

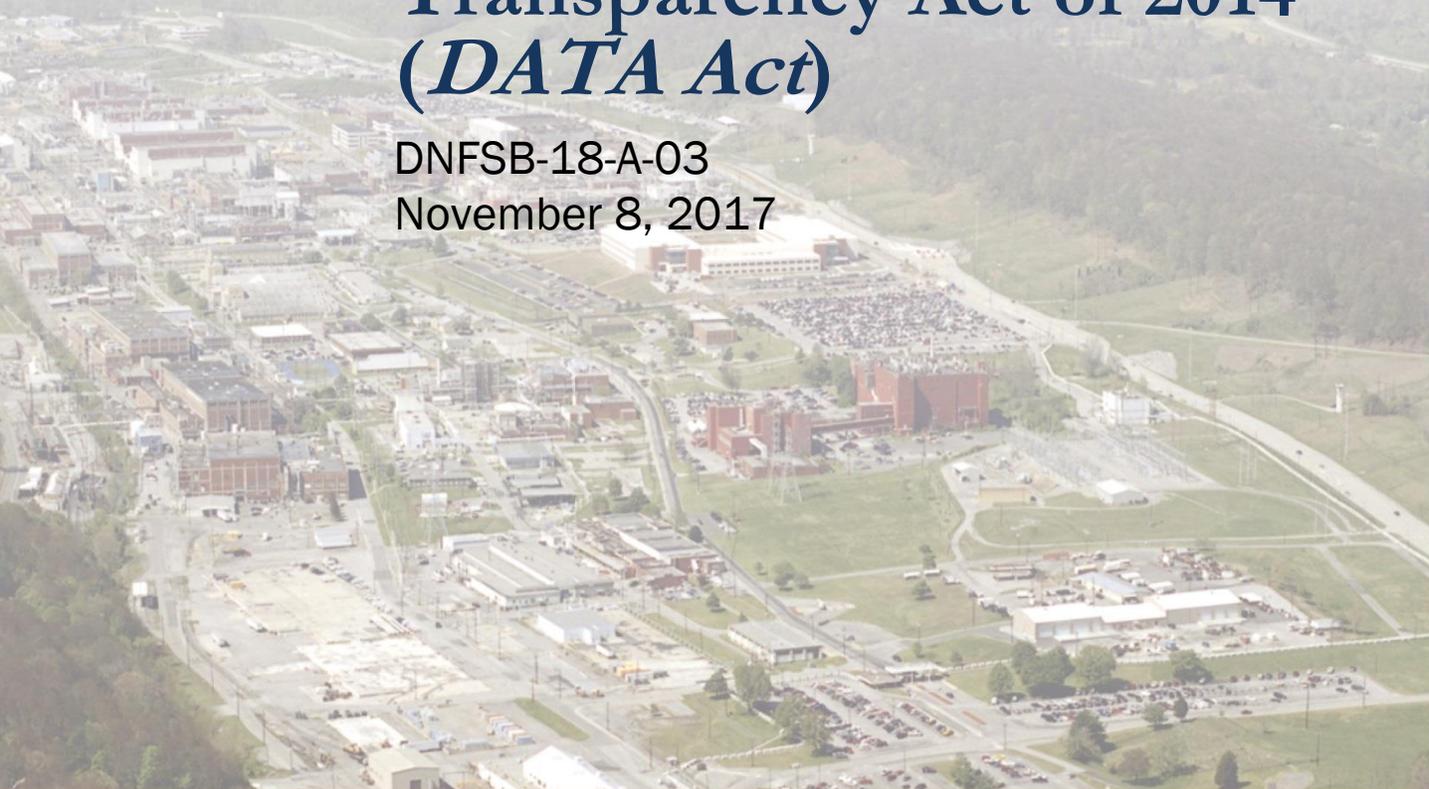


OFFICE OF THE INSPECTOR GENERAL

U.S. NUCLEAR REGULATORY COMMISSION
DEFENSE NUCLEAR FACILITIES SAFETY BOARD

Audit of DNFSB's Compliance with the Digital Accountability and Transparency Act of 2014 (*DATA Act*)

DNFSB-18-A-03
November 8, 2017



All publicly available OIG reports from this office (including this report)
are accessible through NRC's Web site at
<http://www.nrc.gov/reading-rm/doc-collections/insp-gen>





DEFENSE NUCLEAR FACILITIES

SAFETY BOARD

WASHINGTON, D.C. 20004-2901

OFFICE OF THE
INSPECTOR GENERAL

November 8, 2017

MEMORANDUM TO: Glenn Sklar
General Manager

Katherine Herrera
Deputy General Manager

Sherrill S. King
Director, Division of Acquisition and Finance

FROM: Dr. Brett M. Baker */RA/*
Assistant Inspector General for Audits

SUBJECT: AUDIT OF DNFSB'S COMPLIANCE WITH THE DIGITAL
ACCOUNTABILITY AND TRANSPARENCY ACT OF 2014
(DATA ACT) (DNFSB-18-A-03)

Attached is the Office of the Inspector General's (OIG) audit report titled *Audit of DNFSB's Compliance with the Digital Accountability and Transparency Act of 2014 (DATA Act)*.

The report presents the results of the subject audit. Following the November 2, 2017, exit conference, DNFSB staff indicated that they had no formal comments for inclusion in this report.

Please provide information on actions taken or planned for the recommendation within 30 days of the date of this memorandum.

We appreciate the cooperation extended to us by members of your staff during the audit. If you have any questions or comments about this report, please contact me at (301) 415-5915 or Eric Rivera, Team Leader, at (301) 415-7032.

Attachment: As stated



Office of the Inspector General

Defense Nuclear Facilities Safety Board

Results in Brief

DNFSB-18-A-03

November 8, 2017

Why We Did This Review

Congress enacted the Digital Accountability and Transparency Act of 2014 (*DATA Act*) on May 9, 2014. The act allows taxpayers and policymakers direct access to Federal agency spending data, and reporting by Federal agencies of financial and award information in accordance with Government wide data definition standards issued by the Office of Management and Budget (OMB) and the Department of the Treasury (Treasury). Spending data are displayed on the USAspending.gov Web site.

A core requirement of the *DATA Act* is ensuring that posted spending data are reliable and consistent. Agency Senior Accountable Officials (SAOs) are required to provide assurance over the quality of the data submitted and begin reporting fiscal year (FY) 2017 second quarter data for public display by May 2017.

The *DATA Act* also requires Office of the Inspector General (OIG) to submit this audit report to Congress and the public.

The audit objective was to assess the (1) completeness, timeliness, quality, and accuracy of fiscal year 2017, second quarter financial and award data submitted for publication on USAspending.gov, and (2) DNFSB's implementation and use of the Government-wide financial data standards established by OMB and Treasury.

Audit of DNFSB's Compliance with the *DATA Act*

What We Found

There were no differences between the Defense Nuclear Facility Safety Board's (DNFSB) definitions of *DATA Act* standards and those of Treasury and OMB. However, DNFSB's implementation and use of those standards did not comply with applicable Treasury and OMB guidance. Federal guidance requires the Senior Accountable Official (SAO) to submit a statement of assurance over the reliability and validity of account-level and award-level data submitted for display on USAspending.gov. Further, agencies are to design, document, and implement internal controls over data management and processes for their *DATA Act* submissions to help ensure effective operations. While DNFSB submitted data that contained most of the required information and generally conformed to OMB and Treasury standards, improvements are needed in the documentation of procedures for the SAO assurance statement and for policies governing submissions under the *DATA Act*.

