

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

Office of the Chief Financial Officer, Washington, DC

Office of Audit, Region 5 Chicago, IL Audit Report Number: 2020-CH-0001

November 7, 2019



To: Irving L. Dennis, Chief Financial Officer, F

//signed//

From: Kelly Anderson, Regional Inspector General for Audit, 5AGA

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 first quarter, fiscal year 2019, 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.

HUD Handbook 2000.06, REV-4, sets specific timeframes for management decisions on recommended corrective actions. For each recommendation without a management decision, please respond and provide status reports in accordance with the HUD Handbook. Please furnish us copies of any correspondence or directives issued because of the audit.

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.

If you have any questions or comments about this report, please do not hesitate to call me at 312-913-8499.



Audit Report Number: 2020-CH-0001

Date: November 7, 2019

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

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 first quarter of fiscal year 2019. The audit was part of the activities included in our 2019 annual audit plan. Our objectives were to assess the (1) completeness, accuracy, timeliness, and quality of the 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.

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 first quarter, fiscal year 2019, was complete, accurate, timely, and in accordance with the governmentwide data standards established by OMB and Treasury. Although we determined that HUD's overall data quality was high, we identified a few exceptions. Specifically, we determined that data were not initially complete and the data elements could not always be traced to source documentation. In addition, HUD had DATA Act procedures documents that contained inconsistent information. The weaknesses occurred because (1) some program activity codes were disabled in HUD's Oracle Federal Financials system, (2) data such as Data Universal Numbering System (DUNS) numbers and zip codes was missing or invalid, (3) HUD could not provide source documentation or the data elements did not match the source documents, and (4) there was a lack of coordination among the HUD offices to ensure that policies and procedures for the DATA Act were consistent. As a result, HUD could improve the accuracy, completeness, and timeliness of its data submitted to USASpending.gov.

What We Recommend

We recommend that HUD's CFO and senior accountable official continue to work to improve data quality and ensure that (1) required data are complete, accurate, and reported in a timely manner, (2) all data elements are traceable to the source documentation, and (3) procedures for DATA Act reporting are consistent among its various offices.

Table of Contents

Background and Objectives	3
Results of Audit	5
Finding: HUD's Office of the Chief Financial Officer Generally Complied With the Digital Accountability and Transparency Act of 2014 With a Few Exceptions.	5
Scope and Methodology	13
Internal Controls	16
Followup on Prior Audits	17
Appendixes	18
A. Anomaly Letter	18
B. HUD's Results for the Data Elements	20
C. Analysis of the Accuracy of Dollar Value-Related Data Elements	22
D. DATA Act Information Flow Diagram	23
E. Auditee Comments and OIG's Evaluation	24
F. Criteria	31

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. In May 2015, 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). Federal agencies were required to report financial and award data in accordance with these standards for DATA Act reporting 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.

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 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 the FABS must pass a series of validations before the data are published on USASpending.gov.

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 particular submission detail tab: (1) A –

3

DAIMS provides an overall view of the hundreds 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.

Appropriations Account, (2) B – Object Class Program Activity, and (3) C – Award Financial. File D1 contains the award and awardee attributes information for procurement 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). See the table below for a summary of files published quarterly on USASpending.gov.

File name	Data source
File A: Appropriation Account	Federal agency's financial systems
File B: Object Class and Program Activity	Federal agency's financial systems
File C: Award Financial	Federal agency's financial systems
File D1: Award – Procurement	FPDS-NG
File D2: Award – Financial Assistance	FABS
File E: Additional Awardee Attributes	SAM
File F: Subaward Attributes	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's chair 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.² 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 second of three audit reports that we, as the Office of Inspector General (OIG) for HUD, are required to provide to Congress, related to HUD's DATA Act reporting.

The objectives of this audit were to assess (1) the completeness, timeliness, quality, and accuracy of HUD OCFO's fiscal year 2019 first 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 See appendix A.

Results of Audit

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

HUD OCFO generally complied with the reporting requirements of the DATA Act. The information it submitted for inclusion on USASpending.gov for the first quarter, fiscal year 2019, was complete, accurate, timely, and in accordance with the governmentwide data standards established by OMB and Treasury. Although we determined that HUD's overall data quality was high, we identified a few exceptions. Specifically, we determined that (1) data were not initially complete and the data elements could not always be traced to source documentation. In addition, HUD had DATA Act procedures documents that contained inconsistent information. The weaknesses occurred because (1) some program activity codes were disabled in HUD's Oracle Federal Financials system, (2) data such as Data Universal Numbering System (DUNS) numbers and zip codes was missing or invalid, (3) HUD could not provide source documentation or the data elements did not match the source documents, and (4) there was a lack of coordination among the HUD offices to ensure that policies and procedures for the DATA Act were consistent. As a result, HUD could improve the accuracy, completeness, and timeliness of its data submitted to USASpending.gov.

Summary-Level Testing

We assessed the completeness of HUD's submission of summary level-data for first quarter, fiscal year 2019, files A, B, and C to the DATA Act Broker³ for compliance with the DATA Act.

File A

We compared Treasury's "non-finance" version of the Governmentwide Treasury Account Symbol (GTAS) Standard Form 133, Report on Budget Execution and Budgetary Resources, to HUD's first quarter, fiscal year 2019, file A and determined that the Treasury Account Symbols (TAS) matched. We also determined that the amounts between the two reports matched. Therefore, we determined that file A was complete.

File B

We determined that TASs between files A and B matched; therefore, files A and B were 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 was a more than \$216 million gross outlay variance between files A and B. The errors and warnings report generated by the DATA Act Broker also identified these variances. Therefore, we determined that file B was not complete at the time of HUD's submission to the DATA Act Broker.

The DATA Act Broker is a tool that Treasury developed to allow agencies to submit the required data in a standardized format for publication on USASpending.gov.

According to the warning materiality thresholds section of HUD's Data Quality Process Document (DQPD), HUD OCFO strongly recommends that any variance over \$600,000 be thoroughly investigated due to the high materiality and impact to the agency as a whole. The root cause must be investigated and resolved during the reporting cycle or documented within the senior accountable official's certification statement if it cannot be resolved during the reporting cycle. Documentation provided by HUD on September 13, 2019, dated May 2, 2019, explained why the \$216 million gross outlay variance occurred in the first quarter, fiscal year 2019, submission. HUD resubmitted the first quarter, fiscal year 2019, data files to the DATA Act Broker on September 5, 2019. In its resubmission, HUD stated that the variance was due to program activity code issues. The program activity codes were disabled in HUD's Oracle Federal Financials system, which affected the amounts reported for the United States Standard General Ledger (USSGL) accounts associated with gross outlays in file B. We reviewed the resubmission and determined that with the corrections for this variance, file B was complete.

