The table is sorted alphabetically by agencies with and without COVID-19 outlays during the quarter selected for testing.

Agency	Number of records tested	Population size (total records)	Selection methodology	Files from which sample was selected	Quarter selected for testing
Agencies with COVID-19 outla	ys		-		
Department of Agriculture	250	938,160	S	С	Q4 - FY2020
Department of Commerce	349	2,818	S	С	Q1 - FY2021
Department of Defense	372	438,603	S	С	Q4 - FY2020
Department of Education	385	250,194	S	С	Q4 - FY2020
Department of Energy	349	3,676	S	С	Q1 - FY2021
Department of Health and Human Services	269	40,923	S	С	Q1 - FY2021
Department of Homeland Security	103	N/R	S	D1, D2	Q4 - FY2020
Department of Housing and Urban Development	246	66,392	S	С	Q3 - FY2020
Department of the Interior	323	8,607	S	С	Q1 - FY2021
Department of Justice	226	33,446	S	С	Q3 - FY2020
Department of Labor	385	6,407	S	D1, D2	Q3 - FY2020 8 Q1 - FY2021
Department of State	288	2,938	S	С	Q1 - FY2021
Department of Transportation	381	30,676	S	С	Q1 - FY2021
Department of the Treasury	265	7,723	S	С	Q3 - FY2020
Department of Veterans Affairs	45	N/R	S	D1, D2	Q4 - FY2020
Election Assistance Commission	11	11	F	С	Q3 - FY2020
Environmental Protection Agency	239	7,551	S	С	Q4 - FY2020

Agency	Number of records tested	Population size (total records)	Selection methodology	Files from which sample was selected	Quarter selected for testing
Federal Communications Commission	385	28,435	S	С	Q1 - FY2021
General Services Administration	235	5,556	S	С	Q1 - FY2021
National Aeronautics and Space Administration	242	13,788	S	С	Q4 - FY2020
National Archives and Records Administration	40	426	S	С	Q1 - FY2021
National Endowment for the Arts	190	1,477	S	С	Q4 - FY2020
National Science Foundation	385	14,302	S	С	Q4 - FY2020
Nuclear Regulatory Commission	60	625	S	С	Q3 - FY2020
Office of Personnel Management	150	2,702	S	С	Q4 - FY2020
Peace Corps	45	60	S	D1	Q1 - FY2021
Railroad Retirement Board	200	39,647	S	С	Q1 - FY2021
Small Business Administration	385	3,208,065	S	С	Q4 - FY2020
Social Security Administration	250	214,009	S	С	Q3 - FY2020
U.S. Agency for International Development	238	7,165	S	D1, D2	Q4 - FY2020
U.S. Army Corps of Engineers	365	8,073	S	С	Q4 - FY2020
Agencies without COVID-19 outla	ays				
AmeriCorps	50	191	S	D1, D2	Q1 - FY2021
Bureau of Consumer Financial Protection	30	141	S	С	Q1 - FY2021
Commodity Futures Trading Commission	61	649	S	С	Q2 - FY2021
Consumer Product Safety Commission	30	N/R	S	С	Q1 - FY2021
Court Services and Offender Supervision Agency for the District of Columbia	39	43	S	С	Q3 - FY2020
Defense Nuclear Facilities Safety Board	33	45	S	С	Q4 - FY2020
Denali Commission	N/R	N/R	F	С	Q2 - FY2021
District of Columbia Courts	48	54	S	С	Q2 - FY2021
Equal Employment Opportunity Commission	81	101	S	С	Q3 - FY2020
Export-Import Bank of the United States	170	740	S	D1, D2	Q2 - FY2021

Agency	Number of records tested	Population size (total records)	Selection methodology	Files from which sample was selected	Quarter selected for testing
Federal Election Commission	22	22	F	D1	Q1 - FY2021
Federal Labor Relations Authority	7	7	F	С	Q2 - FY2021
Federal Maritime Commission	35	35	F	С	Q4 - FY2020
Federal Trade Commission	83	124	S	С	Q1 - FY2021
Gulf Coast Ecosystem Restoration Council	18	18	F	С	Q4 - FY2020
Inter-American Foundation	39	44	S	С	Q1 - FY2021
International Trade Commission	34	37	S	С	Q3 - FY2020
Millennium Challenge Corporation	40	40	F	С	Q1 - FY2021
National Credit Union Administration	93	122	S	D2	Q4 - FY2020
National Labor Relations Board	46	46	F	D1	Q1 - FY2021
Pension Benefit Guaranty Corporation	112	202	S	С	Q1 - FY2021
Securities and Exchange Commission	244	244	F	С	Q1 - FY2021
U.S. African Development Foundation	19	19	F	С	Q1 - FY2021
U.S. Agency for Global Media	246	1,396	S	С	Q4 - FY2020
U.S. Chemical Safety and Hazard Investigation Board	14	15	S	С	Q3 - FY2020

Legend: F = full population tested; S = statistical sample tested; N/R = OIG did not report this information; C = File C (award financial data); D1 = File D1 (procurement awards); D2 = File D2 (financial assistance awards); Q = quarter; FY = fiscal year.

Source: GAO analysis of Office of Inspector General (OIG) reports and scorecards. | GAO-22-105427

Notes: The CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act (IG Guide) instructs OIGs to select a statistical sample or carry out full population testing. OIGs were to determine whether File C (award financial) was suitable for sampling and, if not, select a statistical sample from Files D1 (procurement) and D2 (financial assistance).