What We Recommend

This report makes a recommendation to improve DNFSB's documentation of policies and procedures for the SAO statement of assurance, and to improve DNFSB's internal policies and procedures governing submissions under the *DATA Act*. Agency management stated their general agreement with the recommendation in this report and did not provide formal comments.

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ABBREVIATIONS AND ACRONYMS

ASP	Award Submission Portal
CIGIE	Council of the Inspectors General on Integrity and Efficiency
CLA	CliftonLarsonAllen LLP
DAIMS	<i>DATA Act</i> Information Model Schema
<i>DATA Act</i>	Digital Accountability and Transparency Act of 2014
DNFSB	Defense Nuclear Facilities Safety Board
FAEC	Federal Audit Executive Council
FFATA	Federal Funding Accountability and Transparency Act of 2006
FPDS-NG	Federal Procurement Data System Next Generation
FSRS	Federal Funding Accountability and Transparency Act Subaward Reporting System
FSSPs	Federal Shared Service Provider
FY 2017	Fiscal Year 2017
GAO	U.S. Government Accountability Office
IDD	Interface Definition Document
IDV	Indefinite Delivery Vehicle
OIG	Office of the Inspector General
OMB	Office of Management and Budget
RSS	Reporting Submission Specification
SAM	System for Award Management
SAO	Senior Accountable Official
Treasury	U.S. Department of the Treasury
USDA	United States Department of Agriculture

I. BACKGROUND

The Digital Accountability and Transparency Act of 2014 (*DATA Act*)

Congress enacted the *Digital Accountability and Transparency Act of 2014 (DATA Act)* on May 9, 2014. The act expanded the *Federal Funding Accountability and Transparency Act of 2006 (FFATA)* by requiring the disclosure of direct Federal agency spending, and reporting by Federal agencies of financial and award data in accordance with 57 Government-wide data definition standards¹ (57 elements) issued by the OMB and the Treasury. More information on this law is available on USAspending.gov, a publicly available Web site aimed at increasing government transparency. Treasury and OMB intended the data standards to allow taxpayers and policymakers to track Federal spending easily with accessible, consistent, reliable, and searchable data.

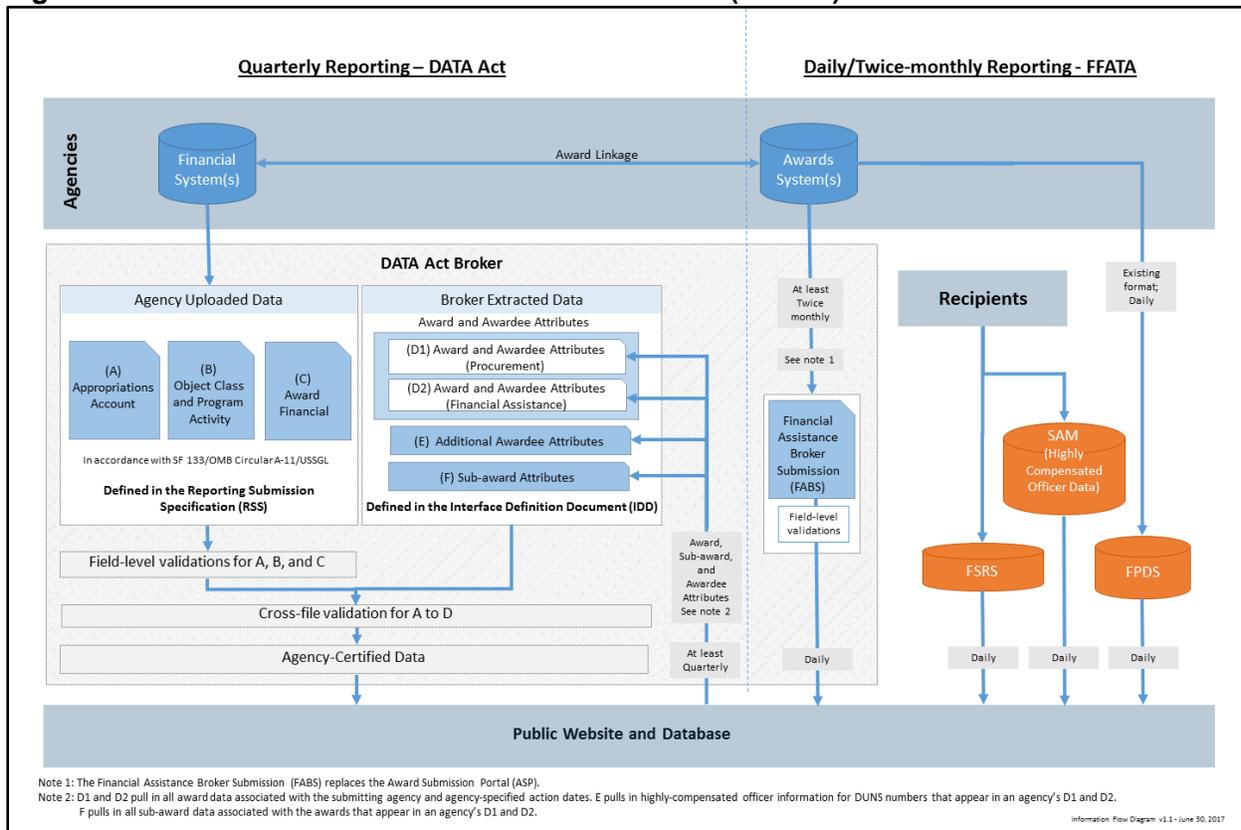
OMB and Treasury used the 57 data definition standards to develop and issue the *DATA Act Information Model Schema (DATA Act Schema, the Schema or DAIMS)* (Figure 1). The DAIMS provides technical guidance for agencies on what data to report to Treasury, as well as the submission format to use. Figure 1 also depicts relationships between data elements. DAIMS guides agencies in the production and submission of the required data.²

As mandated by the act, the U.S. Government Accountability Office (GAO) engages in ongoing efforts to provide interim reports on the progress in implementing the *DATA Act*. According to a December 2016 assessment by GAO, agencies are indicating the need for additional guidance on reporting intergovernmental transfers, providing assurances over their data, and reporting information. For example, officials from U.S. Department of Agriculture (USDA) told GAO auditors that they were waiting for guidance to be issued by OMB, but guidance still had not been issued just four months prior to the required submission date.

¹ The 57 elements including definitions can be found at <https://fedspendingtransparency.github.io/data-elements/>

² The table in Appendix D of this report lists the 57 different data definition standards.