We also determined that with the exception of 52 records that had an object class of 000, the object classes in file B matched with those in section 83 of OMB Circular A-11. Additionally, program activity names and program activity codes from file B, with the exception of program activity names of "Unknown/Other" and program activity codes of 0000,4 matched with either the detailed budget estimates by agency appendix to the President's Budget or the MAX Collect Exercise. Therefore, the object classes, program activity names, and program activity codes were accurately reported in file B.

File C

We assessed the TAS, object class, and program activity linkages between files C and B and determined that there were no discrepancies. Therefore, the elements in file C also existed in file B.

We assessed the linkage between files C and D1 and identified 24 records that were reported in file C but not file D1. However, we assessed the variances and determined that there were valid reasons for all 24 of the records in file C not being included in file D1. Of the 24 records, 2 were associated with a procurement task order that was less than the Federal micro-purchase threshold,⁵ 4 listed the contracting agency in FPDS-NG as the Treasury's Bureau of the Fiscal Service,⁶ and 18 were deobligations of funds.⁷

_

⁴ According the DAIMS rule B9, a program activity name of "Unknown/Other" and program activity code 0000 may be used in file B if there are no obligations or outlays on that TAS.

HUD's DQPD states that only Federal Acquisition Regulation (FAR)-based contracts with a total estimated contract value over the micro-purchase threshold are required to be reported to FPDS. Agencies have discretion regarding whether to report contracts with a total estimated value under the micro-purchase threshold.

⁶ HUD's DQPD states that contracts that were administered by Treasury will not be in HUD's D1 file.

⁷ HUD's DQPD states that some transactions posted in Oracle are not required to be posted in FPDS (for example, financial deobligations).

We assessed the linkage between files D1 and C and identified 101 records that were reported in file D1 but not file C. We determined that there were valid reasons for 91 of the 101 variances. For the 91 records,

- 77 had a Federal action obligation amount of zero. DAIMS rule C12 states that each unique procurement instrument identifier (PIID) (or combination of PIID and parent award identification number (PAI)) from file D1 should exist in file C during the same reporting period, except file D1 records in which the Federal action obligation equals zero.
- 13 records were reported as contract closeouts in FPDS-NG with a negative Federal action obligation amount. HUD stated in its DQPD that variances may be due to closing out and removing a contract from its financial system and the procurement transaction appears in file D1 for documentation purposes only.
- 1 record was associated with an indefinite delivery vehicle contract with the U.S. Department of Energy.

For the remaining 10 variances, HUD was not able to provide adequate explanations to support why the PIID or PAI were reported in file D1 but not file C.

In addition, we assessed the linkage between files C and D2 and identified 9,770 records, consisting of 3,304 unique Federal award identification numbers (FAIN), that were reported in file C but not file D2. We searched for the 3,304 FAINs that were reported in file C but not file D2 in each submission published to FABS between October 12, 2018, and July 16, 2019, and determined that 2,303 of the records appeared to not have been entered into FABS during that timeframe.

HUD's senior accountable official certification stated that there were vendor management issues related to invalid DUNS numbers and zip codes. HUD's DATA Act lead said that HUD maintains a vendor management list that tracks records in which a vendor's or awardee's DUNS number or address is missing or incomplete. The records in the vendor management list are researched so they can eventually be published to FABS. FABS does not allow records without DUNS numbers to be published unless the assistance type code⁸ is 06 or higher. Data published to FABS is used to produce file D2. Therefore, if a record with an assistance type code of 05 or lower does not have a valid DUNS number, it would not be published in FABS and would not appear in file D2.

We assessed the linkage between files D2 and C and identified 229 records that were reported in file D2 but not file C. Therefore, we determined that file C was not complete. HUD stated that generally the FAINs were reported in file D2 but not file C due to timing differences. For instance, if records were entered into HUD's Line of Credit Control System (LOCCS) on September 30, 2018, the records would not be in HUD's Oracle Federal Financials accounting

7

The DAIMS reporting submission specification domain values include a listing of the data elements with specific instructions for Federal agencies to submit content in the appropriate format, including assistance type codes.

system until October 1, 2018, because interfacing between the systems is performed in batches nightly. The timing difference would, therefore, cause the information from LOCCS to be reported in file D2 for the current period and the information from HUD's Oracle Federal Financials accounting system to be reported in file C during the following period. Additionally, HUD stated that in some instances, an award may have funds committed and reserved in HUD's systems before they have been completely approved and executed. This is a standard business practice for HUD while it negotiates the terms and conditions of contracts before they are fully executed. Therefore, in this case, file D2 would show the commitment or reservation of funds, but because the transaction was not an obligation or outlay of funds, the transaction would not show in file C.

Timeliness of HUD's Submission to the DATA Act Broker

We assessed the timeliness of HUD's first quarter, fiscal year 2019, files A, B, and C compliance with the DATA Act. We evaluated HUD's DATA Act submission to Treasury's DATA Act Broker and determined that HUD submitted its first quarter, fiscal year 2019, data in a timely manner on March 20, 2019.9

Detailed Testing of Record-Level Linkages for File C and File D1 for Completeness, **Accuracy, and Timeliness of the DATA Elements**

Of the 385 records statistically selected for review, 2 were related to procurement transactions. We determined that the data elements for both procurement records matched supporting documentation. Therefore, we did not note any discrepancies with the completeness, accuracy, and timeliness of the data elements associated with the two procurement records.

Detailed Testing of Record-Level Linkages for File C and File D2 for Completeness, **Accuracy, and Timeliness of the DATA Elements**

The remaining 383 statistically selected records were related to financial transactions. When we traced the data elements to the source documentation, we noted anomalies with the data.¹⁰ For instance, of the 385 sample records, 383 were related to financial transactions and contained an award-modification-amendment number¹¹ data element that was not traceable to source documentation. Therefore, this data element was not considered accurate.

