













Audit Report



OIG-15-034

Treasury Is Making Progress in Implementing the DATA Act But Needs Stronger Project Management

May 19, 2015

Office of Inspector General

Department of the Treasury

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Abbreviations		
CFO BRD DATA Act DOD DTO ESC FFATA Fiscal Service GSA HHS IAC IG OFFM OIG OMB PMBOK PMO Recovery Board ROC SAO	Chief Financial Officer Budget Review Division Digital Accountability and Transparency Act of 2014 Department of Defense Data Transparency Office Executive Steering Committee Federal Funding Accountability and Transparency Act of 2006 Bureau of the Fiscal Service General Services Administration Department of Health and Human Services Interagency Advisory Committee Inspector General Office of Federal Financial Management Office of Inspector General Office of Management and Budget Project Management Body of Knowledge Program Management Office Recovery Accountability and Transparency Board Recovery Operations Center Senior Accountable Official	

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OIG Audit Report

The Department of the Treasury Office of Inspector General

May 19, 2015

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Fiscal Assistant Secretary
Department of the Treasury

This report presents the results of our audit of the Department of the Treasury's (Treasury) efforts to meet its responsibilities under the Digital Accountability and Transparency Act of 2014 (DATA Act)¹ as of October 31, 2014. We performed this audit, the first of a series, as part of our ongoing oversight over Treasury's DATA Act implementation efforts.

Our objective was to determine the sufficiency of plans and actions taken by Treasury and its Bureau of the Fiscal Service (Fiscal Service) to timely comply with the DATA Act, including but not limited to those plans and actions to (1) establish Government-wide financial data standards for Federal funds made available to or expended by Federal agencies and entities receiving Federal funds by May 2015; (2) ensure this financial data is accurately posted and displayed on USAspending.gov (or a successor system) by May 2017; (3) ensure the data standards established are applied to the data made available on the website by May 2018; and (4) establish a data analysis center or expand an existing service to provide data, analytic tools, and data management techniques to support the prevention and reduction of improper payments by Federal agencies and improving efficiency and transparency in Federal spending.

To accomplish our objective, we obtained an understanding of the current laws and guidance related to Treasury's responsibilities under the DATA Act, conducted interviews with Treasury personnel involved with the agency's implementation of the DATA Act, and conducted interviews with personnel from the Office of Management and Budget (OMB) involved with DATA Act

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¹ Public Law 113-101 (May 9, 2014)

implementation efforts. We also reviewed project management good practices,² Treasury and OMB's DATA Act project management plans, and other relevant documents. We conducted our fieldwork from August to December 2014. Appendix 1 contains a detailed description of our objective, scope, and methodology.

Results in Brief

We found that, as of October 31, 2014, Treasury and OMB had made progress in implementing the DATA Act. However, we do have concerns with Treasury's project management practices that we believe could hinder the timely, comprehensive implementation of this program, if not addressed.

Specifically, Treasury and OMB put a governance structure in-place and developed certain project management documents that provided a vision for the implementation of the DATA Act requirements. The project management documents developed were designed to track the implementation of significant DATA Act workstreams at a high level. These documents, however, lack several key attributes called for by project management good practices.

Due to the complexities involved, Treasury and OMB are primarily using an agile approach to implement the DATA Act. However, Treasury officials acknowledged that since all aspects of the implementation do not fit this approach, they are using a mix of

Project Management Institute: A Guide to the Project Management Body of Knowledge (PMBOK), Fourth Edition, 2008, is a recognized industry standard. PMBOK defines a good practice as one where there is general agreement that the application of these skills, tools, and techniques can enhance the chances of success over a wide range of projects. In addition, The Government Accountability Office's July 2012 report entitled Software Development Effective Practices and Federal Challenges in Applying Agile Methods GAO-12-681 described good practices in applying agile methods.

Agile is a project management methodology that values individuals and interactions over processes and tools, working software over comprehensive documentation, customer collaboration over contract negotiation, and responding to change over following a plan.

agile and traditional project management practices.⁴ We noted that the project planning documents that Treasury developed did not describe the different practices being used for each identified workstream. Additionally, the project management documents provided did not fully reflect recognized artifacts, tools, and metrics for either an agile or traditional project management methodology. Furthermore, detailed project plans for certain workstreams were either incomplete or were not provided to us. We also noted inconsistencies between the statuses reflected in tracking documents.