The Federal Deposit Insurance Corporation does not submit Files C through F; therefore, the OIG did not select or test a statistical sample as prescribed in the IG Guide, and the agency is not included in this table.

#### **Overall Quality Level**

Table 8 lists the Offices of Inspector General (OIG) reported overall quality scores and levels for data their agencies submitted under the Digital Accountability and Transparency Act of 2014 (DATA Act). The table is sorted by the quality scores OIGs reported and by agencies with and without COVID-19 outlays during the 3rd month of the quarter selected for testing. The CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act suggests that OIGs determine the overall data quality score using a scorecard calculation based on weighted scores for both statistical (maximum score of 60) and non-statistical testing results (maximum score of 40). Appendix II provides details on the scorecard calculation method.

gency name	Quality score (out of 100)	Quality level
gencies with COVID-19 outlays		
luclear Regulatory Commission	99.88	Excellent
epartment of Health and Human Services	99.26	Excellent
lational Endowment for the Arts	99.07	Excellent
Department of Energy	98.90	Excellent
lational Archives and Records Administration	98.64	Excellent
ailroad Retirement Board	98.52	Excellent
ocial Security Administration	98.01	Excellent
epartment of the Interior	97.75	Excellent
epartment of Housing and Urban Development	97.11	Excellent
ational Aeronautics and Space Administration	95.50	Excellent
epartment of Education	95.19	Excellent
epartment of the Treasury	95.06	Excellent
nall Business Administration	94.87	Higher
eneral Services Administration	94.18	Higher
S. Agency for International Development	93.96	Higher

<sup>&</sup>lt;sup>1</sup>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). Per Office of Management and Budget guidance, agencies were required to report a running total of outlays for all award records in File C containing a COVID-19–related *Disaster Emergency Fund Code*.

<sup>&</sup>lt;sup>2</sup>Council of the Inspectors General on Integrity and Efficiency, Federal Audit Executive Council DATA Act Working Group, *CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act*, OIG-CA-21-008 (Washington, D.C.: Department of the Treasury, Office of Inspector General, Dec. 4, 2020).

Agency name	Quality score (out of 100)	Quality level
Environmental Protection Agency	92.65	Higher
Department of Transportation	92.60	Higher
Peace Corps	90.68	Higher
National Science Foundation	90.49	Higher
Department of Commerce	89.32	Higher
Department of State	89.28	Higher
U.S. Army Corps of Engineers	88.13	Higher
Department of Justice	87.67	Higher
Department of Homeland Security	84.70	Moderate
Department of Labor	82.68	Moderate
Department of Defense	79.97	Moderate
Office of Personnel Management	73.00	Moderate
Department of Veterans Affairs	71.50	Moderate
Election Assistance Commission	70.61	Moderate
Federal Communications Commission	51.21	Lower
Department of Agriculture	42.83	Lower
Agencies without COVID-19 outlays		
U.S. Chemical Safety and Hazard Investigation Board	99.86	Excellent
Bureau of Consumer Financial Protection	99.09	Excellent
Commodity Futures Trading Commission	99.00	Excellent
Federal Trade Commission	98.58	Excellent
Securities and Exchange Commission	98.30	Excellent
Federal Labor Relations Authority	98.28	Excellent
Consumer Product Safety Commission	98.26	Excellent
International Trade Commission	98.25	Excellent
Federal Maritime Commission	97.80	Excellent
National Credit Union Administration	97.40	Excellent
Pension Benefit Guaranty Corporation	97.36	Excellent
Millennium Challenge Corporation	96.93	Excellent
Equal Employment Opportunity Commission	96.59	Excellent
Gulf Coast Ecosystem Restoration Council	96.01	Excellent
U.S. Agency for Global Media	95.38	Excellent
Inter-American Foundation	94.24	Higher
Court Services and Offender Supervision Agency for the District of Columbia	94.09	Higher
Denali Commission	93.39	Higher
District of Columbia Courts	93.37	Higher

Agency name	Quality score (out of 100)	Quality level
Federal Election Commission	90.15	Higher
Federal Deposit Insurance Corporation <sup>a</sup>	88.77	Higher
Export-Import Bank of the United States	86.39	Higher
National Labor Relations Board	81.36	Moderate
AmeriCorps	78.29	Moderate
U.S. African Development Foundation	36.09	Lower
Defense Nuclear Facilities Safety Board	24.17	Lower

Legend: DATA Act = Digital Accountability and Transparency Act of 2014.

Source: GAO analysis of Office of Inspector General (OIG) reports and scorecards. | GAO-22-105427

<sup>a</sup>The Federal Deposit Insurance Corporation OIG reported that it determined the agency's quality score and level based on the results of the non-statistical tests for timeliness and completeness of summary-level data in Files A and B.

#### Statistical Sample Results

Table 9 lists the agencies' statistical sample error rates OIGs reported for completeness, timeliness, and accuracy of record-level financial and award data submitted under the DATA Act. The table is sorted alphabetically by agencies with and without COVID-19 outlays during the quarter selected for testing.