The DATA Act Broker relies on a primary key¹² to uniquely identify each record. The primary key is used to prevent the submission of duplicate records. During our previous audit (2018-FO-

Data are to be submitted within 45 days of the quarter end date as required by the Treasury DATA Act Program Management Office. However, due to the government shutdown and furlough between December 22, 2018, and January 25, 2019, the due date for the submission of fiscal year 2019 first quarter data was extended to March

¹⁰ See appendix B for the complete results of our reviews.

The award-modification-amendment number is the identifier of an action being reported that indicates the specific later change to the initial award.

The DAIMS Practices and Procedures, v1.3.1, section 2.1.15, states that the primary key is used to prevent the submission of duplicate records, correct existing records, or delete existing records. The primary key consists of five fields: (1) Federal award identification number, (2) unique record identifier, (3) award modification amendment number, (4) awarding subtier agency code, and (5) Catalog of Federal Domestic Assistance number.

0001), we determined that records were excluded from file D2 because of duplicative¹³ FAINs. According to HUD OCFO, it developed a method of creating an award modification amendment number to ensure that FAINs with multiple transactions are included in its file C reporting. HUD stated that the award modification amendment number consisted of two components added together, a posting date and posting number. Both components are derived from HUD's Central Accounting and Program System (HUDCAPS). HUD stated that the posting number from HUDCAPS is temporary and is truncated when data are transferred to the Financial Data Mart, which is HUD's system of record for maintaining data that are published to FABS and then published to file D2. HUD stated that using the posting date and posting number from HUDCAPS was not its "top choice solution" to address the issue of duplicate FAINs not being published to FABS; however, the initial solution it used did not allow data to get published to the DATA Act Broker. HUD stated that it intended to continue using the posting date and posting number from HUDCAPS in the award modification amendment number as long as its legacy systems were still in use.

Further, 35 of the 385 records were reported in HUD's first quarter, fiscal year 2019, submission of file C but were not included in HUD's file D2. HUD stated that this error occurred because 33 records were missing DUNS numbers. The remaining two (35 - 33) data records were not submitted in a timely manner. HUD stated that this error occurred because the transactions occurred in the first quarter of 2019 but were not reported until the second quarter, fiscal year 2019, DATA Act submission.

Completeness of the Data Elements

The projected error rate for the completeness of the data elements is 8.1 percent.¹⁴ 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 14.2 percent.¹⁵ 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 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 8.1 percent.¹⁶ The timeliness of data elements was based on the reporting schedules defined by the procurement and financial assistance requirements (FFATA, FAR, FPDS-NG, FABS, and DAIMS).

¹³ The FAIN is the unique identification number within the Federal agency for each financial assistance award.

Based on a 95 percent confidence level, the projected error rate for the completeness of the data elements is between 5.6 and 10.7 percent.

Based on a 95 percent confidence level, the projected error rate for the accuracy of the data elements is between 11.9 and 16.7 percent.

Based on a 95 percent confidence level, the projected error rate for the timeliness of the data elements is between 5.6 and 10.7 percent.

Quality of the Data Elements

The quality of the data elements was determined using the midpoint of the range of the proportion of errors (error rate) for completeness, accuracy, and timeliness. The highest of the three error rates was used as the determining factor of quality. The following table provides the range of error in determining the quality of the data elements.

Highest error rate	Quality level
0% - 20%	Higher
21% - 40%	Moderate
41% and above	Lower

Based on our test work and the highest error rate of 14.2 percent, we determined that the quality of HUD's data is considered **higher** quality.

Analysis of Errors in Data Elements Not Attributable to the Agency

Certain data elements included in our detailed testing were derived from sources other than HUD. Therefore, we included the data elements not specifically entered by HUD that contained errors in the table below.

Errors in data elements not attributable to HUD				
FAIN	FAIN Data element (DE)		Attributed to	
FAIN	DE 3	Ultimate parent unique	Treasury's DATA Act Broker	
		identifier	Extracting from FABS	
FAIN	DE 4	Ultimate parent legal	Treasury's DATA Act Broker	
		entity name	Extracting from FABS	
FAIN	DE	Funding subtier agency	Treasury's DATA Act Broker	
	4017	name	Extracting from FABS	

HUD Financial Data Standards Implemented

We evaluated HUD's implementation and use of the governmentwide financial data standards for spending information as developed by OMB and Treasury. HUD fully implemented and used the data standards as defined by OMB and Treasury.

Although data element number 40 is derived by FABS and not generally attributable to HUD, in this case, the error is a direct result of incorrect information entered by HUD into the data element 41 funding subtier agency code. The records that caused these errors are associated with Section 184 - Indian Housing Loan Guarantee. HUD's loan-mapping document indicates that these loans must be hard (manually) coded to funding subtier agency code 8635 to indicate "Assistant Secretary for Public and Indian Housing"; however, the code was not changed and remained under funding subtier agency code 8620 "Assistant Secretary for Community Planning and Development."

HUD's Risk Profile Not in Alignment With DATA Act Reporting for First Quarter, Fiscal Year 2019

During the audit, HUD's DATA Act lead stated that the HUD was not in compliance with the requirements in OMB Circular A-123 as it related to DATA Act reporting. When we met with HUD's chief risk officer, he stated that risks related to DATA Act reporting were not included in HUD's risk profile because it was not reported as a top-level risk. HUD's enterprise risk management (ERM) risk assessment process is still maturing; however, during our audit, HUD had not identified key controls and risks related to DATA Act reporting. Therefore, there was no direct alignment between the DATA Act reporting and HUD's ERM risk profile for the first quarter, fiscal year 2019, data submission. Appendix A of OMB Circular A-123, M-18-16, Management of Reporting and Data Integrity Risk, requires DATA Act reporting agencies to implement a data quality plan (DQP), effective for fiscal years 2019 through 2021, at a minimum. HUD issued its final DQP on September 30, 2019, after the completion of our fieldwork. The DQP is prospective; therefore, it was not reviewed for risks related to transactions that were reported before its issuance.