Figure 1: DATA Act Information Model Schema v1.1 (DAIMS)



Source: USAspending.gov

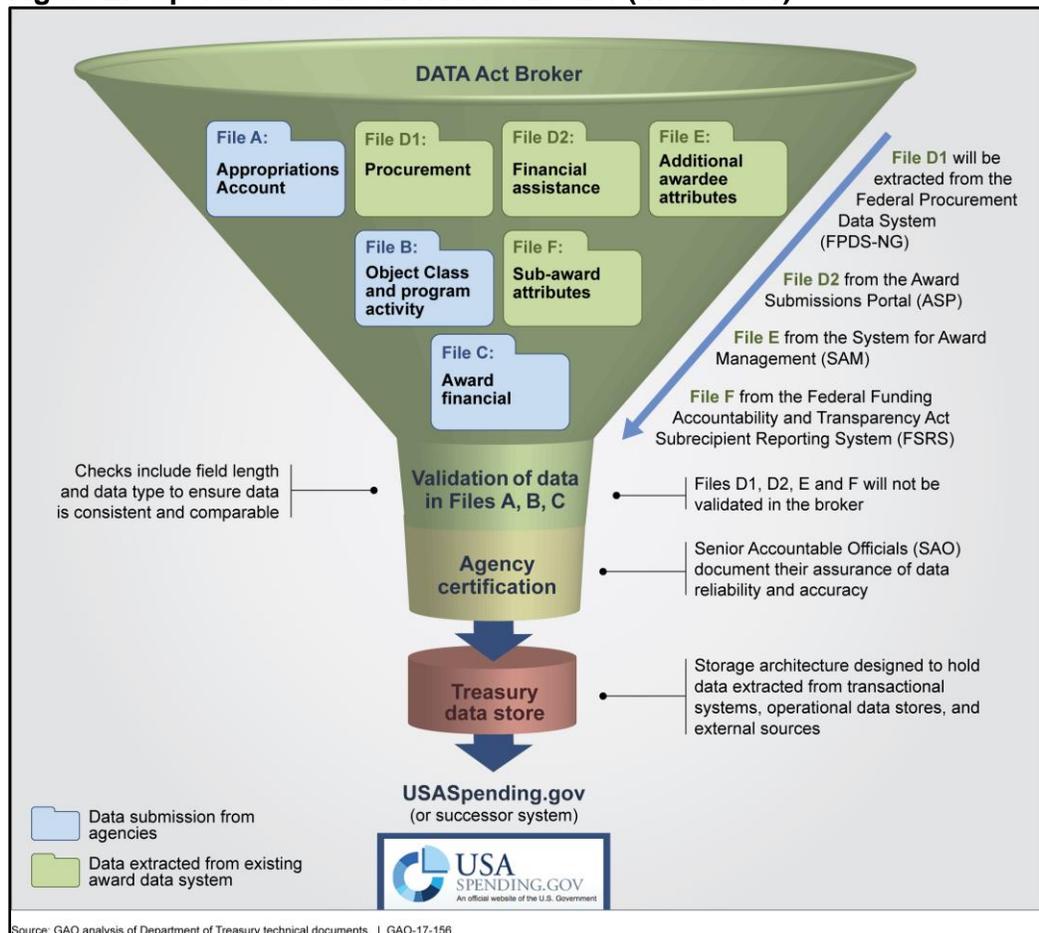
Agencies use DAIMS to plan what changes are needed to systems and business processes in order to capture and submit the required data. Under the act, an audit following the first full quarter of implementation is required, and agencies must report data in compliance with established standards by May 2017. Toward that end, OMB and Treasury have directed agencies to begin submitting data by the beginning of the second quarter of FY 2017 (January 2017) with the intention of publically reporting that data by May 2017.

OMB acknowledges that the 4 month delay in the release of *DATA Act* Schema delayed agencies timelines for implementation. OMB also recognizes that the iterative approach used to develop and release guidance has posed challenges for some agencies as changes in the guidance may require revisions to their implementation project plans. GAO's analysis of implementation plan updates submitted by Federal agencies confirms this challenge. Specifically, nearly half of 24 surveyed agencies highlighted challenges related to the guidance provided by OMB and Treasury in their implementation plan updates. One of the most

commonly cited challenges noted by agencies concerned complications arising due to the iterative nature or late release of the guidance.

A key component of the reporting framework laid out in the *DATA Act* schema is the *DATA Act* Broker, a system of software applications designed to standardize data formatting and assist reporting agencies in validating data prior to submitting it to Treasury. See Figure 2 for a depiction of how Treasury expects the Broker to operate.³

Figure 2: Operation of the *DATA Act* Broker (the Broker)



Source: GAO-17-156

Treasury developed the Broker using an agile development process.⁴ This involves continual development of Broker capabilities through 2 week software development cycles, called sprints. On September 30, 2016,

³ GAO-17-156, *OMB and Treasury Have Issued Additional Guidance and Have Improved Pilot Design but Implementation Challenges Remain*, December 2016

⁴ Treasury describes agile software development as a process that emphasizes frequent user feedback so that changes can be incorporated into the prototype early and often.

Treasury released a version of the Broker stating it was fully capable of performing the key functions of extracting⁵ and validating agency data. Treasury plans to continue to refine the Broker to improve its functionality and overall user experience; however, there are no plans to alter these key functions. Meeting the requirements of Treasury guidance documents, agencies are expected to use the Broker to upload three files containing data pulled from the agencies' internal financial and award management systems.

Agency Requirements

In addition to agencies' financial data, the Broker pulls procurement and financial assistance award and sub award information from Government wide systems, as agencies are already required to submit data to those systems.

Applicable Treasury guidance require Federal agencies to generate and submit three files to the Broker:

- File A is "Appropriations Account Detail," which agencies must cross-validate to OMB Standard Form 133, Report on Budget Execution and Budgetary Resources (SF-133).
- File B is "Object Class and Program Activity Detail," which agencies must cross-validate to their OMB Memorandum A-11, Section 83.
- File C is "Award Financial Detail," which agencies verify linkages between files D1 and D2 and file C using common, unique identifiers.

The *DATA Act* Information Model Schema also provides two documents that contain specifications for reporting required data: the Reporting Submission Specification (RSS) and the Interface Definition Document (IDD). The RSS includes a listing of a portion of the 57 elements with specific instructions on how to submit content in the appropriate format. The IDD lists the remaining data elements, with supporting metadata that aid agencies in understanding what data Treasury will extract from

⁵ Data extraction is the act or process of retrieving data out of (structured or unstructured) data sources for further data processing or data storage (data migration).

Government wide systems for procurement and what data will come from agency financial systems.

There are four files in the IDD content extracted from existing systems:

- File D1 reports award and awardee attributes for Procurement from the Federal Procurement Data System Next Generation (FPDS-NG).
- File D2 reports award and awardee attributes for the Financial Assistance (i.e., direct loans, loan guarantees, grants, etc.) from the Award Submission Portal (ASP).
- File E reports the additional awardee attributes from the System for Award Management (SAM).
- File F reports sub award attributes from Federal Funding Accountability and Transparency Act (FFATA) Sub award Reporting System (FSRS) (FFATA FSRS).

A core requirement of the *DATA Act* is ensuring that Federal agencies report reliable, consistent spending data for public use. Once agencies have extracted, linked, and mapped their data and tested Broker implementation outputs to ensure data in files A, B and C are valid, the agency submits data via the Data Act Broker Web site. For the extracted data files [D1 through F], the Broker provides some parameters for the agency to select when choosing the extent of the extraction.

