



DATA Act Compliance Audit of the U.S. Department of Housing and Urban Development

Office of the Chief Financial Officer,
Washington, DC

Financial Audit Division
Washington DC

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OFFICE OF INSPECTOR GENERAL
U.S. Department of Housing and Urban Development

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Subject: HUD's Office of the Chief Financial Officer Generally Complied With the Digital Accountability and Transparency Act of 2014, With a Few Exceptions

Attached is the U.S. Department of Housing and Urban Development (HUD), Office of Inspector General's (OIG) final results of our review of HUD's third quarter, fiscal year 2020, compliance with the Digital Accountability and Transparency Act of 2014 and standards established by the Office of Management and Budget and the U.S. Department of the Treasury.

The Inspector General Act, Title 5 United States Code, appendix 8M, requires that OIG post its reports on the OIG website. Accordingly, this report will be posted at <https://www.hudoig.gov>.

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Highlights

What We Audited and Why

In accordance with the statutory requirements of the Digital Accountability and Transparency Act of 2014 (DATA Act) and standards established by the Office of Management and Budget (OMB) and the U.S. Department of the Treasury, we audited the U.S. Department of Housing and Urban Development (HUD), Office of the Chief Financial Officer's (OCFO) compliance with the DATA Act for the third quarter of fiscal year 2020. The audit was statutorily mandated by Congress. Our objectives were to assess the (1) completeness, accuracy, timeliness, and quality of HUD OCFO's fiscal year 2020, third quarter, financial and award data submitted for publication on USASpending.gov and (2) HUD's implementation and use of the governmentwide financial data standards established by OMB and Treasury.

HUD's Office of the Chief Financial Officer Generally Complied With the Digital Accountability and Transparency Act of 2014, With a Few Exceptions

What We Found

HUD OCFO generally complied with the reporting requirements of the DATA Act. The information it submitted for inclusion on USASpending.gov for the third quarter, fiscal year 2020, was complete, accurate, timely, and in accordance with the governmentwide data standards established by OMB and Treasury. In addition, the overall quality of the summary-level and detailed data submitted for the indicated quarter scored 97.1 percent, a score of excellent, according to the DATA Act standards. However, we identified a few exceptions. Specifically, we determined that (1) award data reported in File C were not always reported in File D2 in a timely manner and (2) inaccuracies existed between the data reported and the source documentation for the business type, action type, and other data elements. The exceptions occurred because of (1) timing differences in processing issuances of the Indian Housing Loan Guarantee (IHLG) program loan guarantees and (2) potential errors in recording the information in HUD's financial systems or errors caused by third-party sources. HUD OCFO later submitted the IHLG program award data. It also indicated having implemented procedures to correct timing differences. Further, HUD OCFO acknowledged potential data entry errors in the business type and action type data elements, however, we considered these errors immaterial. Although we identified a few exceptions, we concluded that HUD had implemented and used the governmentwide data standards to successfully submit the spending data to Treasury's DATA Act Broker.

What We Recommend

We do not have any new recommendations as a result of this audit. We determined that HUD had satisfactorily addressed the reasons why program award data were not submitted in a timely manner. Also, the remaining exceptions related to potential errors in the business type, action type, and other data elements were immaterial or due to causes outside HUD's control. Further, HUD has taken corrective actions that address all open recommendations from our prior audit, and these actions address remaining issues identified in the current year audit.

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Background and Objectives

Signed into law on May 9, 2014, the Digital Accountability and Transparency Act of 2014 (DATA Act) was enacted for purposes which include expanding on previous Federal transparency legislation by requiring the disclosure of Federal agency expenditures and linking agency spending information to Federal program activities so that both policymakers and the public can more effectively track Federal spending. The DATA Act requires governmentwide reporting on a greater variety of data related to Federal spending, such as budget and financial information, as well as tracking these data at multiple points in the Federal spending life cycle.

The DATA Act gives the Office of Management and Budget (OMB) and the U.S. Department of the Treasury, in consultation with the heads of Federal agencies, responsibility to establish governmentwide financial data standards for any Federal funds made available to or spent by Federal agencies. These standards specify the data to be reported under the DATA Act and define and describe what is to be included in each element, with the aim of ensuring that information will be consistent and comparable. To improve the quality and consistency of the data, OMB and Treasury published 57 data definition standards (commonly referred to as data elements) to assist Federal agencies in meeting their DATA Act reporting requirements. The 57 data definition standards are found within the DATA Act Information Model Schema (DAIMS).¹ Federal agencies were required to report financial and award data in accordance with these standards for DATA Act reporting beginning in January 2017. In accordance with the DATA Act, in May 2017, Treasury began displaying Federal agencies' financial and payment information data in accordance with these data standards on USASpending.gov for taxpayers and policymakers. In April 2020, OMB issued M-20-21, Implementation Guidance for Supplemental Funding Provided in Response to the Coronavirus Disease 2019 (COVID-19), which changed DATA Act reporting from quarterly to monthly, included reporting a running total of outlays for each award funded with COVID-19 supplemental relief funds, and added two additional data elements, resulting in 59 data elements in total.

Agency expenditure information is posted to USASpending.gov, which is the official source for spending data for the U.S. Government. The mission of USASpending.gov is to show the American public what the Federal Government spends every year and how it spends the money.