Inconsistent Policies and Procedures

During the audit, HUD provided its draft DQP document. However, HUD had four policy and procedures documents in addition to its draft DQP. Each of the policy documents was drafted at different times during HUD's implementation of the DATA Act, resulting in inconsistencies between the documents. For example, HUD OCFO standard operating procedure (SOP) states that the Federal Housing Administration (FHA) is responsible for generating file B and sending it to OCFO. FHA's SOP does not mention that FHA is responsible for generating file B. Further, HUD's DQPD states that the DATA Act Program Management Office within HUD OCFO is responsible for generating FHA's file B. During our audit, HUD provided documentation showing that FHA generated its own file B for the first quarter, fiscal year 2019, DATA Act reporting and provided it to HUD OCFO. However, to ensure full, appropriate, and consistent implementation of the DATA Act going forward, HUD should revise the policy documents to resolve inconsistencies. HUD agreed to update its policies to ensure that they are current and consistent.

Conclusion

The weaknesses described above occurred because (1) some program activity codes were disabled in HUD's Oracle Federal Financials system, (2) data such as DUNS numbers and zip codes was missing or invalid, (3) HUD could not provide source documentation or the data elements did not match the source documents, and (4) there was a lack of coordination among the HUD offices to ensure that policies and procedures for the DATA Act were consistent. As a result, HUD could improve the accuracy, completeness, and timeliness of its data submitted to USASpending.gov

Recommendations

We recommend that HUD's Chief Financial Officer and senior accountable official

1A. Implement adequate procedures and controls to ensure that all required data are complete, accurate, and reported in a timely manner. These procedures and

controls should include but not be limited to ensuring that all transactions are recorded and reported within the proper period and listing the source of each of the data elements, including how to obtain the source documentation from HUD's various program offices or systems.

- 1B. Implement adequate procedures and controls to ensure that all data elements are traceable to the source documentation.
- 1C. Revise internal DATA Act policy and procedure documents to resolve inconsistencies to ensure full, appropriate, and consistent implementation of the DATA Act.

Scope and Methodology

We conducted the audit from March through October 2019 at HUD headquarters in Washington, DC, and our field office in Columbus, OH. The scope of the audit was first quarter, fiscal year 2019, financial and award data submitted by HUD for publication on USASpending.gov and any applicable procedures, certifications, documentation, and controls to achieve this process.

To accomplish the audit objectives, we

- obtained an understanding of regulatory criteria related to HUD's responsibilities to report financial and award data under the DATA Act;
- obtained an understanding of HUD's process for collecting, reviewing, and consolidating information required to be reported under the DATA Act through interviews, walkthroughs, and reviews of source documents;
- reviewed HUD's ERM profile for fiscal year 2018, dated June 2018;
- reviewed HUD's senior accountable official's first quarter, fiscal year 2019 certification that HUD's internal controls support the reliability and validity of the agency's summary and record-level data reported for publication on USASpending.gov;
- reviewed HUD's draft DQP;
- reviewed the system of record notices for Oracle Federal Financials and Financial Data Mart:
- assessed the internal and information system controls in place as they related to the extraction of data from the source systems and the reporting of data to Treasury's DATA Act Broker;
- reviewed and reconciled the fiscal year 2019 first quarter summary-level data submitted by HUD for publication on USASpending.gov;
- reviewed a statistically valid sample from fiscal year 2019 first quarter financial and award data submitted by HUD for publication on USASpending.gov;
- assessed the completeness, accuracy, timeliness, and quality of the financial and award data sampled; and
- assessed HUD's implementation and use of the 57 data elements and standards established by OMB and Treasury.

We evaluated files A, B, and C to determine whether all transactions and events that should have been recorded were recorded in the proper period. During our test work, we noted that file C was not complete. However, the number of records not recorded in file C represented less than 1 percent¹⁸ of all records in file C. Therefore, based on our assessments of the anomalies within file C, we determined that file C was generally suitable for use to select a statistical sample of records for our review.

 $^{^{18}}$ 229/103,004 = 0.22%

We statistically selected a random sample of 385 records from the universe of 103,004 records reported in HUD's first quarter, fiscal year 2019, file C. A record is a row within the data file for file C. Each row has individual data elements as defined by OMB and Treasury.¹⁹ The sample size is based on a 95 percent confidence level, an expected error rate of 50 percent, and a desired sampling precision of 5 percent. In accordance with the guidance established in the CIGIE Federal Audit Executive Council (FAEC) Inspectors General Guide to Compliance under the DATA Act,²⁰ we selected a 50 percent expected error rate based on the results of our previous DATA Act audit (2018-FO-0001).

For each statistically selected record, we traced the data from HUD's file C to files D1 or D2 and to the associated source documents for each required data element. We tested each of the data elements to determine whether each element was complete, accurate, and timely. Of the 385 records reviewed, 383 were related to financial transactions in file D2, and 2 were related to procurement transactions in file D1.

Based on our review of each data element within the 385 statistically selected records, we determined an overall completeness error rate of .08, an overall accuracy error rate of .14, and an overall timeliness error rate of .08. We applied bootstrapping and projection methods using SAS®, based on our audit review results of the 385 records with known error status of their corresponding data elements. The table below shows the projected distribution of error rate and count for incomplete, inaccurate, and untimely reporting, respectively. Using the midpoint range estimate (50th percentiles), with 95 percent confidence intervals (2.5th, 97.5th percentiles), we project that

- 374,560, or 8.1 percent of data elements, were not complete;
- 634,612, or 14.2 percent of data elements, were not accurate; and
- 374,560, or 8.1 percent of data elements, were not timely.

See the table below.

The projected distribution of incomplete, inaccurate, and untimely data element reporting p2 5 p50 p97 5 Measure Incomplete error rate 10.7 5.60 8.1 492,279 Incomplete error count 256,841 374,560 Inaccurate error rate 11.9 14.2 16.7 529,467 750,993 Inaccurate error count 634,612 5.6 8.1 10.7 Untimely error rate Untimely error count 256,841 374,560 492,279

14

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 DAIMS.

²⁰ CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act, section 560.

We relied on computer-processed data from files A, B, C, D1, and D2, which we extracted from the DATA Act Broker. To assess the reliability of the data, we compared the computer-processed data across multiple external and internal sources, such as FPDS-NG, SAM, the United States Postal Service, LOCCS, and Oracle Federal Financials data history reports. For example, we compared the data in the files to the HUD's source systems and external reports when applicable. Based on our tests, we concluded that the computer-processed data we used for this audit were sufficiently reliable.