Treasury issued the *DATA Act Implementation Playbook* (Playbook) to assist agencies in meeting reporting requirements under the *DATA Act*. The Playbook requires agencies to identify an SAO who is responsible for their agency's implementation of the *DATA Act*. Treasury guidance states that agencies should select an SAO who is an executive officer with enough seniority and expertise to manage a project across multiple offices and Federal spending communities. When agencies make their quarterly submissions to the Broker for publication on USAspending.gov, agency SAOs must provide reasonable assurance that internal controls support the reliability and validity of the account-level and award-level data they submitted.

Agency SAOs were required to begin reporting in compliance with the *DATA Act* beginning with the second quarter of FY 2017 and quarterly

thereafter. Treasury displayed FY 2017 second quarter data on USASpending.gov for the first time in May 2017.

The Broker delivers warnings to users when it cannot validate data elements or values — a condition that ultimately could affect the display of information on USASpending.gov. Treasury allows some validation rules to give warnings so that the agencies have the opportunity to resolve these issues prior to certifying. If they do not correct the issue, agencies can submit their data with the warnings, but will be required to correct the problems in future uploads. In the future, Treasury will change these warnings to fatal errors, requiring the agencies to correct them before submission.

Agencies may use the Broker to verify data files using validation rules to test

- Completeness and accuracy of data elements the agency plans to submit to Treasury.
- Linkages between financial and award data.
- Mapping to the *DATA Act* Schema and whether data passes basic validations within the Schema.

DNFSB's *DATA Act* Systems

DNFSB contracts with other government agencies for accounting, payroll, and personnel services. DNFSB staff perform regular reconciliations between internal records and those of their service providers. The service providers' records are the official financial records for DNFSB. The accounting services provider assists in the preparation of DNFSB's financial statements. DNFSB uses Pegasys as its financial system of record. The United States Department of Agriculture (USDA), a Federal Shared Service Provider (FSSPs), hosts⁶ Pegasys. The Pegasys system is DNFSB's only application requiring *DATA Act* compliance.

⁶ Providing service to other firms or persons. The hosting service provider rents disk or storage space on its server(s), and usually provides backup and maintenance services and full software suites that handle traffic and transaction management functions.

Office of the Inspector General (OIG)

The *DATA Act* requires the Inspector General (IG) of each Federal agency to review a statistically valid sample of the spending data submitted by its agency. The act also requires IGs to submit to Congress a publicly available report assessing the completeness, timeliness, quality, and accuracy of the data sampled and the implementation and use of Government-wide financial data standards by the agency.

To meet the *DATA Act* review needs of the IG community and to provide the consistency of the testing approach and methodology, the Council of the Inspectors General on Integrity and Efficiency (CIGIE) Federal Audit Executive Council (FAEC) established the *DATA Act* Working Group (the Working Group). The Working Group provided a common approach and reporting methodology outlined in the *Inspector General Guide to Compliance under the DATA Act*, issued February 27, 2017. This guide suggests that auditors perform specific assessments procedures and summarize control deficiencies and impacts on completeness, timeliness and accuracy for the data submitted to the Broker. See Appendices B and C of this document for those assessments and summaries.

II. OBJECTIVE

The audit objective was to assess (1) the completeness, timeliness, quality, and accuracy of FY 2017, second quarter financial and award data submitted for publication on USAspending.gov and (2) DNFSB's implementation and use of the Government-wide financial data standards established by OMB and Treasury.⁷

OIG contracted with CliftonLarsonAllen LLP (CLA), an independent certified public accounting firm, to perform this audit.

III. FINDINGS

Auditors assessed the DNFSB second quarter financial and award data submitted for publication on USAspending.gov and found while it contained most of the required information and conformed to the OMB and Treasury standards, there were deficiencies in completeness, timeliness, quality, and accuracy of the sampled submitted information. The table in Appendix D explains the files we reviewed. All of the 13 sampled transactions were found to be incomplete, not timely, inaccurate, and did not meet quality standards. Further, DNFSB's implementation of the Government-wide financial data standards established by OMB and Treasury should be improved in the following areas:

- A. SAO's statement of assurance attesting to the internal controls over the validity and reliability of the *DATA Act* submission.
- B. Implementation of guidance and internal procedures governing submissions under the *DATA Act*.

⁷ Federal agencies were not required to begin reporting under the *DATA Act* until FY 2017, second quarter. For this reason, the earliest available data that will be displayed on USAspending.gov under the *DATA Act* are from FY 2017, second quarter.

For detailed descriptions of the details supporting these findings, refer to the following appendices:

Appendix A describes the scope and methodology used to address the audit objective.

Appendix B describes assessments of DNFSB's submitted data.

Appendix C describes other data element discrepancies.

Appendix D describes DNFSB's results for each of the 57 data elements.

A. DNFSB's SAO Statement of Assurance Should Be Improved

Federal guidance requires that agencies submit SAO assurance statements along with the data reported through the *DATA Act* Broker process. Additionally, SAOs are required to implement internal controls, such as internal procedures, to help ensure the validity, completeness, and accuracy of the submitted agency data that will eventually be reported on the public Web site USASpending.gov. DNFSB was not able to submit an SAO assurance statement because internal procedures to facilitate meeting the submission requirements of the *DATA Act* were not developed. Without such internal controls, there is an increased risk that DNFSB will submit unreliable, and untimely data for publication on the publicly accessible USASpending.gov Web site.

What Is Required

SAO Assurance Statement Required with Broker Submission

OMB memorandum M-17-04, *Memorandum for Agency Senior Accountable Officials*, dated November 4, 2016, requires SAOs to submit quarterly SAO assurance statements along with their account-level and award-level data through the *DATA Act* Broker process. SAO statements provide assurance that the alignment among Files A-F is valid and reliable.

A *DATA Act* submission contains a combination of many data sets and agency SAOs are required to attest to the validity and reliability of the

complete *DATA Act* submission, including the interconnectivity or linkages (for example: award ID linkage) across all data in files A, B, C, D1, D2, E, and F. Where there are legitimate differences between files, agency SAOs should include in their statements categorical explanations for misalignments. To provide this assurance, agency SAOs should have internal controls in place over all of the data reported for display on USAspending.gov per OMB Circular No. A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control*, Revised July 15, 2016 (A-123).

What We Found

No SAO Assurance Statement Submitted

DNFSB was not able to submit an SAO statement associated with their Broker upload. Therefore, there was no attestation of the validity and reliability of the *DATA Act* submission for DNFSB.

Why This Occurred

DNFSB Did Not Develop Procedures

DNFSB did not develop internal procedures for publishing the *DATA Act* information or develop an SAO Statement. DNFSB management stated that, independent of results, their team followed available guidance to the best of their ability. However, DNFSB management stated the guidance for submitting SAO statements was not specific enough to facilitate clear understanding of expectations. Agency Management stated their commitment to doing what is necessary to make proper Broker submissions.

Why This Is Important

Potential risk for Inaccuracies and Inconsistency

Without an SAO Assurance Statement, there is an increased risk that DNFSB will submit unreliable, and untimely account-level and award-level data for publication on the publicly accessible Web site USAspending.gov. The public relies on that data. By establishing a process for publishing reliable and timely data, DNFSB decreases the likelihood of providing erroneous data.