The DATA Act amended the Federal Funding Accountability and Transparency Act of 2006 (FFATA) to require the disclosure of direct Federal agency expenditures and the linkage of Federal agencies' contract, grant, loan, direct payment, and other award or spending

¹ Treasury updated DAIMS in December 2020, to include two additional data elements from the prior model schema. DAIMS provides an overall view of distinct data elements used to tell the story of how Federal dollars are spent. It includes artifacts that provide technical guidance for Federal agencies about what data to report to Treasury, including the authoritative sources of the data elements and the submission format.

information to Federal agency programs. The data are either uploaded to USASpending.gov directly from Federal agencies' financial systems or derived from other government systems, such as the Federal Procurement Data System Next Generation (FPDS-NG) or Financial Assistance Broker Submission (FABS). Every grant, loan, direct payment, and other financial assistance record submitted to FABS must pass a series of validations before the data are published on USASpending.gov.²

For the DATA Act Broker submission, data should be submitted in three separate comma-separated value (or pipe-delimited text) format files, one for each submission detail tab: (1) File A – Appropriation Accounts, (2) File B – Object Class Program Activity, and (3) File C – Award Financial. File D1 contains the award and awardee attributes information for procurement information sourced from FPDS-NG. File D2 contains the award and awardee attributes information for financial assistance sourced from the FABS component of the DATA Act Broker. File E contains additional awardee attributes sourced from the System for Award Management (SAM). File F contains subaward and subawardee attributes information sourced from the FFATA Subaward Reporting System (FSRS).

As written in the DATA Act, the first set of Inspector General (IG) reports was due to Congress in November 2016. However, Federal agencies were not required to submit spending data in compliance with the DATA Act until May 2017. As a result, IGs were not able to report on the spending data submitted under the DATA Act, as the information did not exist until 2017. For this reason, the Council of the Inspectors General on Integrity and Efficiency (CIGIE) developed an approach to address the reporting date anomaly. On December 22, 2015, CIGIE issued a letter detailing the strategy for dealing with the IG reporting date anomaly and communicated the strategy to the Senate Committee on Homeland Security and Governmental Affairs and the House Committee on Oversight and Government Reform. Specifically, the IGs provided Congress with the first required reports in November 2017, 1 year later than the due date in the statute, with reports to follow on a 2-year cycle in November 2019 and November 2021. This is the third of three audit reports that we, as the Office of Inspector General (OIG) for the U.S. Department of Housing and Urban Development (HUD), are required to provide to Congress, related to HUD's DATA Act reporting.³ On December 4, 2020, CIGIE's Federal Audit Executive Council (FAEC) DATA Act Working Group issued the Inspector General Guide to Compliance Under the Digital Accountability and Transparency Act of 2014 for the third required audit report. This guide recommended a common methodology and reporting approach for the IG community to use in performing the third mandated DATA Act work.

The objectives of this audit were to assess (1) the completeness, accuracy, timeliness, and quality of the HUD Office of the Chief Financial Officer's (OCFO) fiscal year 2020 third quarter financial and award data submitted for publication on USASpending.gov and (2) HUD's implementation and use of the governmentwide financial data standards established by OMB and Treasury.

² Refer to appendix C for the overview of the DATA Act Reporting end-to-end process flowchart.

³ HUD's DATA Act reporting includes transactions of the Federal Housing Administration and Government National Mortgage Association, both of which are component entities of HUD.

Results of Audit

Finding: HUD’s Office of the Chief Financial Officer Generally Complied With the Digital Accountability and Transparency Act of 2014

HUD OCFO generally complied with the reporting requirements of the DATA Act. The information it submitted for inclusion on USASpending.gov for the third quarter, fiscal year 2020, was complete, accurate, timely, and in accordance with the governmentwide data standards established by OMB and Treasury. In addition, the overall quality of the summary-level and detailed data submitted for the indicated quarter scored 97.1 percent, a score of excellent, according to the DATA Act standards. However, we identified a few exceptions related to (1) award data reported in File C that were not always reported in File D2 in a timely manner and (2) inaccuracies that existed between the data reported and the source documentation for the business type and action type data elements. The exceptions occurred because of (1) timing differences in processing issuances of the Indian Housing Loan Guarantee (IHLG) program loan guarantees and (2) potential errors in recording the information in HUD’s financial systems or errors caused by third-party sources. HUD later submitted the IHLG program award data. It also indicated having implemented procedures to correct timing differences and acknowledged potential data entry errors in the business type and action type data elements that were attributable to both HUD and third parties outside HUD’s control. Although we identified a few exceptions, we concluded that HUD had implemented and used the governmentwide data standards to successfully submit the spending data to Treasury’s DATA Act Broker.

Testing of Summary-Level Certification Submission

The CIGIE Federal Audit Executive Council (FAEC) Inspectors General Audit Guide to Compliance Under the Digital Accountability and Transparency Act of 2014 (DATA Act audit guide) required auditors to review the agency’s certification and submission process; determine completeness and accuracy of the summary-level data for Files A, B, and C; determine whether File C was suitable for sampling for detailed transaction testing; and determine the timeliness of the agency’s submission. We assessed HUD’s submission of summary-level data for the third quarter, fiscal year 2020, Files A, B, and C. We concluded that HUD’s submission was complete, accurate, and timely as required by the DATA Act, and that File C was suitable for sample selection and detailed testing.

File A

We performed a summary-level data reconciliation between Treasury’s “non-finance” version of the Government-wide Treasury Account Symbol (GTAS) Standard Form (SF) 133 Report on Budget Execution⁴ and HUD’s third quarter, fiscal year 2020, File A and determined that the

⁴ The SF-133 is a quarterly report that contains information on the sources of budget authority and the status of budgetary resources by individual fund or appropriation.

Treasury Account Symbols (TAS) matched, and we did not identify any variances. Therefore, we determined that File A was complete and accurate.

File B

We performed a summary-level reconciliation of TASs between DATA Act Files A and B and determined that they matched, and we did not identify any variances; therefore, Files A and B were complete and accurate. In reconciling the linkages between Files A and B to determine validity and to identify any significant variances between the files, our test work noted that there were variances from three transactions in obligations incurred and outlays between Files A and B. The errors and warnings report completed by the DATA Act Broker also identified these variances. HUD's internal policies require that any variance over \$600,000 per item be thoroughly investigated due to the high materiality and potential impact to the agency's compliance with the DATA Act requirements. The variances were lower than HUD's threshold and were not investigated. We considered the variances to be immaterial, having minimal to no impact on File B completeness. We also determined that all object class codes from File B matched the codes in section 83 of OMB Circular No. A-11, Preparing, Submitting, and Executing the Budget.⁵ Therefore, we determined that File B was complete and accurate at the time of HUD's submission to the DATA Act Broker.