We provided our review results to HUD's Chief Financial Officer and staff responsible for the DATA Act reporting during the audit.

Standard Language for Reporting

On October 3, 2019, the CIGIE FAEC DATA Act working group released additional guidance for reporting on governmentwide reporting issues. We considered the standard reporting language below in conducting our compliance audit.

Testing Limitations for Data Reported From Files E and F

File E of DAIMS contains additional awardee attribute information the broker extracts from SAM. File F contains subaward attribute information the broker extracts from FFATA FSRS. File 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 assuring 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, timeliness, quality, and accuracy of the data extracted from SAM and FSRS via the DATA Act Broker system.

Period of Performance Start Date for Procurement Awards

DAIMS defines "period of performance start date" as the date on which, for the award referred to by the action being reported, awardee effort begins, or the award is otherwise effective. For modifications of procurement awards, it is not clear whether "the award referred to" is the initial award or the modification and neither OMB nor Treasury's DATA Act Program Management Office has issued guidance with specific instructions on this matter. Thus, for procurement awards (file D1) with modifications, if agencies recorded the initial award date or the date of the modification as the start date in accordance with their internal policies and procedures or practices, it is not an error for DATA Act reporting purposes.

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 objective(s). We believe that the evidence obtained provides 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 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 reported to USASpending.gov.
- HUD's reporting processes among FHA, the Government National Mortgage Association, and OCFO.

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.

Followup on Prior Audits

We reviewed recommendations from our prior reviews and audit report regarding HUD's compliance with the DATA Act. As of October 5, 2019, all recommendations from our prior reviews and audit have reached management decisions and have been closed.

Independent Attestation Review: U.S. Department of Housing and Urban Development, DATA Act Implementation Efforts, 2016-FO-0802, Issued August 26, 2016

All recommendations have been closed.

Independent Attestation Review: U.S. Department of Housing and Urban Development, DATA Act Implementation Efforts, 2017-FO-0801, Issued March 2, 2017

All recommendations have been closed.

HUD's Office of the Chief Financial Officer Did Not Comply With the Digital Accountability and Transparency Act of 2014, 2018-FO-0001, Issued November 3, 2017

All recommendations have been closed.

Appendixes

Appendix A

Anomaly Letter



December 22, 2015

The Honorable Ron Johnson Chairman The Honorable Thomas Carper Ranking Member Committee on Homeland Security and Governmental Affairs United States Senate Washington, D.C. The Honorable Jason Chaffetz
Chairman
The Honorable Elijah Cummings
Ranking Member
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, D.C.

Dear Mr. Chairmen and Ranking Members:

The Council of the Inspectors General on Integrity and Efficiency (CIGIE) recognizes and appreciates your leadership on issues of Government transparency and accountability. In particular, we believe the enactment last year of the Digital Accountability and Iransparency Act of 2014 (DATA Act) will significantly improve the quality of Federal spending data available to Congress, the public, and the accountability community if properly implemented. To make sure this happens, the DATA Act provides for strong oversight by way of the Federal Inspectors General and the Government Accountability Office (GAO). In particular, the DATA Act requires a series of reports from each to include, among other things, an assessment of the completeness, timeliness, quality, and accuracy of data submitted by agencies under the DATA

I am writing this letter on behalf of CIGIE to inform you of an important timing anomaly with the oversight requirement for Inspectors General in the DATA Act. Your staffs have been briefed on this timing anomaly, which affects the first Inspector General reports required by the DATA Act. Specifically, the first Inspector General reports are due to Congress in November 2016. However, the agencies we oversee are not required to submit spending data in compliance with the DATA Act until May 2017. As a result, Inspectors General would be unable to report on the spending data submitted under the Act, as this data will not exist until the following year. This anomaly would cause the body of reports submitted by the Inspectors General in November 2016 to be of minimal use to the public, the Congress, the Executive Branch, and others.

To address this reporting date anomaly, the Inspectors General plan to provide Congress with their first required reports in November 2017, a one-year delay from the due date in statute, with subsequent reports following on a two-year cycle, in November 2019 and November 2021. We believe that moving the due dates back one year will enable the Inspectors General to meet the

1717 H Street, NW, Suite 825, Washington, DC 20006

Anomaly Letter (continued)

Page 2

intent of the oversight provisions in the DATA Act and provide useful reports for the public, the Congress, the Executive Branch, and others.

Although we think the best course of action is to delay the Inspector General reports, CIGIE is encouraging the Federal Inspector General Community to undertake DATA Act "readiness reviews" at their respective agencies well in advance of the first November 2017 report. Through a working group, CIGIE has developed guidance for these reviews. I am pleased to report that several Inspectors General have already begun reviews at their respective agencies, and many Inspectors General are planning to begin reviews in the near future. We believe that these reviews, which are in addition to the specific oversight requirements of the Act, will assist all parties in helping to ensure the success of the DATA Act implementation.

We have kept GAO officials informed about our plan to delay the first Inspector General reports for one year, which they are comfortable with, and our ongoing efforts to help ensure early engagement through Inspector General readiness reviews.

Should you or your staffs have any questions about our approach or other aspects of our collective DATA Act oversight activities, please do not hesitate to contact me at (202) 514-3435.

Sincerely

Michael E. Horowitz

Chair, Council of the Inspectors General on Integrity and Efficiency

Inspector General, U.S. Department of Justice

ce: The Honorable David Mader, Controller, OMB

The Honorable Gene Dodaro, Comptroller General, GAO

Appendix B

HUD's Results for the Data Elements

There are 57 data elements established by OMB and Treasury. Appendix 7 of the CIGIE FEAC Guide required that we test 50 of those data elements. The table below summarizes the results of our data element testing. Results are sorted in descending order by accuracy error rate (the data element with the highest accuracy error rate is listed first). This table is based on the results of our testing of 383 financial records and 2 procurement records submitted in HUD's fiscal year 2019 first quarter DATA Act submission.

We calculated the error rate for each attribute of completeness, accuracy, and timeliness and for each data element required to be reported for all of the 385 records sampled. The sample included 2 PIID and 383 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.

Since HUD's DQP was not completed at the time of our fieldwork, we were unable to determine whether the risks identified in this report are consistent with the risks identified in the DQP.