Recommendation

OIG Recommends that DNFSB

1. Develop, document, and implement DATA Act policies and procedures to
 - a. Create a system of internal controls that allows DNFSB to publish more reliable and timely account-level and award-level data on USAspending.gov.
 - b. Ensure the submission of DNFSB's Senior Accountable Official Statement of Assurance with the quarterly Broker submission. This process should include documentation for a system to develop, review, and approve (when such statements are required) any categorical explanations for misalignments of the data reported for display on USAspending.gov.

B. DNFSB Guidance Should Clearly Articulate Processes, Roles, and Responsibilities

Federal guidance addresses various aspects of how data is to be collected, managed, submitted, reviewed, and presented for purposes of the *Data Act*. *Specifically*, it states agencies must

- employ a data-centric approach toward presenting Federal spending data on USAspending.gov including documentation of data mapping
- document the role of Federal Shared Service Providers (FSSPs) in maintaining data, and
- identify and understand linkages and any gaps in how *DATA Act* elements are captured in agency financial and management award systems and FSSPs.

DNFSB was not able to map data and subsequently, could not document how the data was mapped from the Board's source systems to the *DATA Act* Schema. Additionally, DNFSB encountered significant obstacles in verifying interconnectivity or linkages across data contained in various Files. These issues could have been avoided with better internal guidance governing the DNFSB's processes, roles and responsibilities under the *DATA Act*. As a result, DNFSB may continue to experience systemic issues in its approach to meeting *DATA Act* requirements.

What Is Required

Documentation of Policies and Procedures Governing the *DATA Act*

OMB and Treasury guidance states that *DATA Act* project management teams take a data-centric approach toward presenting Federal spending data on USAspending.gov. According to the Playbook, this data-centric approach provides the necessary linkages between financial events, and enables users to query data across the government. Treasury guidance requires that agencies prepare their Broker submissions by first

conducting a review of the *DATA Act* Schema, including the reporting architecture and submission specifications. Then, agencies are to extract data from agency source systems, map agency data to the *DATA Act* Schema, and make any source system changes needed to collect and link data. The *DATA Act* required agencies to submit their data to the Treasury by May 8, 2017, so that Treasury can make the data available on USASpending.gov by May 9, 2017. Treasury subsequently issued guidance asking agencies to submit their information to the Broker by April 30, 2017.

OMB and Treasury guidance also states that Federal agencies should have policies and procedures, which document the role that FSSPs play in maintaining data on each of the 57 elements, if applicable. Following processes and procedures allow inter-agency workgroups to leverage their inventory of data to determine ways they can modify systems and processes to improve data quality and better streamline agency analytics, data management, reporting, and compliance efforts. OMB and Treasury guidance advise agencies to engage with key stakeholders at FSSPs and with other agencies having similar business lines or systems.

U.S. Government Accountability Office (GAO) and Treasury *DATA Act* compliance guidance state that agencies were to locate *DATA Act* elements in agency or FSSP systems, identify and understand linkages and any gaps in how *DATA Act* elements are captured in agency financial and management award systems. This guidance further advises agencies to first document systems, processes, and policies for each of the 57 elements. Agencies then need to brainstorm potential improvements to agency systems, processes, and policies and determine ways to improve data quality and better streamline analytical, management, and reporting activities. Additionally, the guidance stated that agencies should document the workflow for addressing validation errors and revisions by identifying the people and systems necessary to make changes to the data prior to submittal.

What We Found

No Documentation of Data Element Mapping

DNFSB was not able to map data from DNFSB source systems to the *DATA Act* Schema in time for the second quarter FY 2017 submission. Additionally, DNFSB did not document the mapping of the data elements within Pegasys to the 57 *DATA Act* data elements.

No Documented Procedures Governing File Alignment or Linkages

DNFSB's internal policies and procedures governing DNFSB's submissions under the *DATA Act* can better address SAO assurance over the validity and reliability of the complete *DATA Act* submission. Additionally, DNFSB's policies and procedures governing the process to verify interconnectivity, and validate errors and revisions need strengthening.

Why This Occurred

Inadequate Documentation of data element mapping

DNFSB documentation of the processes for linking internal systems data, transforming data into the required *DATA Act* Schema format, and mapping the data from DNFSB Schema (original format) to the *DATA Act* Schema requires strengthening.

Lack of Procedures Governing Coordination with USDA

DNFSB's documentation of policies and procedures governing Broker submissions in cooperation with USDA needs improvement. DNFSB's data, upload to the Broker was after the deadline specified in applicable Treasury and OMB guidance. This was due, in part, to USDA notifying DNFSB that the files were ready for certification after 12 p.m. on Sunday, April 30, 2017. However, DNFSB's tardiness was primarily due to a need for more formalized, comprehensive standard operating procedures on

how to identify, report, and correct data Broker submission processing errors and warnings between DNFSB and USDA.

Inadequate Documentation of File Alignment or Linkage Procedures

DNFSB management encountered obstacles when trying to understand the guidance requirements applicable to Broker upload of files A through F and the cross-file linkages. These obstacles could not be resolved in time for their first submission to the Broker. However, DNFSB's documentation of policies and procedures governing alignment of files A through F and the cross-file linkages is inadequate.

Why This Is Important

Potential risk for Posting Inconsistent and Inaccurate Data

May Publish Unreliable and Inconsistent Data

The result of testing demonstrates that most of DNFSB's errors (e.g. elements 53, 49, 18, 47, 21, and 21) occurred because of system errors with the Broker that were out of the agency's control. DNFSB's *DATA Act* project team does not have control over the content of Files D1 through F, as the Broker extracts content for those files from external systems outside of DNFSB's control. However, once the Broker creates the files, Treasury provides the option to perform a reasonable review over the files, prior to re-submission and SAO certification. These warnings are an indicator that linkages between agency files and files from external systems are not in place.

May Continue to Make Untimely Broker submissions

Without formal, comprehensive standard operating procedures on how to identify, report, and correct Broker data submission processing errors and warnings between DNFSB and USDA, DNFSB risks continuing to make untimely submissions to the Broker, thereby not meeting submission requirements.

Recommendation

OIG Recommends that DNFSB

1. Develop, document, and implement *DATA Act* policies and procedures to
 - c. Define the mapping between agency specific data elements within Pegasys to the *DATA Act* Schema (57 elements).
 - d. Define the workflow for addressing validation errors and revisions, including identifying the people and systems necessary to make changes to the data prior to submittal to the Broker, in coordination with the USDA.
 - e. Define the role of the USDA FSSP in any migration or change to information systems supporting Broker submissions in coordination with the USDA.
 - f. Define alignment of files A through F and the cross-file linkages and cross-file calculations including documentation of systems, processes and policies for each element.
 - g. Define the process to create consistent and proper handling of data across DNFSB including establishing internal roles and responsibilities and identifying the people and systems necessary to make changes to the data prior to Broker submittal.