Table 9: 2021 Estimated Error Rates OIGs Reported for Completeness, Timeliness, and Accuracy of Agencies' Record-Level Data Submitted under the DATA Act

Agency name	Completeness error rate (percentage)	Timeliness error rate (percentage)	Accuracy error rate (percentage)
Agencies with COVID-19 outlays			
Department of Agriculture	74.6	83.4	77.6
Department of Commerce	3.4	13.9	8.5
Department of Defense	0.7	13.6	6.5
Department of Education	1.1	1.1	2.0
Department of Energy	1.5	0.0	2.7
Department of Health and Human Services	0.6	0.6	1.5
Department of Homeland Security	0.5	19.0	14.1
Department of Housing and Urban Development	1.5	2.2	3.4
Department of the Interior	0.1	3.4	1.8
Department of Justice	8.2	15.5	10.9
Department of Labor	5.3	4.8	20.9
Department of State	7.4	36.1	8.1
Department of Transportation	3.3	3.9	6.4
Department of the Treasury	1.4	15.5	5.4

Agency name  Department of Veterans Affairs  Election Assistance Commission <sup>a</sup>	rate (percentage)	error rate (percentage)	Accuracy error rate (percentage)
	2.8	13.3	3.6
	36.6	36.6	39.3
Environmental Protection Agency	2.5	6.3	7.7
Federal Communications Commission	69.3	91.1	69.5
General Services Administration	3.6	2.9	4.8
National Aeronautics and Space Administration	4.5	8.4	7.8
National Archives and Records Administration	1.5	1.5	3.0
National Endowment for the Arts	0.9	0.9	2.1
National Science Foundation	11.5	11.5	11.5
Nuclear Regulatory Commission	0.0	0.0	0.4
Office of Personnel Management	41.3	41.3	41.3
Peace Corps	0.0	0.0	1.4
Railroad Retirement Board	0.0	9.4	0.2
Small Business Administration	0.0	8.3	6.8
Social Security Administration	0.0	0.0	0.1
U.S. Agency for International Development	2.7	12.0	5.3
U.S. Army Corps of Engineers	2.2	4.3	9.6
Agencies without COVID-19 outlays			
AmeriCorps	6.0	12.3	14.6
Bureau of Consumer Financial Protection	1.5	1.5	1.5
Commodity Futures Trading Commission	0.0	0.0	3.3
Consumer Product Safety Commission	1.8	1.8	4.1
Court Services and Offender Supervision Agency for the District of Columbia	0.0	29.2	0.6
Defense Nuclear Facilities Safety Board	87.4	100.0	87.4
Denali Commission <sup>a</sup>	4.7	4.7	4.3
District of Columbia Courts	5.6	6.4	5.6
Equal Employment Opportunity Commission	0.0	3.3	0.9
Export-Import Bank of the United States	0.1	73.9	2.1
Federal Election Commission <sup>a</sup>	3.8	3.8	3.8
Federal Labor Relations Authority <sup>a</sup>	0.0	0.0	0.0
Federal Maritime Commission <sup>a</sup>	0.0	9.7	2.5
Federal Trade Commission	0.6	4.8	2.1
Gulf Coast Ecosystem Restoration Council <sup>a</sup>	5.6	5.6	5.8
Inter-American Foundation	0.0	35.3	1.6
International Trade Commission	0.0	7.5	0.5

Agency name	Completeness error rate (percentage)	Timeliness error rate (percentage)	Accuracy error rate (percentage)
Millennium Challenge Corporation <sup>a</sup>	3.8	3.8	6.5
National Credit Union Administration	3.1	3.1	3.4
National Labor Relations Board <sup>a</sup>	1.3	30.6	8.6
Pension Benefit Guaranty Corporation	0.4	12.0	2.6
Securities and Exchange Commission <sup>a</sup>	1.0	1.7	3.7
U.S. African Development Foundation <sup>a</sup>	77.1	77.1	78.4
U.S. Agency for Global Media	3.2	8.7	6.8
U.S. Chemical Safety and Hazard Investigation Board	0.0	0.0	0.7

Legend: DATA Act = Digital Accountability and Transparency Act of 2014.

Source: GAO analysis of Office of Inspector General (OIG) reports and scorecards. | GAO-22-105427

Notes: Percentages rounded to the nearest tenth.

The CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act (IG Guide) instructs OIGs to select a statistical sample or carry out full population testing. OIGs were to determine whether File C (award financial) was suitable for sampling and, if not, select a statistical sample from Files D1 (procurement) and D2 (financial assistance). For the OIGs that selected a statistical sample as noted in app. II, the percentages shown are the projected error rates that the OIGs reported. The guidance encouraged OIGs use a margin of error no greater than 5 percentage points at the 95 percent level of confidence.

The Federal Deposit Insurance Corporation does not submit Files C through F; therefore, the OIG did not select or test a statistical sample as prescribed in the IG Guide, and no error rate results are included in this table.

<sup>a</sup>The OIG tested the full population (i.e., error rate presented is the actual error rate).

# Non-Statistical Sample Results

Table 10 lists the agencies' non-statistical sample scores that OIGs reported for the five categories: timeliness of agency submission, completeness of summary-level data (Files A and B), suitability of File C for sample selection, record-level linkages (Files C and D1/D2), and COVID-19 outlay testing. The table is sorted alphabetically by agencies with and without COVID-19 outlays during the quarter selected for testing.