Results of OIG's detailed testing of HUD's data listed in <u>descending</u> order by accuracy error rate				ror rate		
percentage Accuracy (A), completeness (C), timeliness (T)						
Data element no.	Data Data element name		Error rate			
	Assessed Madiffrantian / Assessed assessed Navardan	A 00 480/	C 0.000/	T		
23	Award Modification / Amendment Number	99.48%	9.09%	9.09%		
26	Period of Performance Start Date	64.42%	9.09%	9.09%		
37	Business Types	36.88%	9.09%	9.09%		
27	Period of Performance Current End Date	32.21%	9.09%	9.09%		
11	Federal Action Obligation	31.43%	9.09%	9.09%		
30	Primary Place of Performance Address	19.22%	9.09%	9.09%		
5	Legal Entity Address	17.40%	9.09%	9.09%		
6	Legal Entity Congressional District	13.77%	9.09%	9.09%		
31	Primary Place of Performance Congressional District	13.77%	9.09%	9.09%		
1	Awardee/Recipient Legal Entity Name	12.21%	9.09%	9.09%		
4	Ultimate Parent Legal Entity Name	10.65%	9.09%	9.09%		
3	Ultimate Parent Unique Identifier	9.87%	9.09%	9.09%		
25	Action Date	9.61%	9.09%	9.09%		
40	Funding Sub Tier Agency Name	9.61%	9.09%	9.09%		
41	Funding Sub Tier Agency Code	9.61%	9.09%	9.09%		
46	Awarding Sub Tier Agency Name	9.61%	9.09%	9.09%		
47	Awarding Sub Tier Agency Code	9.61%	9.09%	9.09%		

Results of OIG's detailed testing of HUD's data listed in <u>descending</u> order by accuracy error rate percentage

percentage				
Accuracy (A), completeness (C), timeliness (T)				
Data	Data element name	Error rate		
element no.	Data clement name	A	С	T
32	Primary Place of Performance Country Code	9.35%	9.09%	9.09%
2	Awardee/Recipient Unique Identifier	9.09%	9.09%	9.09%
7	Legal Entity Country Code	9.09%	9.09%	9.09%
8	Legal Entity Country Name	9.09%	9.09%	9.09%
12	Non-Federal Funding Amount	9.09%	9.09%	9.09%
13	Amount of Award	9.09%	9.09%	9.09%
14	Current Total Value of Award	9.09%	9.09%	9.09%
16	Award Type	9.09%	9.09%	9.09%
19	Catalog of Federal Domestic Assistance (CFDA) Number	9.09%	9.09%	9.09%
20	Catalog of Federal Domestic Assistance (CFDA) Title	9.09%	9.09%	9.09%
22	Award Description	9.09%	9.09%	9.09%
33	Primary Place of Performance Country Name	9.09%	9.09%	9.09%
34	Award ID Number (PIID/FAIN)	9.09%	9.09%	9.09%
35	Record Type	9.09%	9.09%	9.09%
36	Action Type	9.09%	9.09%	9.09%
38	Funding Agency Name	9.09%	9.09%	9.09%
39	Funding Agency Code	9.09%	9.09%	9.09%
42	Funding Office Name	9.09%	9.09%	9.09%
43	Funding Office Code	9.09%	9.09%	9.09%
44	Awarding Agency Name	9.09%	9.09%	9.09%
45	Awarding Agency Code	9.09%	9.09%	9.09%
48	Awarding Office Name	9.09%	9.09%	9.09%
49	Awarding Office Code	9.09%	9.09%	9.09%
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%
29	Ordering Period 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%

0.00%

0.00%

0.00%

56

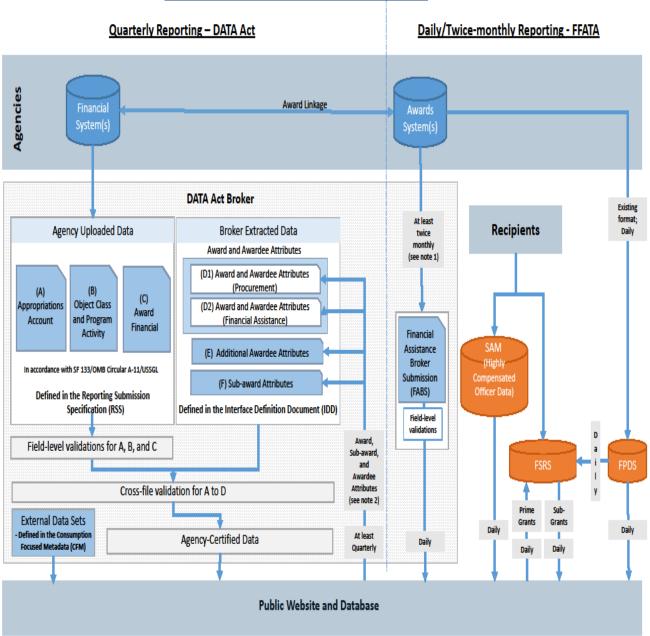
Program Activity

Appendix C

Analysis of the Accuracy of Dollar Value-Related Data Elements

During our testing, we did not note any errors with dollar values related to data elements.

DATA Act Information Flow Diagram



Note 1: The Financial Assistance Broker Submission (FABS) replaces the Award Submission Portal (ASP).

Note 2: D1 and D2 pull in all award data associated with the submitting agency and agency-specified action dates. 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.

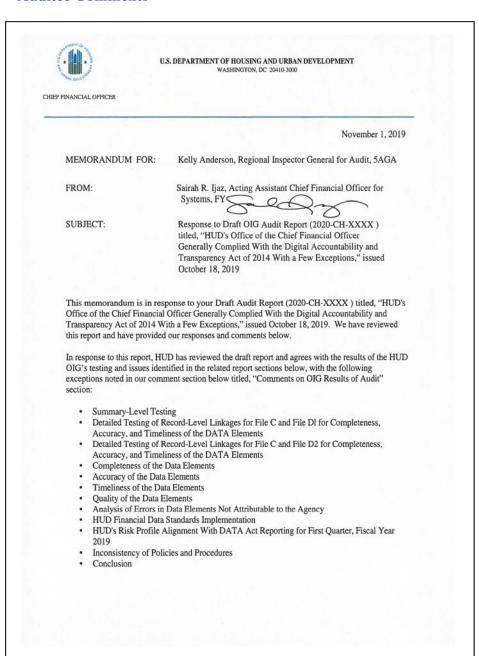
Schema Version 1.3.1 Friday, February 8, 2019

Appendix E

Auditee Comments and OIG's Evaluation

Ref to OIG Evaluation

Auditee Comments



Ref to OIG Evaluation

Auditee Comments



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

CHIEF FINANCIAL OFFICE

Comments on OIG Results of Audit

Comment 1

In response to the "Highlights" section, page 1, under "What We Recommend" paragraph,

"We recommend that HUD's OCFO and senior accountable official ensure that (1) required data are complete, accurate, and rep01ted in a timely manner, (2) the all data elements are traceable to the source documentation, and (3) procedures for DATA Act reporting are consistent among its various offices."