IV. CONSOLIDATED LIST OF RECOMMENDATIONS

OIG recommends that DNFSB

1. Develop, document, and implement *DATA Act* policies and procedures to:
 - a. Create a system of internal controls that allows DNFSB to publish more reliable and timely account-level and award-level data on USAspending.gov.
 - b. Ensure the submission of DNFSB's Senior Accountable Official statement of assurance with the quarterly Broker submission. This process should include documentation for a system to develop, review, and approve (when such statements are required) any categorical explanations for misalignments of the data reported for display on USAspending.gov.
 - c. Define the mapping between agency specific data elements within Pegasys to the *DATA Act* Schema (57 elements).
 - d. Define the workflow for addressing validation errors and revisions, including identifying the people and systems necessary to make changes to the data prior to submittal to the Broker, in coordination with the USDA.
 - e. Define the role of the USDA FSSP in any migration or change to information systems supporting Broker submissions in coordination with the USDA.
 - f. Define alignment of files A through F and the cross-file linkages and cross-file calculations including documentation of systems, processes and policies for each element.
 - g. Define the process to create consistent and proper handling of data across DNFSB including establishing internal roles and responsibilities and identifying the people and systems necessary to make changes to the data prior to Broker submittal.

V. AGENCY COMMENTS

An exit briefing was held with DNFSB on November 2, 2017. DNFSB management reviewed a discussion draft and provided comments that have been incorporated into this report as appropriate. As a result, DNFSB management stated their general agreement with the findings and recommendation of this report and chose not to provide formal comments for inclusion in this report.

OBJECTIVE, SCOPE, AND METHODOLOGY

Objective

The audit objective was to assess (1) the completeness, timeliness, quality, and accuracy of FY 2017, second quarter financial and award data submitted for publication on USAspending.gov, and (2) DNFSB's implementation and use of the Government-wide financial data standards established by OMB and Treasury.

OIG contracted with CliftonLarsonAllen LLP (CLA), an independent certified public accounting firm, to perform this audit.

Scope

The scope of this first *DATA Act* audit includes financial and award data for FY 2017, second quarter that DNFSB submitted for publication on USAspending.gov. The scope of this audit also address any applicable procedures, certifications, documentation, and controls to achieve this process. In compliance with OMB MPM-2016-03, Treasury displayed data reported by Federal agencies in compliance with the *DATA Act* on USAspending.gov in May 2017.

We downloaded the second quarter FY 2017 File C submission from the *Data Act* Broker, as well as the File D1 and File D2 submissions. DNFSB had seven records in File C. File D1 contained 13 records, and File D2 contained no records. We tested all records against the applicable criteria. Because the PIID field in File C was not populated, and there was no way to link the records in File C to the records in D1 or D2. For this reason, in accord with Treasury guidance, File C was not suitable for testing. Consequently, we used File D1 for testing purposes.

Methodology

We reviewed relevant criteria for this audit including

- The *Digital Accountability and Transparency Act of 2014* May 9, 2014
- *Federal Funding Accountability and Transparency Act of 2006* September 26, 2006
- *The Federal Financial Management Improvement Act of 1996*
- *Federal Managers' Financial Integrity Act of 1982*
- OMB Memorandum M-15-12, *Increasing Transparency of Federal Spending by Making Federal Spending Data Accessible, Searchable, and Reliable* May 8, 2015
- OMB Management Procedures Memorandum No. 2016-03, *Additional Guidance for DATA Act Implementation: Implementing Data-Centric Approach for Reporting Federal Spending Information* May 3, 2016
- OMB Memorandum M-17-04, *Additional Guidance for DATA Act Implementation: Further Requirements for Reporting and Assuring DATA Reliability* November 4, 2016
- OMB Memorandum M-10-06, *Open Government Directive* December 8, 2009
- OMB Memorandum: *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies implementing section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001* (Public Law 106-554) December 21, 2000
- OMB Memorandum: *Open Government Directive – Framework for the Quality of Federal Spending Information* February 8, 2010
- OMB Memorandum: *Open Government Directive – Federal Spending Transparency* April 6, 2010
- Department of the Treasury: *DATA Act Information Model Schema v1.1 (DAIMS)* June 30, 2017

- Department of the Treasury: *DATA Act Monthly Digest Policy Update Volume 34*, November, 2016
- Department of the Treasury: *DATA Act Implementation Playbook (Playbook)* June 24, 2016
- *U. S. Digital Services Playbook* August 11, 2014
- OMB Circular A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control*, Revised July 15, 2016
- GAO *Financial Audit Manual, Volumes 1 and 2* July 2008, Volume 3 August 2007
- GAO-12-331G, *Government Auditing Standards (The Yellow Book)* December 2011
- GAO-10-365 *ELECTRONIC GOVERNMENT: Implementation of the Federal Funding Accountability and Transparency Act of 2006* March 2010
- GAO-14-476 *DATA Transparency: Oversight Needed to Address Underreporting and Inconsistencies on Federal Award Web site* June 2014
- GAO *Standards for Internal Control in the Federal Government (The Green Book)* September 2014
- General Services Administration *Federal Acquisition Regulation (FAR)* March 2005

To obtain the perspectives of DNFSB's staff, we conducted inquiries, walkthroughs of the data submission process, interviews with DNFSB's Senior Accountable Official (SAO) and other key *DATA Act* project team members, as appropriate. We also examined Federal and Board guidance and compared them with processes and procedures pertaining to DNFSB's *DATA Act* processes and procedures to obtain an understanding of DNFSB's internal control design and process used to complete its *DATA Act* submissions.

We assessed whether DNFSB properly designed internal controls used over their authoritative source system (Pegasys) and if they were implemented, and operating effectively for *DATA Act* submissions. We based our assessment on the results of the FY 2016 DNFSB financial statement audit and FY 2017 A-123 results, preliminary results from the FY 2017 financial statement audit, and the USDA service organization controls audit report. In addition, we assessed the design, implementation, and operating effectiveness of DNFSB processes, systems, and controls for extracting financial and award data from Pegasys for *DATA Act* Broker submissions.

We followed the audit methodology prescribed in the Inspector General Guide to Compliance under the *DATA Act*, as amended (OIG Audit Guide). We evaluated internal control risks over DNFSB's source system and whether internal controls over the *DATA Act* submission were sufficient to assure the completeness, accuracy, timeliness and quality of what was posted to USAspending.gov.

The evaluation was conducted at DNFSB headquarters from August 2017 through November 2017. Any information received from DNFSB subsequent to the completion of fieldwork was incorporated when possible. We reviewed and analyzed internal controls related to the audit objective. Per the findings documented in this report, we identified areas for DNFSB to improve their *DATA Act* related processes and procedures. Throughout the audit, auditors considered the possibility of fraud, waste, or abuse in the program.

We conducted this performance 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. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

OIG contracted with CLA, an independent certified public accounting firm, to perform this audit. This audit was conducted by: Roger Von Elm, Principal; Christina Beck, Director/Team Leader; Patrick Hanlon, Lead Senior; Carol Christian, Subject Matter Expert; James Cox, Information

Technology Manager; with support from staff auditors Alejandra Leon-Jasso, Clark Etheridge, and Marshall Smith.

Office of the Inspector General staff that worked on this audit included Eric Rivera, Team Leader; and Gail Butler, Senior Auditor; and Contracting Officer's Representative.

Assessment of Submitted Spending Data

Results of Assessment of Internal Controls Over Source Systems

Based on DNFSB's fiscal year 2016 financial statement audit report, the results of the fiscal year 2017 financial statement audit to date, A-123 results, and on service organization control audits, internal controls over source systems are designed, implemented, and operating effectively.