The absence of key project management artifacts and the inconsistencies in the tracking statuses noted may be due, in part, to the lack of definition surrounding the method of project management to be followed for each workstream. Also of note, Treasury encountered delays in filling the program manager position for the DATA Act's implementation effort. Subsequent to the completion of our fieldwork, Treasury officials did fill the position with an internal transfer.

We are recommending that project management over the DATA Act's implementation efforts be strengthened by (1) defining the project management methodology being used for each workstream, and (2) ensuring that project management artifacts appropriate to those methodologies such as project planning tools, progress metrics, and collaboration documentation are adopted and maintained. To this end, we are also recommending that management ensure that the individual charged with program management has the requisite qualifications, resources, and understanding of project management methodologies used to effectively fulfill that role.

In a written response, which is included as appendix 2, Treasury management commented that since the enactment of the DATA Act in May 2014, Treasury has embraced its new responsibility to lead the government-wide implementation of the DATA Act in partnership with OMB. In the initial 6-month period after

⁴ Traditional project management is a project management methodology that is generally characterized by a step-by-step approach which moves the project through its five stages: initiation, planning, execution, monitoring, and completion. Each stage is done in chronological order, with a stage beginning after the preceding stage has been completed.

enactment, Treasury, in partnership with OMB, focused on laying the groundwork for a successful government-wide implementation of the DATA Act. Treasury and OMB were successful in establishing a comprehensive Government-wide DATA Act governance and implementation structure. Treasury and OMB also conducted initial stakeholder outreach and created virtual platforms for both the Federal and non-Federal communities to facilitate communication and collaboration.

Treasury management concurred with our recommendations. Treasury recognized that there are improvements to be made with the artifacts as well as the processes for the agile approach. The response described a number of process improvements that have been recently implemented and stated that Treasury is committed to improving workstream documentation to identify and document when the agile approach is being used. In addition, Treasury noted that it filled the program manager position with an individual who has received formal training and is certified in agile project management methodologies. Treasury committed to ensure that the data transparency office program management personnel have the requisite qualifications and skills to perform the coordinating functions necessary to achieve its larger business goal. We consider the actions taken by Treasury to be responsive to our recommendations.

Background

Signed into law May 9, 2014, the purposes of the DATA Act are to:

- (1) expand the Federal Funding Accountability and Transparency Act of 2006 (FFATA)⁵ by disclosing direct Federal agency expenditures and linking Federal contract, loan, and grant spending information to programs of Federal agencies to enable taxpayers and policy makers to track Federal spending more effectively;
- (2) establish Government-wide data standards for financial data and provide consistent, reliable, and searchable Governmentwide spending data that is displayed accurately for taxpayers

⁵ Public Law 109-282 (Sep. 26, 2006)

- and policy makers on USAspending.gov (or a successor system that displays the data);
- (3) simplify reporting for entities receiving Federal funds by streamlining reporting requirements and reducing compliance costs while improving transparency;
- (4) improve the quality of data submitted to USAspending.gov by holding Federal agencies accountable for the completeness and accuracy of the data submitted; and
- (5) apply approaches developed by the Recovery Accountability and Transparency Board (Recovery Board)⁶ to spending across the Federal government.

To fulfill these purposes, the DATA Act imposes requirements on the Director of OMB, the Secretary of the Treasury, the Inspector General (IG) of each Federal agency, and the Comptroller General of the United States (Comptroller General). In brief, the DATA Act requires that: (1) OMB and Treasury establish Government-wide financial data standards for Federal funds made available to or expended by Federal agencies and entities receiving Federal funds by May 2015; (2) Treasury, in consultation with OMB, ensure this financial data is accurately posted and displayed on USAspending.gov (or a successor system) by May 2017; and (3) OMB and Treasury ensure the data standards established are applied to the data made available on the website by May 2018.

The DATA Act requires the IG of each Federal agency to review a statistically valid sampling of the spending data submitted under the DATA Act by the Federal agency, and submit to Congress and make publically available a report assessing the completeness, timeliness, quality, and accuracy of the data sampled and the implementation and use of data standards by the Federal agency. The first IG reports are due November 2016 with others following at 2 year intervals.