OCFO suggests revising the text to:

"We recommend that HUD's OCFO and Senior Accountable Official continue to work to improve the [1] accuracy, completeness, and timeliness of its data submitted to USASpending.gov, (2) traceability of all data elements to the source documentation, and (3) consistency of procedures for DATA Act reporting among its various offices."

Comment 2

Capitalize the title Senior Accountable Official throughout the document; currently it is all lower case (see pages 1, 6, 7, 12, 13, and 15).

Comment 3

In response to the "Results of Audit," "Summary-Level Testing," File C section, page 7, paragraph,

"We assessed the linkage between files D2 and C and identified 229 records that were reported in file D2 but not file C. Therefore, we determined that file C was not complete. HUD stated that generally the FAINs were reported in file D2 but not file C due to timing differences."

OCFO suggests revising the text to:

"We assessed the linkage between files D2 and C and identified 229 records that were reported in file D2 but not file C. Therefore, we determined that file C was not complete. HUD stated that generally the FAINs were reported in file D2 but not file C due to timing differences and other factors."

Comment 1

Comment 2

Comment 3

Ref to OIG Evaluation

Auditee Comments



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

CHIEF FINANCIAL OFFICE

Comment 4

In response to "Results of Audit," "Quality of the Data Elements" section, page 10, sentence,

"Based on our test work and the highest error rate of 14.2 percent, we determined that the quality of HUD's data is considered higher quality."

OCFO suggests revising the text to:

"Based on our test work and the highest error rate of 14.2 percent, we determined that the quality of HUD's data is considered higher quality, which is the highest quality level rating an agency can achieve based on the quality level ranges' guidance established in the CIGIE Federal Audit Executive Council (FAEC) Inspectors General Guide to Compliance under the DATA Act, dated February 14, 2019."

Comment 5

In "Results of Audit," "HUD's Risk Profile Not in Alignment With DATA Act Reporting for First Quarter, Fiscal Year 2019, "section, page 11, capitalize the document title "Data Quality Plan."

"During the audit, HUD's DATA Act lead stated that the HUD was not in compliance with the requirements in 0MB Circular A-123 as it related to DATA Act reporting. When we met with HUD's chief risk officer, he stated that risks related to DATA Act reporting were not included in HUD's risk profile because it was not reported as a top-level risk. HUD's enterprise risk management (ERM) risk assessment process is still maturing; however, during our audit, HUD had not identified key controls and risks related to DATA Act reporting. Therefore, there was no direct alignment between the DATA Act reporting and HUD's ERM risk profile for the first quarter, fiscal year 2019, data submission. Appendix A of OMB Circular A-123, M-18-16, Management of Reporting and Data Integrity Risk, requires DATA Act reporting agencies to implement a data quality plan (DQP), effective for fiscal years 2019 through 2021, at a minimum. HUD issued its final DQP on September 30, 2019, after the completion of our fieldwork. The DQP is prospective; therefore, it was not reviewed for risks related to transactions that were reported before its issuance."

Comment 6

With reference to the "Scope and Methodology," section, page 14, what will be HUD's expected error rate for the fiscal year 2021 audit, based on the results of HUD's 2019 DATA Act audit?

"We statistically selected a random sample of 385 records from the universe of 103,004 records reported in HUD's first quarter, fiscal year 2019, file C. A record is a row within the data file for file C. Each row has individual data elements as defined by OMB and Treasury." The sample size is based on a 95 percent confidence level, an expected error rate of 50 percent, and a desired sampling precision of 5 percent. In accordance with the guidance established in the CIGIE Federal Audit Executive Council (FAEC) Inspectors General Guide to Compliance under the DATA Act, we selected a 50 percent expected error

Comment 4

Comment 2

Comment 5

Ref to OIG Evaluation

Auditee Comments



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

CHIEF FINANCIAL OFFICE

rate based on the results of our previous DATA Act audit (2018-FO-0001)."

HUD Responses to OIG Recommendations

In response to page 12 under "Recommendations," OCFO has the following comments.

Recommendation 1A

"IA. Ensure that all required data are complete, accurate, and reported in a timely manner."

OCFO comment: HUD will continue to work to improve the accuracy, completeness, and timeliness of its data submitted to USASpending.gov. However, HUD requests further guidance from the OIG on what criteria will be used to determine closure (how will closure be measured).

Recommendation 1B

"IB. Ensure that all data elements are traceable to the source documentation."

OCFO Comment: HUD has a complex web of legacy systems used to support compliance with the DATA Act reporting requirements. These legacy source systems (PAS, LOCCS, HUDCAPS, etc.) were developed for different purposes prior to the enactment of the DATA Act in 2014 and, therefore, the traceability of the DATA Act reporting (i.e. Data Elements) back to these source systems is sub-optimal. These data quality issues will persist until and unless HUD modernizes these systems and associated business processes.

Recommendation 1C

"IC. Revise internal DATA Act policy and procedure documents to resolve inconsistencies to ensure full, appropriate, and consistent implementation of the DATA Act."

OCFO Comment: HUD will review its current DATA Act standard operating procedures documents both for the OCFO as well as FHA and GNMA to resolve and revise for inconsistencies to support the full, appropriate, and consistent implementation of the DATA Act across HUD.

We value the OIG's hard work and professionalism throughout this audit process and appreciate the opportunity to respond to this draft report. We look forward to working with you and your staff to resolve and close-out the recommendations. If you have any questions or need additional information, please contact James C. Norsworthy at 202-402-6827.