Results of Assessment of Internal Controls over Data Management and Processes (DATA Act Submission)

DNFSB did not design internal controls over data management and processes for their *DATA Act* submissions that are, implemented, or operating effectively. For the specific instances of control deficiencies that may adversely affect the completeness, timeliness, and accuracy of the *DATA Act* submission, see the following "Summary of Control Deficiencies and Impact on Completeness, Timeliness, and Accuracy."

Summary of Control Deficiencies and Impact on Completeness, Timeliness, and Accuracy

Figure 3: Figure File Names and Descriptions

File Name	File Description	Contents	What we Found	Reference
File A	Appropriations Account Detail	Appropriation is setting aside money for a specific purpose. These accounts show the details of the appropriations.	*DNFSB did not test the linkages between Files A-F.	Appendix: B
File B	Object Class and Program Activity Detail	Object classes are categories of items or services purchased by the Federal Government. Program Activity Detail is a specific activity or project listed in the Government's annual budget. This file contains more details about the items or services purchased by the Government.	*DNFSB did not test the linkages between Files A-F.	Appendix: B
File C	Award Financial Detail	This file contains the totals of DNFSB's awards to each awardee	*DNFSB did not test the linkages between Files A-F. *File C did not have the required fields or proper PIID information that matched back to File D1.	Element: 6 Appendix: B

This audit identified the following control deficiencies that may adversely affect the completeness, timeliness, quality, and accuracy of the data submitted:

The SAO did not submit a statement of assurance over the reliability and validity of DNFSB account-level and award-level data submitted to the *DATA Act* Broker as required by OMB Management Procedures Memorandum 2016-03 Additional Guidance for Implementation (OMB MPM 2016-03) (May 3, 2016) (100% error rate)

DNFSB did not test linkages between file C and files D1 through F for validity or reliability (100% error rate).

DNFSB / USDA have no formal, comprehensive standard operating procedures between them on how to identify, report, and correct data Broker submission processing errors and warnings (100% error rate).

DNFSB / USDA have no formal, documented mapping of the data elements within Pegasys to the 57 *DATA Act* data elements (100% error rate).

While there were no differences between DNFSB's definitions of the data standards and OMB guidance, DNFSB's files for *DATA Act* elements were inaccurate for each of the 13 transactions tested for the 57 data elements with over a 50% error rate as follows:

- A. The PIID field in File C was not populated (100% error rate) [Note: DNFSB does not have grants or loans, so the Federal Award Identification Number (FAIN) field was properly blank.] (Data Element 6).
- B. **Data Broker Issue:**⁸ The *DATA Act* Broker filled the Indefinite Delivery Vehicle (IDV) with the contract action code rather than the IDV (13 of 13 or 100% error rate) (Data Element 53).
- C. **Outside of Agency Issue:** The Place of Performance Congressional District was listed as 00 for Washington DC in both File D1 and FPDS, when it should have been listed as 98 (12 of 13, or 92% error rate) (Data Element 49).

⁸ The CIGIE FAEC *DATA Act* Working Group with GAO and OMB participation identified data errors, which the agencies neither caused nor controlled. These errors are attributable to agency supplied information and issues with the Broker. Where possible, this report differentiates the root cause of such errors between what is DNFSB's responsibility, and analysis ascribes to the Broker.

Results of Assessment of Internal Controls over Data Management and Processes (DATA Act Submission)

Figure 4: File Names and Descriptions

File Name	File Description	Contents	What we Found	Reference
File D1	Award and Awardee Attributes (Procurements)	This file contains DNFSB's awardee names, addresses, and award amounts for procurement contracts.	*DNFSB did not test the linkages between Files A-F. *Required fields were either blank on the D1 and FPDS or did not match the values on the source procurement documents.	Element: 18,21,31,32,47,49 Appendix: B, C
File E	Additional Awardee Attributes	This file contains DNFSB's awardee's Executive Compensation Information.	*DNFSB did not test the linkages between Files A-F.	Appendix: B
File F	Subaward Attributes	This file contains DNFSB's awardee's sub-award information.	*DNFSB did not test the linkages between Files A-F.	Appendix: B

The File D1 population included 13 transactions representing \$277,000. All (100%) of the 13 transactions were tested. DNFSB had a 100% error rate for this element. This is because DNFSB did not populate the PIID field in File C so there was no way we could link the records in File C to the records in D1 or D2. For this reason in accord with Treasury guidance, File C was not suitable for testing. Consequently, we used File D1 for testing purposes.

Overall Assessment of Implementation and Use of Data Standards

There were no differences between DNFSB's definitions of the data standards and OMB guidance. However, DNFSB's Implementation and Use of data standards did not comply with applicable Treasury and OMB guidance as follows:

- A. DNFSB submitted a file C where the PIID field was not populated (100% error rate). DNFSB does not have grants or loans so the Federal Award Identification Number (FAIN) field was properly blank. During DNFSB's review of file C as prepared by USDA, DNFSB noted that file C was not completely populated. Agency officials contacted USDA about why they had entered no data in the field and asked for a solution for the issue from USDA. USDA advised DNFSB to certify the submission stating that they would correct the issue for the 3rd quarter submission.

- B. **Outside of Agency Issue:** Primary Place of Performance
Congressional District field was listed as 00 for Washington DC in both File D1 and FPDS, when it should have been listed as 98 (12 out of 13 (92% error)).

- C. DNFSB did not upload the second quarter *DATA Act* submission to the *DATA Act* Broker timely. The agency submitted their files on May 2, 2017, rather than on or before April 30, 2017, as required by applicable Treasury and OMB guidance.

Other Data Element Discrepancies

The following paragraphs, starting with “A.” lists DNFSB’s results in ascending order by error rate percentage. Appendix D lists results for each of the 57 data elements [Note: “**Yes**” indicates a discrepancy and “**No**” indicates no discrepancy].

The DNFSB data submission to the Broker was not compliant with applicable Treasury and OMB guidance on other instances as follows:

- A. **Outside of Agency Issue:**⁹ Legal Entity Congressional District in File D1 did not agree to FPDS for one transaction. FPDS was blank. (1 of 13, or 8% error rate) (Data Element 32).
- B. **Outside of Agency Issue:** The Business Type field in File D1 did not agree to the Business Type per SAM for some transactions (5 of 13, or 38% error rate) (Data Element 18).
- C. **Data Broker Issue:** The *DATA Act* Broker is not accurately pulling Current Total Funding or Potential Total Funding from FPDS when creating File D1 (5 of 13, or 38% error rate) (Data Elements 21 and 47).
- D. DNFSB reported an administrative contract transaction to FPDS that occurred in March 2017 during May 2017, after the *DATA Act* Submission (1 of 13 or 8% error rate) (All Data Elements).
- E. Legal entity zip code in the D1 File was only five digits instead of nine (1 of 13 or 8% error rate) (Data Element 31).

⁹ The CIGIE FAEC *DATA Act* Working Group with GAO and OMB participation identified data errors, which the agencies neither caused nor controlled. These errors are attributable to agency supplied information and issues with the Broker. Where possible, this report differentiates the root cause of such errors between what is DNFSB’s responsibility, and analysis ascribes to the Broker.