Table 10: 2021 Non-S	Statistical Tests Scores	OlGs Reported for A	Agencies' DAT <i>A</i>	Act Submissions

Agency name	Timeliness of agency submission	Completeness of summary-level data (Files A & B)	Suitability of File C for sample selection	Record-level linkages (Files C & D1/D2)	COVID-19 outlay testing
Agencies with COVID-19 funding	5.00 points max	10.00 points max	10.00 points max	7.00 points max	8.00 points max
Department of Agriculture	5.00	6.70	6.30	3.90	8.00
Department of Commerce	5.00	7.78	8.25	6.57	6.86
Department of Defense	5.00	3.30	8.80	7.00	0.00

Agency name	Timeliness of agency submission	Completeness of summary- level data (Files A & B)	Suitability of File C for sample selection	Record-level linkages (Files C & D1/D2)	COVID-19 outlay testing
Department of Education	5.00	8.67	8.00	6.44	8.00
Department of Energy	5.00	10.00	10.00	6.94	8.00
Department of Health and Human Services	5.00	10.00	10.00	6.86	8.00
Department of Homeland Security	5.00	10.00	10.00	6.84	0.00
Department of Housing and Urban Development	5.00	10.00	8.75	6.93	8.00
Department of the Interior	5.00	8.90	10.00	6.90	8.00
Department of Justice	5.00	6.67	9.00	6.21	7.62
Department of Labor	5.00	8.89	8.00	4.58	4.00
Department of State	5.00	10.00	8.51	6.74	8.00
Department of Transportation	5.00	7.78	8.29	6.61	7.90
Department of the Treasury	5.00	10.00	9.24	6.92	7.96
Department of Veterans Affairs	5.00	10.00	0.00	0.00	0.00
Election Assistance Commission	5.00	8.89	8.00	3.50	8.00
Environmental Protection Agency	5.00	8.89	8.96	6.76	6.67
Federal Communications Commission	5.00	10.00	9.00	4.12	8.00
General Services Administration	5.00	6.67	10.00	6.91	8.00
National Aeronautics and Space Administration	5.00	10.00	9.94	6.82	8.00
National Archives and Records Administration	5.00	10.00	10.00	7.00	8.00
National Endowment for the Arts	5.00	10.00	10.00	7.00	8.00
National Science Foundation	5.00	10.00	8.29	6.13	8.00
Nuclear Regulatory Commission	5.00	10.00	10.00	7.00	8.00
Office of Personnel Management	5.00	10.00	7.70	7.00	8.00
Peace Corps	5.00	7.78	8.62	4.71	5.00
Railroad Retirement Board	5.00	10.00	10.00	7.00	8.00
Small Business Administration	5.00	8.89	9.26	7.00	8.00
Social Security Administration	5.00	10.00	9.50	5.60	8.00

Agency name	Timeliness of agency submission	Completeness of summary- level data (Files A & B)	Suitability of File C for sample selection	Record-level linkages (Files C & D1/D2)	COVID-19 outlay testing
U.S. Agency for International Development	5.00	7.78	10.00	7.00	8.00
U.S. Army Corps of Engineers	5.00	10.00	10.00	7.00	0.00
Agencies without COVID-19 funding	5.00 points max	13.00 points max	13.00 points max	9.00 points max	NA
AmeriCorps	5.00	5.78	8.21	6.43	NA
Bureau of Consumer Financial Protection	5.00	13.00	13.00	9.00	NA
Commodity Futures Trading Commission	5.00	13.00	13.00	9.00	NA
Consumer Product Safety Commission	5.00	13.00	13.00	9.00	NA
Court Services and Offender Supervision Agency for the District of Columbia	5.00	13.00	13.00	7.64	NA
Defense Nuclear Facilities Safety Board	1.00	10.11	7.37	0.00	NA
Denali Commission	4.00	13.00	13.00	6.00	NA
District of Columbia Courts	5.00	13.00	10.40	8.44	NA
Equal Employment Opportunity Commission	5.00	13.00	11.57	7.77	NA
Export-Import Bank of the United States	5.00	11.56	12.57	9.00	NA
Federal Deposit Insurance Corporation	5.00	10.98	NT	NT	NA
Federal Election Commission	5.00	13.00	10.83	3.60	NA
Federal Labor Relations Authority	5.00	13.00	12.57	7.71	NA
Federal Maritime Commission	5.00	13.00	13.00	9.00	NA
Federal Trade Commission	5.00	13.00	13.00	9.00	NA
Gulf Coast Ecosystem Restoration Council	5.00	13.00	12.68	8.75	NA
Inter-American Foundation	5.00	13.00	13.00	9.00	NA
International Trade Commission	5.00	13.00	13.00	8.51	NA
Millennium Challenge Corporation	5.00	13.00	13.00	9.00	NA
National Credit Union Administration	5.00	13.00	12.57	8.78	NA

Agency name	Timeliness of agency submission	Completeness of summary- level data (Files A & B)	Suitability of File C for sample selection	Record-level linkages (Files C & D1/D2)	COVID-19 outlay testing
National Labor Relations Board	0.00	10.11	10.40	8.22	NA
Pension Benefit Guaranty Corporation	5.00	13.00	13.00	9.00	NA
Securities and Exchange Commission	5.00	13.00	12.90	8.90	NA
U.S. African Development Foundation	5.00	13.00	2.38	2.06	NA
U.S. Agency for Global Media	5.00	13.00	12.38	8.83	NA
U.S. Chemical Safety and Hazard Investigation Board	5.00	13.00	13.00	9.00	NA

Legend: DATA Act = Digital Accountability and Transparency Act of 2014; NA = not applicable; NT = the OIG did not test because the agency does not submit Files C, D1, or D2.