File C

The DATA Act audit guide required assessing the suitability of File C for sample selection by determining whether File C was complete and contained all transactions and linkages that should be included, as well as the agency's methodology for resolving DATA Act Broker warnings among Files C, B, and D1-D2. We assessed the data reported in File C against the data reported in File B to determine whether the TAS, object class, and program activity linkages between Files C and B were complete and accurate. We concluded that there were no discrepancies and the elements in File C also existed in File B.

We also reviewed the linkage between Files C and D1 by both the procurement instrument identifier (PIID) and parent award ID and linkages between File C and File D2 by the Federal award identification number (FAIN) or unique record identifier to determine whether the records reported in Files C and D1-D2 were complete and accurate. We identified 82 records that were reported in File C but not File D1 and 137 records that were reported in File D1 but not File C. We also identified 8,573 records reported in File C but not File D2 and 7,014 records in File D2 not included in File C. We assessed the variances of the records reported by comparing them with HUD's fiscal year 2020 third quarter submission cross-file warning reports (C to D1 and C to D2) and DAIMS validation rules. We determined that there were valid reasons for all instances of records that were reported in File C but not in File D1 or D2 or records reported in Files D1 and D2 that were not reported in File C. The most significant variances were due to transactions not having the unique FAIN and PIID number on each of the files to identify the transactions. However, all missing records were identified and reported in the monthly warning

⁵ OMB Circular No. A-11, Preparing, Submitting, and Executing the Budget, provides guidance on preparing Federal agencies' budgets and instructions on budget execution reports.

reports with code C8, C9, C11, and C12 validation rules.⁶ We further determined that there were valid reasons for the records variances between Files C and D1-D2 and that they would not have an adverse impact on the overall quality of the DATA Act submission and the suitability of File C for sample selection and testing. Therefore, we considered File C sufficiently complete and accurate to conduct detailed testing.

Timeliness of HUD's Submission to the DATA Act Broker

We evaluated HUD's third quarter of fiscal year 2020 monthly DATA Act submissions to Treasury's DATA Act Broker and determined that the submissions were timely. We also noted that the senior accountable official (SAO) certified the data in a timely manner on August 14, 2020. To be considered timely, the DATA Act submission had to be submitted by the end of the following month and had to be certified by the SAO within 45 days of the end of the corresponding quarter. We also determined that the agency's certification statement made proper disclosure of any data limitations and text explaining that variances in the certification were reasonable.

Detailed Testing of Record-Level Linkages for File C and Files D1 and D2 for Completeness, Accuracy, and Timeliness of the Data

Based on the results of our File C testing, we determined that File C was suitable for selecting a statistical sample to conduct detailed testing to validate the transaction data against the award documentation and report on the error rates for completeness,⁷ accuracy,⁸ and timeliness.⁹

We selected a statistical sample of 246 obligation records from File C to assess the completeness, accuracy, and timeliness of each of the applicable 59 data elements associated with the records compared to the award documentation. Additionally, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) of 2020 required reviewing the Federal Government's response to the COVID-19 pandemic, which included new reporting requirements for agencies that received COVID-19 funds. We selected a nonstatistical sample of 60 outlay transactions from File C coded as CARES Act funding to assess compliance with the new DATA Act reporting requirements and the completeness, accuracy, and timeliness of each transaction.

Statistical Sample Results for Completeness, Accuracy, and Timeliness

Of the 246 statistically selected records, 1 was related to a procurement transaction and the remaining 245 were related to financial transactions. For the procurement record selected, we determined that the data elements matched to supporting documentation. Therefore, we did not note any discrepancies with the completeness, accuracy, and timeliness of the data elements associated with the procurement record. However, we noted a few anomalies when we traced

⁶ DAIMS provides the validation rules C8, C9, C11, and C12 for agencies to identify and explain the reasons for missing records. For example, rule C9 explains that a record's FAIN is required in File C but not in File D2 for loan guarantee subsidy records equal to zero.

⁷ A data element was considered complete if the required data element that should have been reported was reported.

⁸ A data element was considered accurate when the amounts and other data relating to recorded transactions were recorded in accordance with DAIMS.

⁹ The timeliness of data elements was based on the reporting schedules defined by the procurement and financial assistance requirements provided by Treasury.

the data elements for the 245 records to the source documentation. We determined that (1) award data reported in File C were not always reported in File D2 in a timely manner and (2) inaccuracies existed between the data reported and the source documentation for the business type and action type data elements. For instance, of the 245 sample records, 6 were related to award data not reported in File D2.¹⁰ The exceptions occurred because of (1) timing differences in processing issuances of IHLG program guarantees; (2) potential errors in recording the information in HUD's financial systems, such as business type and action type; and (3) errors caused by third-party sources. HUD later submitted the IHLG program award data and indicated having implemented procedures to correct the timing differences. We projected the errors on each category as follows:

- *Completeness of the Data Elements*

The projected error rate for the completeness of the data elements is 1.48 percent.¹¹ A data element was considered complete if the required data element that should have been reported was reported.

- *Accuracy of the Data Elements*

The projected error rate for the accuracy of the data elements is 3.39 percent.¹² A data element was considered accurate when the amounts and other data relating to recorded transactions were recorded in accordance with the DAIMS Reporting Submission Specification, Interface Definition Document, and the online data dictionary and agreed with the authoritative source records.