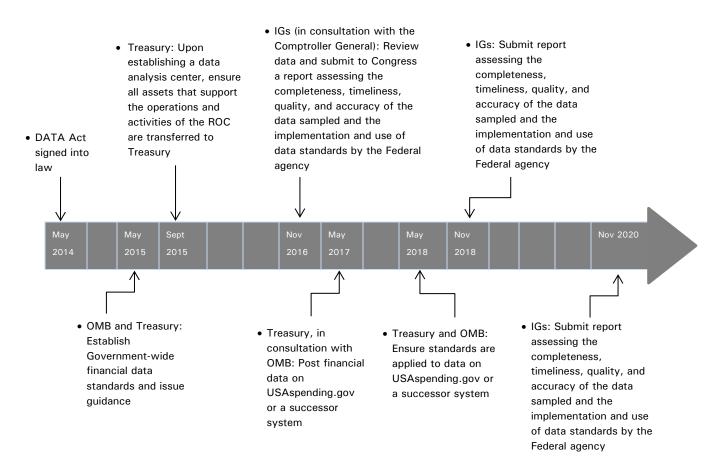
The Recovery Board is a Federal agency that oversees spending under the American Recovery and Reinvestment Act of 2009 (Recovery Act) and manages the Recovery.gov website. Recovery.gov is the official website that provides access to data related to Recovery Act spending and allows for the reporting of potential fraud, waste, and abuse. Originally scheduled to sunset September 30, 2013, the Disaster Relief Appropriations Act of 2013 extended the Recovery Board through September 30, 2015.

Under the DATA Act, Treasury may also establish a data analysis center, or expand an existing service, to provide data analytic tools and data management techniques to support the prevention and reduction of improper payments by Federal agencies and improve efficiency and transparency in Federal spending. If Treasury establishes a data analysis center or expands an existing service, all assets identified by Treasury that support the operations and activities of the Recovery Board's Recovery Operations Center (ROC)⁷ relating to the detection of waste, fraud, and abuse in the use of Federal funds are to transfer to Treasury on or before the date the Recovery Board terminates (September 30, 2015).

The timeline on the following page shows those DATA Act requirements, authorities, and deadlines that impact Treasury.

The Recovery Board launched the ROC in November 2009 to provide a central data analytics service to support fraud detection and prevention related to American Recovery and Reinvestment Act of 2009 awards.

Figure 1: Treasury DATA Act Requirements, Authorities, and Deadlines



Source: OIG analysis of DATA Act requirements

In addition to the deadlines shown in Figure 1, the DATA Act imposes other requirements on the Comptroller General and OMB. In this regard, the Comptroller General is to submit to Congress reports assessing data completeness, timeliness, quality, and accuracy in November 2017, 2019, and 2021, respectively. OMB is required to establish a pilot program to evaluate Federal award recipient reporting by May 2015; report to Congress on the results of that program by August 2017; and, by August 2018, issue guidance to agencies as to how Government-wide financial data standards will be applied to information required to be reported by entities receiving Federal awards to reduce administrative burden and simplify reporting processes.

Audit Results

Treasury's DATA Act Implementation Efforts

The DATA Act places initial responsibility for implementation efforts squarely on Treasury and OMB. Recognizing that strong oversight is critical to successful implementation of the DATA Act, Treasury and OMB worked together to create a Government-wide governance and implementation structure. Treasury documented this structure and implementation approach in a draft document entitled "White Paper: Implementing the Data Act" (Draft White Paper). The following is a discussion of Treasury and OMB's DATA Act implementation approach and their progress in meeting the requirements imposed by the Act.

DATA Act Governance Structure

Treasury and OMB's DATA Act implementation efforts are governed by an Executive Steering Committee (ESC) and supported by an Interagency Advisory Committee (IAC). The ESC consists of Treasury's Fiscal Assistant Secretary and OMB's Controller. The ESC is responsible for setting overall policy and guidance, overseeing recommendations, and making and/or enforcing decisions, as necessary. The ESC meets bi-weekly to monitor the implementation progress at a high level, discuss implementation and policy questions, and resolve issues as they arise.