Comment 6

Comment 7

Comment 8

Ref to OIG Evaluation

Auditee Comments



OIG Evaluation of Auditee Comments

Comment 1 HUD suggested that we revise the text on our highlights page under the recommendations heading.

We appreciate HUD's comment and amended the recommendation statement on the highlights page to state "We recommend that HUD's OCFO and senior accountable official 'continue to work to improve data quality' and ensure that (1) required data are complete, accurate, and reported in a timely manner, (2) all data elements are traceable to the source documentation, and (3) procedures for DATA Act reporting are consistent among its various offices".

Comment 2 HUD suggested editorial changes to our report.

We appreciate HUD's comments. Our audit reports are written and edited in compliance with the Government Publishing Office (GPO) Style Manual (issued in January 2017). Therefore, we did not change the report.

Comment 3 HUD suggested that we revise the text in the paragraph that discuss testing of the linkage between files D2 and C. Specifically, it requested the addition of the wording "and other factors" to the end of the sentence.

We appreciate HUD's comment; however, we did not add the suggested language to the report because HUD did not provide documentation of the additional factors that impacted the linkage.

Comment 4 HUD suggested that we add language regarding the level of quality of its data.

We appreciate HUD's comment. However, we did not add the suggested language. The table above the statement shows the quality levels and the error rates necessary to achieve each level.

Comment 5 HUD asked what its expected error rate would be for the fiscal year 2021 audit, based on the results of this audit.

We are unable to determine the expected error rate for the fiscal year 2021 audit. Guidance for the next audit has not been issued by CIGIE FAEC.

Comment 6 HUD requested further guidance from OIG for recommendation 1A.

We acknowledge that the recommendation was general. This was to allow HUD to determine the steps it should take to further improve the quality of its data. We understand that a too general recommendation may be difficult to close. Therefore, we amended the recommendation in the report to state, "implement

procedures and controls to ensure that all required data are complete, accurate and reported in a timely manner. These procedures and controls should include but not be limited to ensuring that all transactions are recorded and reported within the proper period and listing the source of each of the data elements, including how to obtain the source documentation from HUD's various program offices or systems".

Comment 7

HUD stated that it has a complex web of legacy systems and that data quality issues would persist until HUD modernizes these systems and associated business processes.

We understand HUD's concerns regarding its legacy systems. However, this recommendation was a direct result of HUD not providing all of the source documentation necessary for our review.

Comment 8

HUD stated that it would review its current DATA Act procedure documents to resolve and revise inconsistencies within the documents.

We appreciate HUD's willingness to take corrective action. Reviewing and updating its policy and procedure documents should ensure that HUD continues to improve its data quality and support the full, appropriate, and consistent implementation of the DATA Act.

Appendix F

Criteria

Section 300.05 of the CIGIE FAEC Inspectors General Guide to Compliance Under the DATA Act states, "...while assessing controls, the audit team should also consider the agency's Enterprise Risk Management (ERM) risk profile, if one exists; and document whether the agency identified any risks associated with the controls over the DATA Act source systems and reporting."

Section 540.03 of the CIGIE FAEC Inspectors General Guide to Compliance Under the DATA Act states, "...to assess the completeness of File B, the audit team should compare the data in File B to the TASs listed in File A (if File A is complete) and determine if all TASs in File A are accounted for in File B. In addition, verify that the totals of File A and B are equal. Any variances identified by the auditors between Files A and B should be clearly explained and documented by the Federal agency. The audit team should assess the reasonableness of the agency's explanation and resolution of all variances and report on any unusual or unexplained variances it identifies."

Section 540.01 of the CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act states, "...completeness of the agency submission is defined as transactions and events that should have been recorded are recorded in the proper period."

Section 540.04 of the CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act states, "...verify that all object class codes from File B match the codes defined in Section 83 of OMB Circular A-11. Verify that all program activity names and codes from File B match the names and codes defined in the Detailed Budget Estimates by Agency Appendix in the President's Budget (Program and Financing Schedule)...Any variances identified between the File B and Section 83 of OMB Circular A-11 and the Program and Financing Schedule or the MAX Collect exercise, should be clearly explained and documented by the Federal agency. The audit team should assess the reasonableness of the agency's explanation and resolution of all variances and report on any unusual or unexplained variances it identifies."

Section 550.04 of the CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act states, "File C links to Files D1 and D2 by the Award Identification (Award ID) Number. The audit team should assess this linkage between the File C and D1/D2 by ensuring that all award ID Numbers that exist in File C, exist in File D1 and D2 and vice versa."

DAIMS validation rule A18 states that the gross outlay amount by TAS at the current period end from file A should equal the sum of all gross outlay amounts by program object class in file B.

DAIMS validation rule A19 states that the obligations incurred total by TAS at the current period end from file A should equal the negative sum of obligations incurred by program object class at the current period end from file B as of the same reporting period.

DAIMS validation rule A35 states that deobligations recoveries and refunds by TAS at the current period end should equal the sum of USSGL accounts 4871, 4971, 4872, and 4972 at the current period end for the TAS in file B.

HUD's Data Quality Process states that the high-risk threshold includes variances that exceed \$600,000. HUD OCFO strongly recommends documentation and thorough investigation of the variances that exceed this range due to high materiality and impact to the agency as a whole. Variances that exceed this threshold are typically a result of internal logic errors within the DATA Act Broker or significant data quality issues that must be remediated before submission.

OMB Circular A-123 states that ERM is an effective agencywide approach to addressing the full spectrum of the organization's external and internal risks by understanding the combined impact of risks as an interrelated portfolio, rather than addressing risks only within silos. While agencies cannot respond to all risks related to achieving strategic objectives and performance goals, they must identify, measure, and assess risks related to mission delivery.

OMB Circular A-123 states that risk must be analyzed in relation to achievement of the strategic objectives established in the agency strategic plan as well as risk in relation to appropriate operational objectives. Specific objectives must be identified and documented to facilitate identification of risks to strategic, operational, reporting, and compliance [objectives].

Paragraph 12.03 of Federal Internal Control Standards (U.S. Government Accountability Office Green Book) states that management documents in policies for each unit its responsibility for an operational process' objectives and related risks and control activity design, implementation, and operating effectiveness. Each unit, with guidance from management, determines the policies necessary to operate the process based on the objectives and related risks for the operational process. Each unit also documents policies in the appropriate level of detail to allow management to effectively monitor the control activity.