- *Timeliness of the Data Elements*

The projected error rate for the timeliness of the data elements is 2.23 percent.¹³ The timeliness of data elements was based on the reporting schedules defined by the procurement and financial assistance requirements.¹⁴

Nonstatistical COVID-19 Outlay Sample Results

We selected a nonstatistical sample of 60 records from 21,278 File C outlay records from the third month of the fiscal year 2020, third quarter, DATA Act submission.¹⁵ Our testing included assessing the parent award ID number, PIID-FAIN, object class, appropriations account, obligation, program activity, outlay, and Disaster Emergency Fund Code data elements against the award documentation for completeness, accuracy, and timeliness. Based on our testing, we

¹⁰ Details of these instances can be found in the Analysis of Errors in Data Elements Attributed to HUD section of this report.

¹¹ Based on a 95 percent confidence level, the projected error rate for the completeness of the data elements is between 0.63 and 3.03 percent.

¹² Based on a 95 percent confidence level, the projected error rate for the inaccuracies of the data elements is between 2.51 and 4.96 percent.

¹³ Based on a 95 percent confidence level, the projected error rate for the timeliness of the data elements is between 0.78 and 4.37 percent.

¹⁴ FFATA, Federal Acquisition Regulation, FPDS-NG, FABS, and DAIMS

¹⁵ We used the U.S. Government Accountability Office Financial Audit Manual, section 460, as a guide to determine the sample size.

found that the File C outlays for our sample of 60 records were 100 percent complete, 100 percent accurate, and 100 percent timely. This nonstatistical sample design did not allow projection of the test results to the universe from which the samples were selected.

Assessment of the Use of Data Standards and Overall Quality of Summary-Level and Record-Level Submissions

The DATA Act audit guide¹⁶ required assessing the use of the DATA Act standards established in DAIMS and the reasonableness of the explanations included in the quarterly certification and providing an overall determination of the quality of the summary-level and data-detailed records from the statistical and nonstatistical sample review. Additionally, the audit guide required determining the accuracy of dollar values reported, the error rate for each data element tested from the procurement and financial award records, and the change in error rate for each data element when comparing the fiscal years 2019 and 2021 audit results.

We evaluated HUD’s implementation of the governmentwide financial data standards for award and spending information and determined that HUD used the standards as defined by OMB and Treasury. HUD linked by common identifiers (for example, PIID, FAIN) all of the data elements in the agency’s procurement, financial, and grants systems, as applicable. For Treasury’s DATA Act Broker files tested, we generally found that the required elements were present in the file and that the record values were presented in accordance with the standards.

Based on the results of our review of HUD’s DATA Act summary-level data and the statistical and nonstatistical detailed testing for the third quarter of fiscal year 2020, we determined that HUD scored 97.1 points, which is a quality rating of excellent. The rating was based on the following table provided in the DATA Act audit guide.

Quality level		
Range		Level
0.0	69.9	Lower
70.0	84.9	Moderate
85.0	94.9	Higher
95.0	100	Excellent

Analysis of Errors in Data Elements Attributed to HUD

Using the results of our statistical sample of 246 obligation records, we identified the number of errors and resulting error rates associated with each of the 59 data elements.¹⁷ In evaluating the results by data element, we determined whether the identified risks in the agency’s data quality plan were consistent with the results of testing for the reported data. Although HUD’s data quality was rated excellent, we noted issues from our review of the 246-record statistical sample of detailed testing of record-level linkages for files C and D2.

¹⁶ According to section 820 of the CIGIE FAEC DATA Act audit guide

¹⁷ Refer to appendix A for the error rate analysis of results by data elements.

IHLG Award Data Not Reported in File D2

Award data for six obligation transactions of the IHLG program selected from File C were not reported in File D2 by the due date as part of the monthly submissions and certification for the third quarter of fiscal year 2020. HUD performed subsequent submissions of File D2 award data to match the corresponding obligation transactions reported in File C, after having certified the third quarter data. This error occurred because of timing differences in processing IHLG program issuances. HUD indicated having implemented corrective actions to report future IHLG award data in a timely manner. We reviewed the subsequent submission and found only five of the six obligation test samples. For the remaining samples, the IHLG program office explained that the guarantee was not issued because of lending qualification issues and, therefore, the award data were not submitted.

Other Errors Attributed to HUD

Of the remaining 240 statistically selected transactions, we found that 73 business type, 54 action type, 6 period of performance current end date, and 2 action date data elements were not accurate or supported by the award documentation. We attributed the error to the lack of information available in the award documentation or data entry errors in the information systems. HUD provided the system manuals, which described the process and sources of information, but we were not able to corroborate the accuracy of the data reported for these samples. Excluding the IHLG errors identified above, these errors resulted in error rates of only 0.23 percent, 2.15 percent, and 0.13 percent for completeness, accuracy, and timeliness, respectively, of the data elements for the remaining 240 samples.

Analysis of Errors in Data Elements Not Attributable to HUD

The DATA Act audit guide required comparing and determining the cause of the errors noted between the data reported in Files C and D1-D2 and the data reported in award documentation or external websites, such as Treasury's SAM, the U.S. Postal Service, and the U.S. House of Representatives. We found that most of the errors noted were from incomplete or missing zip codes related to legal entity and primary place of performance addresses. HUD used SAM as the source system to report the award data to Treasury in File D1-D2 and, therefore, the errors were not within HUD's control. The following table provides a summary of errors that were not attributable to HUD.

Data Element #	Data Element Name	Number of Accuracy Errors Not Attributed to HUD	Error Attributed To
5	Legal entity address	28	FPDS-NG extracting from SAM
30	Primary place of performance address	26	FPDS-NG extracting from SAM
4	Ultimate parent legal entity name	10	FPDS-NG extracting from SAM
1	Awardee-recipient legal entity name	5	FPDS-NG extracting from SAM
31	Primary place of performance congressional district	5	FPDS-NG extracting from SAM
6	Legal entity congressional district	5	FPDS-NG extracting from SAM

32	Primary place of performance country code	1	FPDS-NG extracting from SAM
33	Primary place of performance country name	1	FPDS-NG extracting from SAM
7	Legal entity country code	1	FPDS-NG extracting from SAM
8	Legal entity country name	1	FPDS-NG extracting from SAM

Analysis of the Accuracy of Dollar-Value-Related Data Elements

As part of our testing of the statistical and nonstatistical samples, the DATA Act audit guide required an analysis to determine the accuracy of dollar-value-related data elements, based on absolute values, to capture the magnitude of any deviations as a result of those errors. We found no errors in any of the statistical and nonstatistical samples when comparing reported dollar value data elements to the supporting award documentation.