The IAC, which is responsible for providing recommendations to the ESC related to DATA Act implementation, is comprised of representatives from various government-wide communities, and provides leadership in obtaining stakeholder buy-in on recommendations. The IAC representatives include the chairs of the Budget Officers Advisory Council (BOAC), Chief Financial Officer (CFO) Council, Award Committee for E-Government (ACE), Chief Information Officers Council (CIOC), Performance Improvement Council (PIC), Chief Acquisition Officers Council (CAOC), and Council on Financial Assistance Reform (COFAR) as well as a representative from the Executive Office of the President - Office of Science and Technology Policy (EOP-OSTP), General Services Administration (GSA), OMB, Treasury, and members of the IG community.

We requested documentation to support the activities of all ESC and IAC meetings, including agendas and minutes, through October 31, 2014. Based on documentation provided by Treasury, we determined that the ESC met five times; however, Treasury only provided a summary of the topics that were discussed from each of these meetings. Treasury officials told us that the members of the ESC met frequently to discuss issues related to the implementation of the DATA Act requirements; however, we were informed that meeting notes were not taken. With regard to the IAC, we were informed of meetings held on September 3, 2014, and October 1, 2014, and were provided with the agendas and minutes from those meetings.

DATA Act Implementation Approach

In the Draft White Paper, Treasury defined its approach to implementing the requirements of the DATA Act. Due to the complexities involved, the implementation is being executed using an agile approach. This approach, typically used in software development, involves collaboration across the Federal community and is characterized by the execution of quick, small scale pilots to test innovative concepts and strategies for implementation. In addition, rather than pursuing a "system-centric" solution which would collect, aggregate, and validate data from agencies in a bulk file or central system, Treasury proposed a "data-centric" approach. This approach focuses on managing existing data and seeks to avoid massive system changes across Federal agencies. Rather than require agencies to change existing processes or system terms, the data-centric approach calls for agencies to map data from their existing systems to a standard of taxonomy.8 Once the data is mapped, it is anticipated that data may be pulled from agency specified data warehouses, financial systems and/or mixed feeder systems into a virtual repository. The data-centric approach is intended to provide the necessary standards and format to enable users to query data across the government.

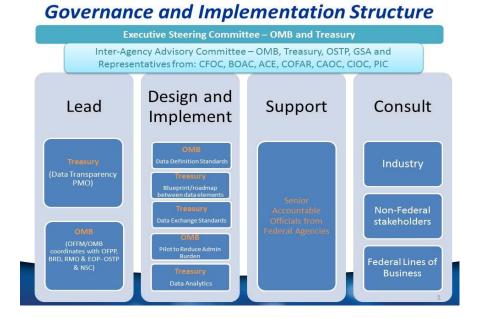
⁸ Taxonomy is a systematic classification of data elements that allows it to be shared and reused in different systems.

A mixed feeder system is an information system that can support both financial and non-financial functions. Such systems may include those designed for: property management, inventory, budget formulation, acquisition, and personnel and payroll.

DATA Act Implementation Structure

To execute the data-centric approach envisioned in the Draft White Paper, Treasury and OMB created an implementation structure that is divided into four general areas: (1) Lead, (2) Implement, (3) Support, and (4) Consult.

Figure 2: OMB and Treasury Governance and Implementation Structure



PMO - Program Management Office

OFFM - OMB, Office of Federal Financial Management

OFPP- OMB, Office of Federal Procurement Policy

BRD - OMB, Budget Review Division

RMO - OMB, Resource Management Office

NSC - National Security Council

Source: Fiscal Service

Following is a discussion of the implementation structure and the status of each area as of October 31, 2014, based on our audit.

Lead

The DATA Act designates Treasury and OMB to lead the implementation effort. As the implementation leads, Treasury and OMB are responsible for developing and guiding the implementation approach and strategy; coordinating and/or developing policies, as

necessary; providing program management functions; and conducting internal and external stakeholder outreach.