Source: GAO analysis of Office of Inspector General (OIG) reports and scorecards. | GAO-22-105427

This appendix includes the error rates the Offices of Inspector General (OIG) reported for completeness, timeliness, and accuracy of individual data elements agencies submitted under the Digital Accountability and Transparency Act of 2014 (DATA Act). Based on the results of their statistical samples, OIGs reported non-projectable completeness, timeliness, and accuracy data element error rates ranging from 0 to more than 30 percent as shown in the tables below. The number of OIGs reporting error rates for each individual data element varies depending on whether the data element is applicable to an agency's data submission, among other things. For OIGs reporting multiple error rates, we used the highest error rate in the tables below.

We obtained and reviewed 57 OIG DATA Act reports. According to one OIG, its agency does not submit Files C through F because the agency concluded that it is not subject to the Federal Funding Accountability and Transparency Act of 2006 and DATA Act requirements for award data, and it consequently did not test such data. Table 11 shows the range of error rates for the completeness of individual data elements that the OIGs reported, and is sorted alphabetically by data element.

Table 11: 2021 OIG-Reported Completeness Error Rates for Data Agencies Submitted under the DATA Act, by Data Element

	Error rate ranges (percentages) (number of agencies)					
Data element name	0	>0-5	>5-15	>15-30	>30	
Action Date	26	13	2	0	2	
Action Type	25	10	3	0	5	
Amount of Award	19	7	1	1	1	
Appropriations Account	32	5	1	2	1	
Award Description	25	13	2	0	3	
Award Identification Number	23	12	3	3	2	
Award Modification/Amendment Number	25	13	2	0	3	
Award Type	26	13	2	0	2	
Awardee/Recipient Legal Entity Name	25	13	2	0	3	
Awardee/Recipient Unique Identifier	24	12	3	0	3	
Awarding Agency Code	26	12	2	0	3	
Awarding Agency Name	25	13	2	0	3	
Awarding Office Code	26	12	2	0	3	

<sup>&</sup>lt;sup>1</sup>For the OIGs that tested the full population as noted in app. II, the error rate percentages shown are the actual error rates.

	Error rate ranges (percentages) (number of agencies)				
Data element name	0	>0-5	>5-15	>15-30	>30
Awarding Office Name	25	13	2	0	3
Awarding Sub Tier Agency Code	25	12	3	0	3
Awarding Sub Tier Agency Name	24	13	3	0	3
Business Types	19	6	1	1	2
Catalog of Federal Domestic Assistance (CFDA) Number	20	5	0	1	1
CFDA Title	19	6	0	1	1
Current Total Value of Award	23	9	6	1	2
Disaster Emergency Fund Code	30	4	1	2	1
Federal Action Obligation	27	12	1	0	3
Funding Agency Code	26	11	3	0	3
Funding Agency Name	25	12	3	0	3
Funding Office Code	27	11	2	0	3
Funding Office Name	25	12	2	0	4
Funding Sub Tier Agency Code	26	11	3	0	3
Funding Sub Tier Agency Name	25	12	3	0	3
Legal Entity Address	23	11	5	0	4
Legal Entity Congressional District	13	10	5	4	11
Legal Entity Country Code	25	13	2	0	3
Legal Entity Country Name	25	13	2	0	3
North American Industry Classification System (NAICS) Code	25	8	5	1	3
NAICS Description	24	9	5	1	3
National Interest Action Code	26	6	3	1	2
Non-Federal Funding Amount	20	1	1	1	1
Object Class	33	3	2	2	1
Obligation	32	4	1	2	1
Ordering Period End Date	25	2	2	2	4
Parent Award Identification Number	21	6	4	2	6
Period of Performance Current End Date	23	13	4	0	3
Period of Performance Potential End Date	23	9	5	1	3
Period of Performance Start Date	24	10	5	1	3
Potential Total Value of Award	24	7	6	1	3
Primary Place of Performance Address	19	16	5	0	3
Primary Place of Performance Congressional District	20	16	4	0	3
Primary Place of Performance Country Code	22	16	2	0	3
Primary Place of Performance Country Name	21	17	2	0	3

Data element name	Error rate ranges (percentages) (number of agencies)					
	0	>0-5	>5-15	>15-30	>30	
Program Activity	31	1	1	1	2	
Record Type	22	5	0	1	1	
Ultimate Parent Legal Entity Name	15	12	9	1	5	
Ultimate Parent Unique Identifier	22	10	4	1	5	

Legend: DATA Act = Digital Accountability and Transparency Act of 2014; > = greater than.

Source: GAO analysis of Office of Inspector General (OIG) reports. | GAO-22-105427

Note: The number of OIGs reporting error rates for each individual data element varies depending on whether the data element is applicable to an agency's data submission, among other things. For OIGs reporting multiple error rates, we used the highest error rate in the table above. According to the CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act, OIGs were to test individual data elements of the statistically selected sample and calculate but not project the error rates.

Table 12 shows the range of error rates for the accuracy of individual data elements that the OIGs reported, and is sorted alphabetically by data element.