Calculation of Error Rates by Data Element

The DATA Act audit guide required calculating the rate of error for each data element. Using the results of our statistical sample of 246 obligation records, we calculated the error rate for each attribute of completeness, accuracy, and timeliness for each data element required to be reported for all 246 records. These results are provided in appendix A. Additionally, we compared the error rates for each data element as determined in our fiscal years 2019 and 2021 audit results and calculated the change in each error rate. These results are shown in appendix B. The comparisons are provided for illustrative purposes only and may not necessarily be indicative of actual percentage change based on differences in testing procedures, such as population size, sample methodology, quarter tested, file tested, and changes to data definition standards.

Conclusion

While we noted a few exceptions, HUD OCFO generally complied with the DATA Act reporting requirements. The information it submitted for inclusion on USASpending.gov for the third quarter, fiscal year 2020, was complete, accurate, timely, and in accordance with the governmentwide data standards established by OMB and Treasury. In addition, HUD’s overall summary-level information and data quality for the indicated quarter was excellent.

Recommendations

We do not have any new recommendations resulting from this audit. However, during the audit, we reviewed the three open recommendations from our prior audit report regarding HUD’s compliance with the DATA Act.¹⁸ We concluded that HUD had taken corrective actions and generally implemented these prior-year recommendations. As a result, HUD closed the three recommendations on October 26, 2021. No recommendations remain open regarding HUD’s compliance with the DATA Act.

¹⁸ Audit report 2020-CH-0001, issued November 7, 2019

Scope and Methodology

To accomplish our audit objectives and reporting requirements, we followed the CIGIE DATA Act audit guide. We also reviewed other pertinent guidance, regulatory requirements, and criteria issued by Treasury and OMB related to the DATA Act and HUD's responsibility to report financial and award data to Treasury required by the DATA Act. The audit field work was performed remotely in the Washington, DC area, using secured and encrypted emails and other systems to exchange documents and data with HUD. We held virtual meetings and conference calls using secured methods of communication with HUD officials between March and October 2021.

We reviewed HUD's enterprise risk management evaluation for fiscal year 2020 and the HUD DATA Act Quality Plan. We assessed internal controls and compliance with laws and regulations necessary to satisfy the audit objectives. Refer to the Internal Controls section of this report, which describes the internal controls we considered relevant. However, because our review was limited to these internal control components and underlying principles, it may not have disclosed all internal control deficiencies that may have existed at the time of this audit.

We determined our scope to be financial and award data submitted for publication on USASpending.gov for the third quarter of fiscal year 2020. We obtained HUD's senior accountable official's third quarter, fiscal year 2020, certification that HUD internal controls support the reliability and validity of the agency's summary- and record-level data reported for publication on USASpending.gov.

We relied on computer software to reconcile and assess the reliability of the data reported in the certification; evaluated Files A, B, and C; and compared the File C data against Files D1 and D2 data to determine whether all transactions that should have been recorded were recorded in the proper period. We determined that File C was suitable for sampling selection and detailed testing in accordance with the guidance established in the CIGIE FAEC DATA Act audit guide, issued December 2020.

We selected a statistically systematic random sample of 246 obligations for review from the universe of 66,392 obligation transaction records reported in File C. The sample size was based on a 95 percent confidence level that allowed for a 2.5 percent sampling risk. We determined the sample size using 2019 audit¹⁹ error rates (< 20 percent) based on sampling guidance provided in the CIGIE FAEC DATA Act audit guide.

The CIGIE FAEC DATA Act audit guide also required us to select a nonstatistical sample of CARES Act outlay transactions. We selected a nonstatistical random sample of 60 outlay

¹⁹ A prior audit report resulted in an error rate of less than 20 percent. Refer to audit report 2020-CH-0001, dated November 7, 2019.

transactions. We used the U.S. Government Accountability Office Financial Audit Manual, section 460, as a guide to determine the sample size of the control sample and followed additional sampling guidance provided in the CIGIE FAEC DATA Act audit guide. We examined transaction outlay amounts for compliance to report the nonstatistical error rate on the sample as required by the audit guide.

For each statistical sample, we traced and compared the data from HUD's File C to D1 or D2 to award documentation, system reports, and other government websites. We tested each of the 59 data elements to determine whether the data were complete, accurate, and reported to USASpending.gov in a timely manner. We projected the results of our reviews of the completeness, accuracy, and timeliness to the universe of File C records. The overall quality of HUD's third quarter, fiscal year 2020, File C submission was determined using the midpoint of the range of the proportion of errors (error rate) for completeness, timeliness, and accuracy. We also determined the error rate by data element from the procurement and financial award records tested (refer to appendix A) and compared the error rate change by data element between the fiscal years 2019 and 2021 audit results (refer to appendix B).

File E of DAIMS contains additional awardee attribute information the Treasury DATA Act Broker software extracts from SAM. File F contains subaward attribute information the broker software extracts from FFATA FSRS. Files E and F data remain the responsibility of the awardee in accordance with terms and conditions of Federal agreements, and the quality of these data remains the legal responsibility of the recipient. Therefore, agency senior accountable officials are not responsible for certifying the quality of File E and F data reported by awardees, but they are responsible for ensuring that controls are in place to verify that financial assistance awardees register in SAM at the time of the award. Therefore, we did not assess the completeness, accuracy, timeliness, or quality of the data extracted from SAM and FSRS via the Treasury broker software system.

We conducted the audit 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.