<u>Status</u>

In fiscal year 2014, Fiscal Service established a Data Transparency Office (DTO) and assigned to that office the responsibility for leading DATA Act implementation efforts in conjunction with OMB's Office of Federal Financial Management (OFFM). In addition to a lead role in implementing the DATA Act, DTO has programmatic responsibilities over the transition of the USAspending.gov website from GSA to Treasury. 10 Fiscal Service's fiscal year 2014 President's Budget request allocated \$5.5 million to establish the DTO to increase transparency in Federal finances at the Government-wide level and support programmatic operations to improve USAspending.gov; however, Treasury officials stated that no funds were specifically appropriated for DATA Act implementation. These officials also noted that they were working with OMB to secure future funding for the implementation. As of October 31, 2014, DTO had two full-time employees—the Executive Director and a Policy Analyst—primarily assigned to DATA Act activities, as well as two part-time detailees supporting the USAspending.gov improvement efforts. 11 Treasury officials told us that they planned to hire a program manager to assist with the DATA Act implementation; however, as of October 31, 2014, the position had not been filled. A job announcement for a Program Analyst to oversee Treasury's DATA Act implementation efforts was posted on June 18, 2014, and closed on June 30, 2014. Subsequent to the completion of our fieldwork, Treasury officials extended an offer to a candidate in October 2014. The candidate declined the offer in November 2014. That same month, Treasury filled the position with an internal transfer.

In a memorandum to Treasury, dated February 4, 2014, the OMB Director designated Fiscal Service as the agency responsible for operating and supporting the USAspending.gov website. The website is currently operated by GSA under an Interagency Agreement with Treasury. Fiscal Service launched a refreshed website on March 31, 2015. Treasury OIG is currently conducting a review of actions taken by Fiscal Service to meet its programmatic responsibilities related to the USAspending.gov website.

Effective October 5, 2014, the DTO Executive Director was selected as Treasury's Deputy Assistant Secretary for Accounting Policy. We were told that the Deputy Assistant Secretary will continue her work on developing and overseeing Government-wide accounting policy and advancing transparency in Federal government financial management data through the implementation of the DATA Act.

The implementation approach described in the Draft White Paper contains certain aspects that align with an agile project management approach. Treasury officials told us that the agile approach is generally appropriate for the DATA Act since project outcomes are not sufficiently known at the present time. However, these officials acknowledged that since not all workstreams fit this structure, they are using a mix of agile and traditional project management practices. In response to our inquiries regarding a project management plan for the DATA Act implementation, officials within DTO provided us a document entitled "DATA Act Implementation – 12 Month Plan" (12 Month Plan). The 12 Month Plan, maintained by DTO, is a project schedule of tasks, duration, and start/end dates typically seen in a traditional project management approach. Our review of this plan along with the Draft White Paper and the Executive Dashboard, 12 found that Treasury had provided a vision for the implementation of the DATA Act requirements, and developed tools designed to track the implementation's progress at a high level. However, we noted inconsistencies between the task statuses reflected in the 12 Month Plan and the Executive Dashboard and also found that these documents, taken as a whole, lacked several key attributes called for by project management best practices.

These matters are discussed further in the Implement section of this report below.

Implement

This area of responsibility is where most of the hands-on implementation work is to occur and is divided into five high-level workstreams based on the requirements of the DATA Act. These workstreams are: (1) Data Exchange Standards, (2) Blueprint/Roadmap between Data Elements, (3) Data Definition Standards, (4) Pilot to Reduce Administrative Reporting Burden, and (5) Data Analytics.

The Executive Dashboard is a high-level summary of the status of the DATA Act implementation prepared by personnel within DTO and used by members of the ESC to monitor the progress of the implementation.

The following is a discussion of the workstreams and the status of each as of October 31, 2014.

 <u>Data Exchange Standards (Treasury)</u> - This workstream, led by DTO, is responsible for establishing the standards for exchanging Federal financial data between systems and conducting agency pilots to test these standards.

Status The October 20, 2014, Executive Dashboard showed that this workstream was on track; however, DTO's 12 Month Plan dated October 14, 2014, listed a number of milestones behind schedule. That said, the task to develop a detailed project plan, scope, and methodology approach for this workstream was listed as complete on the 12 Month Plan. We requested a copy of the detailed plan but it has not been provided to us.

We did see evidence that progress has been made on this workstream. Treasury contracted with a vendor to create the initial prototype to demonstrate that the U.S. Standard General Ledger¹³ data could be mapped effectively to a standardized data model, or "common language". Additionally, Treasury extended the prototype as a pilot to the Department of Agriculture, the Department of Education, and the Department of Homeland Security. These agencies were selected given their diverse grant, loan, and procurement portfolios. The results from the pilot will form the basis of the strategy to develop and implement the intelligent data framework Government-wide. The prototype pilot was scheduled for completion by December 22, 2014. We plan to follow-up on the pilot's status and results in future audit work.