	Error rate ranges (percentages) (number of agencies)					
Data element name	0	>0-5	>5-15	>15-30	>30	
Action Date	16	9	12	6	7	
Action Type	22	7	9	1	10	
Amount of Award	18	7	4	1	5	
Appropriations Account	33	8	4	2	1	
Award Description	19	11	9	3	7	
Award Identification Number	23	14	5	4	4	
Award Modification/Amendment Number	23	13	7	0	6	
Award Type	21	15	6	2	5	
Awardee/Recipient Legal Entity Name	18	13	9	2	7	
Awardee/Recipient Unique Identifier	20	11	11	0	5	
Awarding Agency Code	27	13	3	0	6	
Awarding Agency Name	28	13	3	0	5	
Awarding Office Code	27	13	4	0	5	
Awarding Office Name	24	16	3	1	5	
Awarding Sub Tier Agency Code	28	12	4	0	5	
Awarding Sub Tier Agency Name	26	14	4	0	5	

	Er	ror rate rang (number c	es (percentaç of agencies)	jes)	
Data element name	0	>0-5	>5-15	>15-30	>30
Business Types	17	4	4	2	8
Catalog of Federal Domestic Assistance (CFDA) Number	20	7	2	1	3
CFDA Title	20	7	2	1	3
Current Total Value of Award	16	7	10	7	7
Disaster Emergency Fund Code	34	3	2	3	3
Federal Action Obligation	22	16	3	2	6
Funding Agency Code	26	13	4	0	6
Funding Agency Name	27	13	4	0	5
Funding Office Code	24	11	7	2	5
Funding Office Name	23	12	5	3	6
Funding Sub Tier Agency Code	26	14	5	0	4
Funding Sub Tier Agency Name	26	14	5	0	4
Legal Entity Address	12	8	13	8	8
Legal Entity Congressional District	9	9	12	6	14
Legal Entity Country Code	23	16	5	0	5
Legal Entity Country Name	24	15	5	0	5
North American Industry Classification System (NAICS) Code	22	8	9	2	7
NAICS Description	22	10	9	3	4
National Interest Action Code	27	8	4	0	4
Non-Federal Funding Amount	21	1	2	1	3
Object Class	33	5	6	2	2
Obligation	29	10	5	1	3
Ordering Period End Date	30	1	2	1	6
Parent Award Identification Number	20	10	5	2	9
Period of Performance Current End Date	18	10	9	7	4
Period of Performance Potential End Date	21	6	9	6	5
Period of Performance Start Date	15	6	14	7	7
Potential Total Value of Award	16	5	12	7	8
Primary Place of Performance Address	13	8	17	5	7
Primary Place of Performance Congressional District	13	12	15	2	7
Primary Place of Performance Country Code	22	16	5	1	5
Primary Place of Performance Country Name	22	16	5	1	5
Program Activity	32	4	1	3	3
Record Type	24	6	1	1	3

	Error rate ranges (percentages) (number of agencies)					
Data element name	0	>0-5	>5-15	>15-30	>30	
Ultimate Parent Legal Entity Name	13	3	14	8	11	
Ultimate Parent Unique Identifier	13	9	12	4	10	

Legend: DATA Act = Digital Accountability and Transparency Act of 2014; > = greater than.

Source: GAO analysis of Office of Inspector General (OIG) reports. | GAO-22-105427

Note: The number of OIGs reporting error rates for each individual data element varies depending on whether the data element is applicable to an agency's data submission, among other things. For OIGs reporting multiple error rates, we used the highest error rate in the table above. According to the CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act, OIGs were to test individual data elements of the statistically selected sample and calculate but not project the error rates.

Table 13 shows the range of error rates for the timeliness of individual data elements that the OIGs reported, and is sorted alphabetically by data element.

	Error rate ranges (percentages) (number of agencies)				
Data element name	0	>0-5	>5-15	>15-30	>30
Action Date	11	10	13	2	7
Action Type	13	6	13	2	9
Amount of Award	10	6	5	1	7
Appropriations Account	23	8	4	2	4
Award Description	11	9	12	2	9
Award Identification Number	8	10	14	4	7
Award Modification/Amendment Number	15	9	10	1	8
Award Type	12	9	13	2	7
Awardee/Recipient Legal Entity Name	11	9	13	2	8
Awardee/Recipient Unique Identifier	13	9	10	1	9
Awarding Agency Code	11	9	13	2	8
Awarding Agency Name	11	9	13	2	8
Awarding Office Code	12	8	13	2	8
Awarding Office Name	11	9	13	2	8
Awarding Sub Tier Agency Code	12	8	13	2	8
Awarding Sub Tier Agency Name	11	9	13	2	8
Business Types	9	7	4	2	7
Catalog of Federal Domestic Assistance (CFDA) Number	9	6	4	2	6

	Error rate ranges (percentages) (number of agencies)				
Data element name	0	>0-5	>5-15	>15-30	>30
CFDA Title	8	7	4	2	6
Current Total Value of Award	14	8	11	2	6
Disaster Emergency Fund Code	22	6	4	2	4
Federal Action Obligation	13	9	12	2	7
Funding Agency Code	12	7	14	2	8
Funding Agency Name	11	8	14	2	8
Funding Office Code	12	8	13	2	8
Funding Office Name	11	8	13	2	9
Funding Sub Tier Agency Code	12	7	14	2	8
Funding Sub Tier Agency Name	11	8	14	2	8
Legal Entity Address	10	9	14	2	8
Legal Entity Congressional District	8	5	12	6	12
Legal Entity Country Code	10	10	13	2	8
Legal Entity Country Name	10	10	13	2	8
North American Industry Classification System (NAICS) Code	14	8	11	2	7
NAICS Description	14	8	11	2	7
National Interest Action Code	17	5	9	2	5
Non-Federal Funding Amount	12	4	3	2	3
Object Class	24	7	4	2	4
Obligation	22	8	4	2	4
Ordering Period End Date	25	1	2	1	6
Parent Award Identification Number	9	10	6	4	10
Period of Performance Current End Date	12	10	12	2	7
Period of Performance Potential End Date	12	9	11	2	7
Period of Performance Start Date	12	9	12	3	7
Potential Total Value of Award	14	7	10	3	7
Primary Place of Performance Address	9	8	15	3	8
Primary Place of Performance Congressional District	9	10	14	4	6
Primary Place of Performance Country Code	9	10	14	2	8
Primary Place of Performance Country Name	9	10	14	2	8
Program Activity	21	5	4	1	5
Record Type	11	6	4	2	6
Ultimate Parent Legal Entity Name	11	6	13	2	10
Ultimate Parent Unique Identifier	12	7	11	2	10