Internal Controls

Internal control is a process adopted by those charged with governance and management, designed to provide reasonable assurance about the achievement of the organization's mission, goals, and objectives with regard to

- effectiveness and efficiency of operations,
- reliability of financial information reporting, and
- compliance with applicable laws and regulations.

Internal controls comprise the plans, policies, methods, and procedures used to meet the organization's mission, goals, and objectives. Internal controls include the processes and procedures for planning, organizing, directing, and controlling program operations as well as the systems for measuring, reporting, and monitoring program performance.

Relevant Internal Controls

We determined that the following internal controls were relevant to our audit objectives:

- HUD's design and implementation of controls to ensure completeness, accuracy, and timeliness of data processed in source systems and reported to USASpending.gov.
- HUD's reporting processes among HUD's OCFO, the Federal Housing Administration, and the Government National Mortgage Association.

We assessed the relevant controls identified above.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, the reasonable opportunity to prevent, detect, or correct (1) impairments to effectiveness or efficiency of operations, (2) misstatements in financial or performance information, or (3) violations of laws and regulations on a timely basis.

We evaluated internal controls related to the audit objectives in accordance with generally accepted government auditing standards. Our evaluation of internal controls was not designed to provide assurance regarding the effectiveness of the internal control structure as a whole. Accordingly, we do not express an opinion on the effectiveness of the HUD's internal controls.

Appendixes

Appendix A

HUD's Results for the Data Elements

OMB and Treasury established 59 data elements to be reported under the DATA Act. Appendix 8 of the CIGIE FAEC DATA Act audit guide required that we test all 59 of those data elements. The table below summarizes the results of our data element testing of the procurement and financial award records submitted in HUD's fiscal year 2020 third quarter DATA Act submission. Results are sorted in descending order by accuracy error rate (the data element with the highest accuracy error rate is listed first).

We calculated the error rate for each attribute of completeness, accuracy, and timeliness for each data element required to be reported for all 246 records statistically sampled. The sample included 1 PIID and 245 FAIN items. We used the following formula, and the results are expressed as a percentage: error rate for each data element by attribute = error count for data element by attribute/total number of sample records tested. See the table below.

HUD's Results for Data Elements (in descending order by accuracy error rate)				
Data Element #	Data Element Name	Error Rate ²⁰		
		Accuracy	Completeness	Timeliness
37	Business type	32.11%	6.91%	2.85%
36	Action type	24.39%	2.44%	2.44%
5	Legal entity address	13.82%	3.66%	3.66%
30	Primary place of performance address	13.01%	2.44%	2.44%
4	Ultimate parent legal entity name	6.50%	6.50%	6.50%
27	Period of performance current end date	4.88%	2.44%	2.44%
6	Legal entity congressional district	4.47%	2.44%	2.44%
31	Primary place of performance congressional district	4.47%	2.44%	2.44%
8	Legal entity country name	2.85%	2.44%	2.44%
33	Primary place of performance country name	2.85%	2.44%	2.44%
3	Ultimate parent unique identifier	2.44%	2.44%	2.44%
11	Amount of award	2.44%	2.44%	2.44%

²⁰ These error rates do not reflect projected error rates to the population, but error rates from the sample alone.

HUD's Results for Data Elements

(in descending order by accuracy error rate)

Data Element #	Data Element Name	Error Rate ²⁰		
		Accuracy	Completeness	Timeliness
16	Award type	2.44%	2.44%	2.44%
20	Catalog of Federal Domestic Assistance (CFDA) title	2.44%	2.44%	2.44%
23	Award modification - amendment number	2.44%	2.44%	2.44%
26	Period of performance start date	2.44%	2.44%	2.44%
38	Funding agency name	2.44%	2.44%	2.44%
40	Funding subtier agency name	2.44%	2.44%	2.44%
42	Funding office name	2.44%	2.44%	2.44%
44	Awarding agency name	2.44%	2.44%	2.44%
46	Awarding subtier agency name	2.44%	2.44%	2.44%
48	Awarding office name	2.44%	2.44%	2.44%
1	Awardee-recipient legal entity name	2.03%	0.00%	2.44%
25	Action date	2.03%	0.00%	2.44%
22	Award description	0.81%	0.41%	2.44%
7	Legal entity country code	0.41%	0.00%	2.44%
32	Primary place of performance country code	0.41%	0.00%	2.44%
13	Federal action obligation	0.00%	0.00%	0.00%
19	CFDA number	0.00%	0.00%	0.00%
34	Award ID number (PIID-FAIN)	0.00%	0.00%	2.44%
35	Record type	0.00%	0.00%	0.00%
39	Funding agency code	0.00%	0.00%	0.00%
41	Funding subtier agency code	0.00%	0.00%	0.00%
43	Funding office code	0.00%	0.00%	0.00%
45	Awarding agency code	0.00%	0.00%	2.44%
47	Awarding subtier agency code	0.00%	0.00%	0.00%
49	Awarding office code	0.00%	0.00%	0.00%
2	Awardee-recipient unique identifier	0.00%	0.00%	2.44%
12	Non-Federal funding amount	0.00%	0.00%	2.44%
14	Current total value of award	0.00%	0.00%	2.44%
15	Potential total value of award	0.00%	0.00%	2.44%
17	North American Industry Classification System (NAICS) code	0.00%	0.00%	2.44%
18	NAICS description	0.00%	0.00%	2.44%
24	Parent award ID number	0.00%	0.00%	2.44%
28	Period of performance potential end date	0.00%	0.00%	2.44%
29	Ordering period end date	0.00%	0.00%	0.00%
50	Object class	0.00%	0.00%	0.00%

HUD's Results for Data Elements

(in descending order by accuracy error rate)

Data Element #	Data Element Name	Error Rate ²⁰		
		Accuracy	Completeness	Timeliness
51	Appropriations account	0.00%	0.00%	0.00%
56	Program activity	0.00%	0.00%	0.00%
57	Outlay (gross outlay amount by award current period ending)	0.00%	0.00%	0.00%
163	National interest action	0.00%	0.00%	0.00%
430	Disaster emergency fund code	0.00%	0.00%	0.00%

Appendix B

Comparative Analysis of Fiscal Years 2021 and 2019 Error Rate by Data Elements

The table below identifies and compares the error rate by data element from the fiscal years 2019 and 2021 audit results. The results are presented in descending order by error rate, as determined from the 2019 audit. The information is being provided for illustrative purposes only and may not necessarily be indicative of actual percentage change based on differences in testing procedures, such as population size, sample methodology, quarter tested, file tested, and changes to data definition standards. Some results contain “n/a” (not applicable) because the data element did not exist in the prior year or the data element was not applicable to HUD.