 Blueprint/Roadmap between Data Elements (Treasury) - This workstream is led by Fiscal Service's Fiscal Accounting

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The U.S. Standard General Ledger provides a uniform chart of accounts and technical guidance for standardizing Federal agency accounting. Under the Federal Financial Management Improvement Act of 1996 (Public Law 104-208, Title VIII), agencies are required to implement and maintain financial management systems that comply substantially with the U.S. Standard General Ledger at the transaction level.

Office¹⁴ in close collaboration with OMB's BRD, the Department of Homeland Security, and subject matter experts from other agencies, as needed. The group is responsible for developing the data element blueprint/roadmap, or data model, that will depict how the required FFATA and DATA Act elements relate to each other, and the authoritative sources of the data.

Status The October 20, 2014, Executive Dashboard showed that this workstream was on track; however DTO's 12 Month Plan dated October 14, 2014, listed a number of milestones behind schedule. For example, the task to develop a detailed project plan, scope, and methodology with a due date of October 1, 2014, was only 25 percent complete. Although the Draft White Paper provided a brief description on this workstream, it did not provide detail to explain how the efforts led by the Fiscal Accounting Office will meet the requirements set forth in the DATA Act.

• Data Definition Standards (OMB) - This workstream is led by OMB's OFFM. OFFM has designated leads for each data element to provide recommendations on the data definition standard to the IAC. A Treasury official told us that Treasury and OMB are leveraging on the work already carried out by the Department of Defense (DOD) and the Department of Health and Human Services (HHS) for setting data standards. DOD and HHS provided recommendations for the data element definitions under the Award Committee for

Called the Fiscal Accounting Office in DATA Act implementation documentation, this office appears on Fiscal Service's organizational chart as Fiscal Accounting Operations and Government Wide Accounting.

E-Government¹⁵ and the Financial Assistance Committee for E-Government.¹⁶

Status The October 20, 2014, Executive Dashboard showed that this workstream was behind schedule. DTO's 12 Month Plan dated October 14, 2014, showed the workstream's progress at zero percent complete, even though several start and end dates for component tasks had passed. According to Treasury personnel, work commenced on developing a data element inventory, schedule, and activity durations; but the Executive Dashboard had not been updated with that information.

We did see evidence that, in fact, OMB has made progress on this workstream. A Proposed Data Definition Workflow and a Data Elements – Simple List dated October 1, 2014, was posted on the MAX.gov site.¹⁷ On December 9, 2014, subsequent to our end of fieldwork date, Treasury and OMB released a list of 58 data elements being deliberated on and discussed by the Federal community as part of the DATA Act implementation. We contacted OMB to obtain an overall project plan for this workstream along with an updated status but have not received a response as of the date of this report. We plan to follow-up on the project plan in future audit work.

Pilot to Reduce Administrative Burden (OMB) – The DATA
 Act added Section 5 to FFATA requiring OMB to establish,
 by May 9, 2015, a pilot to (1) standardize reporting
 elements across the Federal government, (2) eliminate

The Award Committee for E-Government is an executive steering committee comprised of Federal acquisition representatives. The committee provides the Federal acquisition community vision, perspective and guidance, and executive level decision-making and oversight regarding scope, priorities, budget, and funding as it relates to the Integrated Acquisition Environment E-Government initiative. The Integrated Acquisition Environment E-Government initiative seeks to create a secure business environment that facilitates and supports cost-effective acquisition of goods and services in support of mission performance.

The Financial Assistance Committee for E-Government is a Federal community group dedicated to addressing the needs of the Federal financial assistance community as it relates to collecting, using, disseminating, and displaying Federal financial assistance data.

Max.gov is a website that allows Federal agencies and their partners to collaborate across agencies by sharing information and files.

duplication in financial reporting, and (3) reduce compliance costs for recipients of Federal awards.

Status The October 20, 2014, Executive Dashboard showed that this workstream was on track. DTO's 12 Month Plan dated October 14, 2014, contained very little detail on this workstream. However, as Treasury does not have responsibility for this DATA Act requirement, we did not evaluate the status of this workstream further.