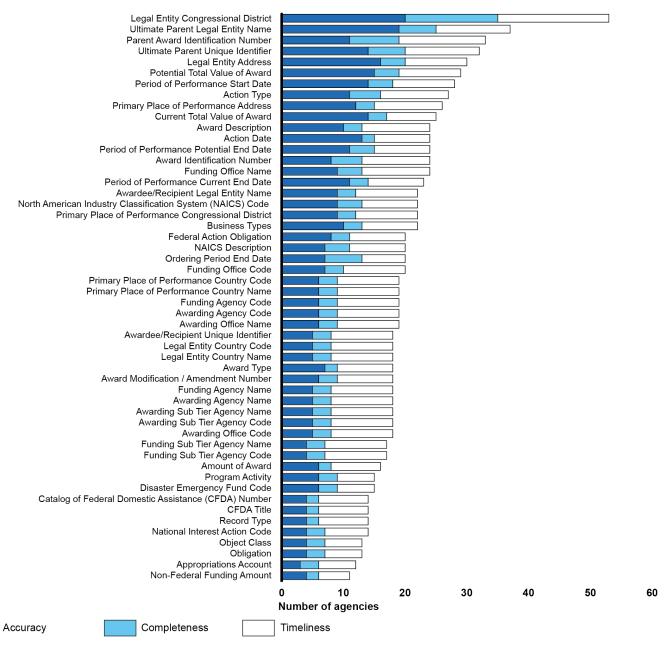
Legend: DATA Act = Digital Accountability and Transparency Act of 2014; > = greater than.

Source: GAO analysis of Office of Inspector General (OIG) reports.  $\mid$  GAO-22-105427

Note: The number of OIGs reporting error rates for each individual data element varies depending on whether the data element is applicable to an agency's data submission, among other things. For OIGs reporting multiple error rates, we used the highest error rate in the table above. According to the CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act, OIGs were to test individual data elements of the statistically selected sample and calculate but not project the error rates.

Figure 8 shows a comparison of error rates greater than 15 percent for accuracy, completeness, and timeliness for each individual data element, and is sorted in descending order by total number of OIGs. The *Legal Entity Congressional District* data element had the most OIGs reporting accuracy, completeness, and timeliness errors greater than 15 percent. The *Non-Federal Funding Amount* data element had the fewest number of OIGs reporting accuracy, completeness, and timeliness error rates greater than 15 percent.

Figure 8: 2021 OIG-Reported Data Element Error Rates Higher Than 15 Percent for Data Agencies Submitted under the Digital Accountability and Transparency Act of 2014 (DATA Act)



Source: GAO analysis of Office of Inspector General (OIG) reports. | GAO-22-105427

Note: The figure shows the number of OIGs reporting error rates greater than 15 percent for the attributes of completeness, timeliness, and accuracy of each individual data element. For a given data element, we may count an OIG up to three times (i.e., once for each attribute). The number of

OIGs reporting error rates for each individual data element varies depending on whether the data element is applicable to an agency's data submission, among other things. For OIGs reporting multiple error rates for one data element, we used the highest error rate for the figure above. According to the CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act, OIGs were to test individual data elements of the statistically selected sample and calculate but not project the error rates.

# Appendix V: 2021 OIG DATA Act COVID-19 Outlay Non-Statistical Testing Results

The CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act (IG Guide) includes five non-statistical tests for calculating the overall quality score. One of these tests included a specific test of COVID-19 outlays. The IG Guide suggests that Offices of Inspector General (OIG) select a non-statistical sample of outlay records from the third month of the quarter selected in the scope of their audit and test the completeness, timeliness, and accuracy of certain data elements (i.e., the Parent Award Identification Number, Procurement Instrument Identifier/Federal Award Identification Numbers, Object Class, Appropriations Account, Program Activity, Outlay, and Disaster Emergency Fund Code).

Thirty-one of the 57 OIGs tested COVID-19 outlays their agencies reported during the quarter included in the scope of their audits and reported on their agencies' COVID-19 outlay testing results. However, the non-statistical sample design did not allow OIGs to project the test results to the universe from which they selected the samples. Table 14 lists the COVID-19 testing error rates OIGs reported on their non-statistical samples, sorted alphabetically by Chief Financial Officers Act of 1990 (CFO Act) and non-CFO Act agency.

Table 14: 2021 OIG-Reported Non-Statistical Error Rates for Completeness, Timeliness, and Accuracy of Agencies' COVID-19 Outlays

	Error rates (percentage)			
Agency name	Completeness	Timeliness	Accuracy	
CFO Act agencies				
Department of Agriculture	0.0	0.0	0.0	
Department of Commerce	14.3	14.3	14.3	
Department of Defense	NR	NR	NR	
Department of Education	0.0	0.0	0.0	
Department of Energy	0.0	0.0	0.0	
Department of Health and Human Services	0.0	0.0	0.0	

<sup>1</sup>Council of the Inspectors General on Integrity and Efficiency (CIGIE), Federal Audit Executive Council (FAEC) DATA Act Working Group, *CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act*, OIG-CA-21-008 (Washington, D.C.: Department of the Treasury, Office of Inspector General, Dec. 4, 2020).