HUD’s Comparative Results for Data Elements (Based on accuracy error rate in descending order)		Error Rate		
Data Element #	Data Element Name	2021	2019	% Change
37	Business type	32.11%	36.88%	-4.77%
36	Action type	24.39%	9.09%	15.30%
5	Legal entity address	13.82%	17.40%	-3.58%
30	Primary place of performance address	13.01%	19.22%	-6.21%
4	Ultimate parent legal entity name	6.50%	10.65%	-4.15%
27	Period of performance current end date	4.88%	32.21%	-27.33%
6	Legal entity congressional district	4.47%	13.77%	-9.30%
31	Primary place of performance congressional district	4.47%	13.77%	-9.30%
8	Legal entity country name	2.85%	9.09%	-6.24%
33	Primary place of performance country name	2.85%	9.09%	-6.24%
16	Award type	2.44%	9.09%	-6.65%
20	CFDA title	2.44%	9.09%	-0.0665
38	Funding agency name	2.44%	9.09%	-6.65%
42	Funding office name	2.44%	9.09%	-6.65%
44	Awarding agency name	2.44%	9.09%	-6.65%
48	Awarding office name	2.44%	9.09%	-6.65%
40	Funding subtier agency name	2.44%	9.61%	-7.17%
46	Awarding subtier agency name	2.44%	9.61%	-7.17%
3	Ultimate parent unique identifier	2.44%	9.87%	-7.43%
11	Amount of award	2.44%	31.43%	-28.99%

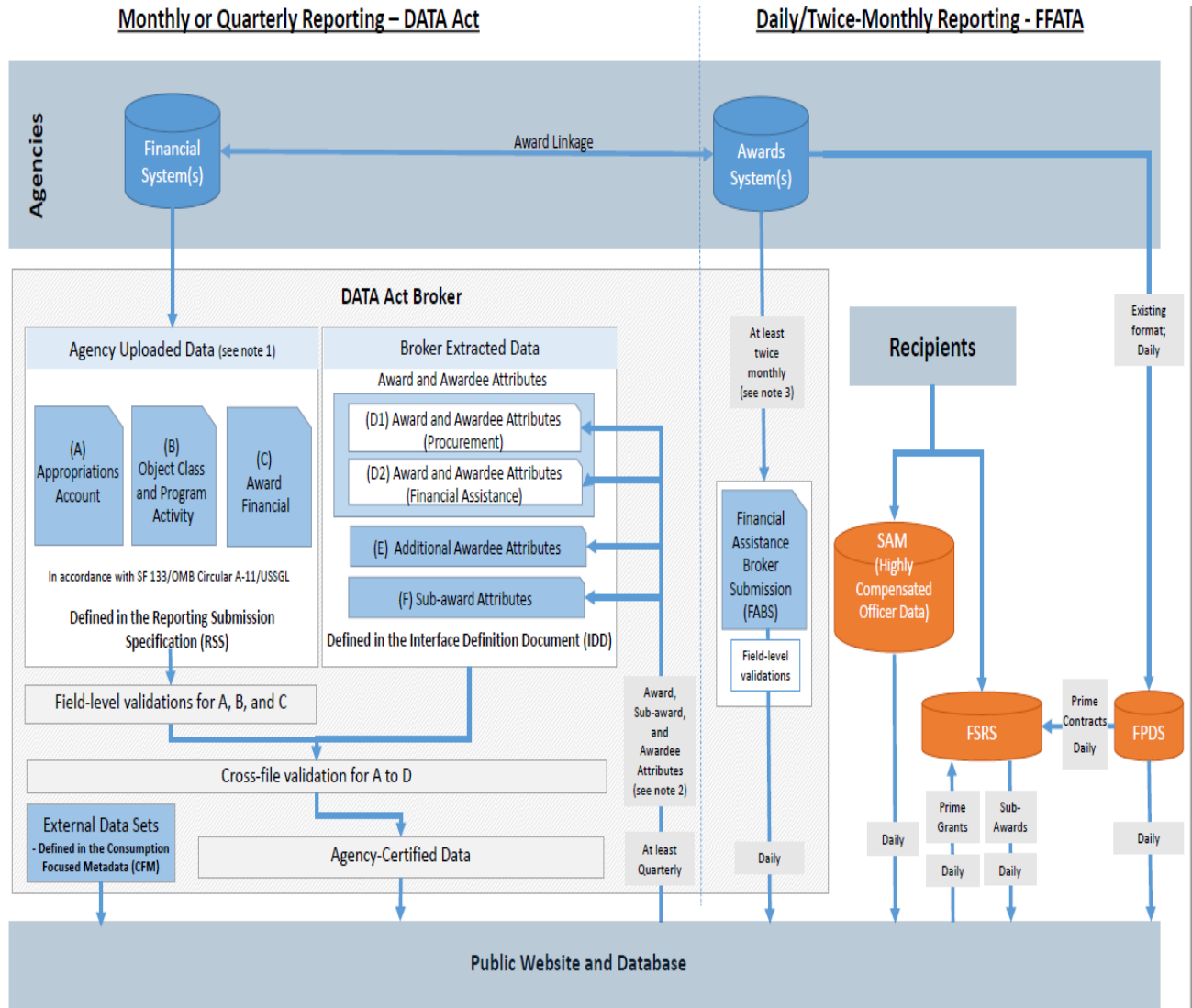
HUD's Comparative Results for Data Elements (Based on accuracy error rate in descending order)		Error Rate		
Data Element #	Data Element Name	2021	2019	% Change
26	Period of performance start date	2.44%	64.42%	-61.98%
23	Award modification - amendment number	2.44%	99.48%	-97.04%
25	Action date	2.03%	9.61%	-7.58%
1	Awardee-recipient legal entity name	2.03%	12.21%	-10.18%
22	Award description	0.81%	9.09%	-8.28%
7	Legal entity country code	0.41%	9.09%	-8.68%
32	Primary place of performance country code	0.41%	9.35%	-8.94%
15	Potential total value of award	0.00%	0.00%	0.00%
17	NAICS code	0.00%	0.00%	0.00%
18	NAICS description	0.00%	0.00%	0.00%
24	Parent award ID number	0.00%	0.00%	0.00%
28	Period of performance potential end date	0.00%	0.00%	0.00%
50	Object class	0.00%	0.00%	0.00%
51	Appropriations account	0.00%	0.00%	0.00%
53	Obligation	0.00%	0.00%	0.00%
56	Program activity	0.00%	0.00%	0.00%
2	Awardee-recipient unique identifier	0.00%	9.09%	-9.09%
12	Non-Federal funding amount	0.00%	9.09%	-9.09%
13	Federal action obligation	0.00%	9.09%	-9.09%
14	Current total value of award	0.00%	9.09%	-9.09%
19	Catalog of Federal Domestic Assistance (CFDA) number	0.00%	9.09%	-9.09%
34	Award ID number (PIID-FAIN)	0.00%	9.09%	-9.09%
35	Record type	0.00%	9.09%	-9.09%
39	Funding agency code	0.00%	9.09%	-9.09%
43	Funding office code	0.00%	9.09%	-9.09%
45	Awarding agency code	0.00%	9.09%	-9.09%
49	Awarding office code	0.00%	9.09%	-9.09%
41	Funding subtier agency code	0.00%	9.61%	-9.61%
47	Awarding subtier agency code	0.00%	9.61%	-9.61%
163	National interest action	n/a	n/a	n/a
430	Disaster emergency fund code	n/a	n/a	n/a