DNFSB Results for Each of the 57 Data Elements

Summary of Errors

DNFSB's results listed in <u>descending</u> order by error rate percentage [Note: Yes indicates a discrepancy and No indicates no discrepancy found].				
Completeness (C), Timeliness (T)¹⁰, Accuracy (A) ASSESSMENT				
Element	Title	C	T	A
6	Award Identification Number (PIID) in File C was not populated. (Note: DNFSB does not have grants or loans, so the Federal Award Identification Number (FAIN) field was properly blank.) (100% error rate)	No	Yes	Yes
53	Data Broker Issue: Record Type (IDV) is populated with the with the contract action code rather than the IDV code (13 of 13, or 100% error rate)	No	Yes	Yes
49	Outside of Agency Issue: Issue Primary Place of Performance Congressional District was listed as 00 for Washington DC in both File D1 and FPDS, when it should have been listed as 98 (12 of 13, or 92% error rate)	No	Yes	Yes
18	Outside of Agency Issue: Business Type fields in File D1 did not agree to the Business Types per SAM for some transactions (5 of 13, or 38% error rate)	No	Yes	Yes
47	Data Broker Issue: Potential Total Value of Award is not being accurately populated by the <i>DATA Act</i> Broker from FPDS when creating File D1 (5 of 13, or 38% error rate)	No	Yes	Yes
21	Data Broker Issue: Current Total Value of Award is not being accurately populated by the <i>DATA Act</i> Broker from FPDS when creating File D1 (5 of 13, or 38% error rate)	No	Yes	Yes
31	Legal Entity Address Legal entity zip code in the D1 File was only five digits instead of nine (1 of 13 or 8% error rate)	No	Yes	Yes
32	Outside of Agency Issue: Legal Entity Congressional District in File D1 did not agree to FPDS for one transaction. FPDS was blank. (1 of 13 or 8% error rate)	No	Yes	Yes

¹⁰ Timeliness for the purposes of this chart refers to the April 30, 2017, deadline included in applicable Treasury and OMB guidance. DNFSB's information was submitted on May 2, 2017, ahead of the *DATA Act's* May 8, 2017, deadline for agency submissions.

DNFSB's results listed in <u>descending</u> order by error rate percentage [Note: Yes indicates a discrepancy and No indicates no discrepancy found].				
Completeness (C), Timeliness (T)¹⁰, Accuracy (A) ASSESSMENT				
Element	Title	C	T	A
1	Action Date (0 of 13, or 0% error rate)	No	Yes	No
2	Action Type (0 of 13, or 0% error rate)	No	Yes	No
3	Amount of Award (0 of 13, or 0% error rate)	No	Yes	No
4	Appropriations Account (0 of 13, or 0% error rate)	No	Yes	No
5	Award Description (0 of 13, or 0% error rate)	No	Yes	No
7	Award Modification/Amendment Number (0 of 13, or 0% error rate)	No	Yes	No
8	Award Type (0 of 13, or 0% error rate)	No	Yes	No
9	Awardee/Recipient Legal Entity Name (0 of 13, or 0% error rate)	No	Yes	No
10	Awardee/Recipient Unique Identifier (0 of 13, or 0% error rate)	No	Yes	No
11	Awarding Agency Code (0 of 13, or 0% error rate)	No	Yes	No
12	Awarding Agency Name (0 of 13, or 0% error rate)	No	Yes	No
13	Awarding Office Code (0 of 13, or 0% error rate)	No	Yes	No
14	Awarding Office Name (0 of 13, or 0% error rate)	No	Yes	No
15	Awarding Sub Tier Agency Code (0 of 13, or 0% error rate)	No	Yes	No
16	Awarding Sub Tier Agency Name (0 of 13, or 0% error rate)	No	Yes	No
17	Budget Authority Appropriated (0 of 13, or 0% error rate)	No	Yes	No
19	Catalog of Federal Domestic Assistance (CFDA) Number (0 of 13, or 0% error rate)	No	Yes	No
20	Catalog of Federal Domestic Assistance (CFDA) Title (0 of 13, or 0% error rate)	No	Yes	No
22	Federal Action Obligation (0 of 13, or 0% error rate)	No	Yes	No
23	Funding Agency Code (0 of 13, or 0% error rate)	No	Yes	No
24	Funding Agency Name (0 of 13, or 0% error rate)	No	Yes	No

DNFSB's results listed in descending order by error rate percentage [Note: Yes indicates a discrepancy and No indicates no discrepancy found].				
Completeness (C), Timeliness (T)¹⁰, Accuracy (A) ASSESSMENT				
Element	Title	C	T	A
25	Funding Office Code (0 of 13, or 0% error rate)	No	Yes	No
26	Funding Office Name (0 of 13, or 0% error rate)	No	Yes	No
27	Funding Sub Tier Agency Code (0 of 13, or 0% error rate)	No	Yes	No
28	Funding Sub Tier Agency Name (0 of 13, or 0% error rate)	No	Yes	No
29	Highly Compensated Officer Name (0 of 13, or 0% error rate)	No	Yes	No
30	Highly Compensated Officer Total Compensation (0 of 13, or 0% error rate)	No	Yes	No
33	Legal Entity Country Code (0 of 13, or 0% error rate)	No	Yes	No
34	Legal Entity Country Name (0 of 13, or 0% error rate)	No	Yes	No
35	Non-Federal Funding Amount (0 of 13, or 0% error rate)	No	Yes	No
36	North American Industrial Classification System (NAICS) Code (0 of 13, or 0% error rate)	No	Yes	No
37	North American Industrial Classification System (NAICS) Description (0 of 13, or 0% error rate)	No	Yes	No
38	Object Class (0 of 13, or 0% error rate)	No	Yes	No
39	Obligation (0 of 13, or 0% error rate)	No	Yes	No
40	Ordering Period End Date (0 of 13, or 0% error rate)	No	Yes	No
41	Other Budgetary Resources (0 of 13, or 0% error rate)	No	Yes	No
42	Outlay (0 of 13, or 0% error rate)	No	Yes	No
43	Parent Award Identification (ID) Number (0 of 13, or 0% error rate)	No	Yes	No
44	Period of Performance Current End Date (0 of 13, or 0% error rate)	No	Yes	No
45	Period of Performance Potential End Date (0 of 13, or 0% error rate)	No	Yes	No
46	Period of Performance Start Date (0 of 13, or 0% error rate)	No	Yes	No

DNFSB's results listed in <u>descending</u> order by error rate percentage [Note: Yes indicates a discrepancy and No indicates no discrepancy found].				
Completeness (C), Timeliness (T)¹⁰, Accuracy (A) ASSESSMENT				
Element	Title	C	T	A
48	Primary Place of Performance Address (0 of 13, or 0% error rate)	No	Yes	No
50	Primary Place of Performance Country Code (0 of 13, or 0% error rate)	No	Yes	No
51	Primary Place of Performance Country Name (0 of 13, or 0% error rate)	No	Yes	No
52	Program Activity (0 of 13, or 0% error rate)	No	Yes	No
54	Treasury Account Symbol (excluding sub-account) (0 of 13, or 0% error rate)	No	Yes	No
55	Ultimate Parent Legal Entity Name (0 of 13, or 0% error rate)	No	Yes	No
56	Ultimate Parent Unique Identifier (0 of 13, or 0% error rate)	No	Yes	No
57	Unobligated Balance (0 of 13, or 0% error rate)	No	Yes	No

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