<sup>2</sup>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). Per Office of Management and Budget guidance, agencies were required to report a running total of outlays for all award records in File C containing a COVID-19–related *Disaster Emergency Fund Code*.

#### Appendix V: 2021 OIG DATA Act COVID-19 Outlay Non-Statistical Testing Results

	Error rates (percentage)		
Agency name	Completeness	Timeliness	Accuracy
Department of Homeland Security	NR	NR	NR
Department of Housing and Urban Development	0.0	0.0	0.0
Department of the Interior	0.0	0.0	0.0
Department of Justice	0.0	0.0	0.0
Department of Labor	50.0	50.0	50.0
Department of State	0.0	0.0	0.0
Department of Transportation	0.0	0.0	2.6
Department of the Treasury	0.0	0.0	1.1
Department of Veterans Affairs	NR	NR	NR
Environmental Protection Agency	16.7	16.7	16.7
General Services Administration	0.0	0.0	0.0
National Aeronautics and Space Administration	0.0	0.0	0.0
National Science Foundation	0.0	0.0	0.0
Nuclear Regulatory Commission	0.0	0.0	0.0
Office of Personnel Management	0.0	0.0	0.0
Small Business Administration	0.0	0.0	0.0
Social Security Administration	0.0	0.0	0.0
U.S. Agency for International Development	0.0	0.0	0.0
Non-CFO Act agencies			
Election Assistance Commission	0.0	0.0	0.0
Federal Communications Commission	100.0	100.0	100.0
National Archives and Records Administration	0.0	0.0	0.0
National Endowment for the Arts	0.0	0.0	0.0
Peace Corps	0.0	100.0	50.0
Railroad Retirement Board	0.0	0.0	0.0
U.S. Army Corps of Engineers	NR	NR	NR

Legend: CFO Act = Chief Financial Officers Act of 1990; NR = OIG did not report an error rate because of system issues preventing testing. Source: GAO analysis of Office of Inspector General (OIG) reports and scorecards. | GAO-22-105427

Note: Percentages rounded to the nearest tenth. The non-statistical sample design did not allow OIGs to project the test results to the universe from which they selected the samples.

# Appendix VI: Comments from the Council of the Inspectors General on Integrity and Efficiency



June 29, 2022

Ms. Paula M. Rascona Director Financial Management and Assurance U.S. Government Accountability Office 441 G. Street, N.W. Washington, D.C. 20548

Dear Ms. Rascona:

On behalf of the Council of the Inspectors General on Integrity and Efficiency (CIGIE), we appreciate the opportunity to provide this response to the Government Accountability Office (GAO) draft report, *DATA Act: OIGs Identified a Variety of Issues with the Quality of Agencies' Data Submissions*, report number GAO-22-105427.

The report provides useful information and reflects the work across OIGs in meeting oversight and reporting responsibilities under the Digital Accountability and Transparency Act of 2014 (DATA Act). The CIGIE Federal Audit Executive Council (FAEC) DATA Act Working Group created the *Inspectors General Guide to Compliance under the DATA Act (Guide)* which presented a common methodology and reporting approach for the Inspector General community to use in performing its mandated DATA Act work, while recognizing that each Federal agency presents a unique set of challenges and risks. The Guide allowed for flexibility and the application of each Inspector General's professional judgment to meet oversight and reporting requirements.

We deeply appreciate the professionalism and cooperation demonstrated by your staff during the course of this engagement. Should you have questions regarding these comments, or if we can provide any additional information, please contact us.

Sincerely,

Pilas

The Honorable Hannibal "Mike" Ware Chair, Audit Committee, CIGIE Inspector General, Small Business Administration

Cc: The Honorable Allison C. Lerner

Chair, CIGIE

Inspector General, National Science Foundation

Mark Lee Greenblatt Vice Chair, CIGIE

Inspector General, U.S. Department of the Interior

# Appendix VII: GAO Contact and Staff Acknowledgments

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

#### Staff Acknowledgments

In addition to the contact named above, Michael LaForge (Assistant Director), Maria Belaval, Dennis Clarke, Nabor Cuevas Jr., Thomas Hackney, Diane Morris, Landon Western, and Lisa Zhao made major contributions to this report. Other key contributors include Marcia Carlsen, Dylan Carr, Anthony Clark, Stephen Duncan, Patrick Frey, and Jason Kelly.

#### Related GAO Products

Emergency Relief Funds: Significant Improvements Are Needed to Ensure Transparency and Accountability for COVID-19 and Beyond. GAO-22-105715. Washington, D.C.: March 17, 2022.

Federal Spending Transparency: Opportunities Exist for Treasury to Further Improve USAspending.gov's Use and Usefulness. GAO-22-104127. Washington, D.C.: December 16, 2021.

Federal Spending Transparency: Opportunities Exist to Further Improve the Information Available on USAspending.gov. GAO-22-104702. Washington, D.C.: November 8, 2021.

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: OMB Needs to Formalize Data Governance for Reporting Federal Spending. GAO-19-284. Washington, D.C.: March 22, 2019.

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.

#### **Related GAO Products**

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: Improvements Needed in Reviewing Agency Implementation Plans and Monitoring Progress. GAO-16-698. Washington, D.C.: July 29, 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.

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

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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