HUD's Comparative Results for Data Elements (Based on accuracy error rate in descending order)		Error Rate		
Data Element #	Data Element Name	2021	2019	% Change
29	Ordering period end date	n/a	n/a	n/a
54	Unobligated balance	n/a	n/a	n/a
57	Outlay (gross outlay amount by award current period ending)	n/a	n/a	n/a

Appendix C

DATA Act Information Flow Diagram

The flowchart below was obtained from the U.S. Treasury DATA Act Information Model Schema. The flowchart provides an overview of the DATA Act Reporting end-to-end process between the agency and the Treasury public website and databases.



Note 1: Agencies receiving COVID-19 supplemental funding must report three monthly submissions covering April, May, and June 2020 in July 2020. Afterwards, they must report all data on a monthly cadence. Agencies that have not received any COVID-19 supplemental funding may continue to report quarterly until FY22 P02, when they must begin full monthly submissions.

Note 2: D1 and D2 pull in all award data associated with the funding or awarding agency and action dates as specified by the agency. E pulls in highly-compensated officer information for DUNS numbers that appear in an agency's D1 and D2. F pulls in all sub-award data associated with the awards that appear in an agency's D1 and D2.

Note 3: Per OMB M-20-21, agencies should report non-loan financial assistance (including aggregates) to FABS at least twice a month (appropriately spacing apart the reporting dates), in each case reporting all issued-but-yet-to-be-reported awards. Issued-but-yet-to-be-reported loans can continue to be reported on a monthly cadence; refer to the Practices & Procedures Section 2.1.1 for more information.

Schema Version 2.0
May 6, 2020

Appendix D


Auditee Comments and OIG's Evaluation

Ref to OIG Evaluation

Auditee Comments

Comment 1

Comment 2



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

OFFICE OF THE CHIEF FINANCIAL OFFICER

October 29, 2021

MEMORANDUM FOR: Kilah S. White, Assistant Inspector General for Audit, GA
SAIRAH IJAZ

FROM: Sairah R. Ijaz, Assistant Chief Financial Officer for Systems, FY

SUBJECT: Response to Draft DATA Act Compliance OIG Audit Report dated October 22, 2021

Thank you for the opportunity to respond to your Draft Audit Report for the FY2020 Quarter 3 HUD DATA Act Broker Submission titled, "*DATA Act Compliance Audit of the U.S. Department of Housing and Urban Development*", issued October 22, 2021. HUD is pleased to affirm our position and data quality by receiving an "Excellent" rating on quality score and we value HUD OIG's efforts and professionalism throughout the audit process across the past three audit cycles. Additionally, HUD received three recommendations from the prior audit of the FY2019 Quarter 1 DATA Act Reporting submission, and we have worked closely with our staff to implement the recommendations to further improve our data quality. As of October 26, 2021, HUD is happy to report that the agency has submitted evidence for closure for all prior recommendations from DATA Act Compliance Audits.

In response to this report, HUD has reviewed the draft and agrees with OIG's testing and issues identified with the minor exceptions that we noted in our technical comments in the document attached. We would be happy to meet/follow-up on any questions or clarifications.

We look forward to working with you and your staff to resolve any issues. If you have any questions or need additional information, please contact Sairah R. Ijaz at sairah.ijaz@hud.gov or 202-402-5798.

www.hud.gov espanol.hud.gov

OIG Evaluation of Auditee Comments

- Comment 1 We recognize the corrective actions taken by HUD OCFO that allowed closure of the three remaining recommendations regarding its compliance with the DATA Act and have updated the report accordingly.
- Comment 2 We did not include HUD OCFO's technical comments in this report; however, we considered each comment and revised the report where warranted.