• Data Analytics (Treasury) – The DATA Act added Section 6 to FFATA stating that, among other things, Treasury may establish a data analysis center, or expand an existing service, to provide data analytic tools and data management techniques to support the prevention and reduction of improper payments by Federal agencies and improve efficiency and transparency in Federal spending. All assets identified by Treasury that support the operations and activities of the Recovery Board's ROC relating to the detection of waste, fraud, and abuse in the use of Federal funds are to transfer to Treasury upon the establishment of the data analysis center or the expansion of services but no later than the date that the Recovery Board terminates (September 30, 2015).

Status The October 20, 2014, Executive Dashboard showed that this workstream was on track. DTO's 12 Month Plan dated October 14, 2014, showed that the workstream had not been started. However, based on interviews with Treasury personnel, Treasury was determining the viability of options related to the possible establishment of a data analysis center or expansion of an existing service, and transfer of ROC assets.

Support

Senior Accountable Officials¹⁸ (SAO) from Federal agencies are responsible for providing high-level feedback on the DATA Act implementation and workstream outputs, as directed by OMB and Treasury.

Status As of October 31, 2014, Treasury and OMB held conference calls with the SAOs on September 17 and 25, 2014, to discuss the DATA Act and agencies' responsibilities under the statute, Treasury and OMB's implementation strategy, and the SAO's role in the Government-wide implementation efforts. We requested documentation to support that discussion; however, Treasury was unable to provide that information. According to Treasury personnel, the conference calls were informal and did not contain full representation from the CFO Act agencies due to the inability to obtain accurate contact information.

Consult

The DATA Act requires Treasury and OMB to consult with public and private stakeholders in establishing data standards by incorporating widely accepted common data elements such as those developed and maintained by international standard setting bodies and accounting standards organizations. Internal stakeholders include Federal departments and agencies and Federal councils, groups, and boards. In addition to the internal stakeholders, external stakeholders include state, local, and tribal governments, citizens, private industry, transparency advocacy groups, and academia.

Status Treasury and OMB solicited feedback and advice on best practices on data standards and user experience from various stakeholders. Treasury has made numerous stakeholder presentations regarding the DATA Act implementation including council/committee meetings, one-on-one meetings with agencies, outreach events and participation in transparency advocacy groups

SAOs are high-level senior officials who are accountable for the quality and objectivity of Federal spending information. These senior leaders ensure that the information conforms to OMB guidance on information quality and adequate systems and processes are in place within the agencies to promote such conformity.

meetings. In addition, on September 26, 2014, Treasury hosted a DATA Act Town Hall to allow public and private stakeholders to make presentations related to data transparency and data standardization. On the same day, Treasury published a notice in the Federal Register seeking input on the establishment of financial data standards, and requested input from public and private stakeholders on alternatives for Treasury to consider. 19 The deadline to submit the comments was November 25, 2014. Treasury received 35 comments. Additionally, to foster communication across communities, Treasury developed webpages on Max.gov and GitHub.com, 20 allowing both public and private stakeholders to provide feedback during the implementation process. We inquired about Treasury's plans or process for documenting input received from internal and external stakeholders and evaluating the impact that this input has on the implementation approach. A Treasury official told us that the agency does not have a formal process to track the information it receives. We plan to follow-up on Treasury analysis and use of public and private feedback in future audit work.

Finding DATA Act Implementation Requires Stronger Project Management

According to the Government Accountability Office (GAO), program management principles and best practices emphasize the importance of using a program management plan that, among other things, establishes a complete description that ties together all program activities. PMBOK notes that the project management plan and project management documents explore all aspects of the scope, time, cost, quality, communication, risk, and procurements associated with the project. The project management plan becomes the primary source of information on how the project will be planned, executed, monitored, controlled and closed. This methodology contrasts with the themes of agile project management which value individuals and interactions, customer

¹⁹ 79 FR § 58045, Public Input on the Establishment of Financial Data Standards (Data Exchange) (Sep. 26, 2014)

²⁰ Github is a web-based open source collaboration tool based on the Git version control software which allows users to make and track changes for software development projects.

²¹ GAO-11-50, Information Technology: Opportunities Exist to Improve Management of DOD's Electronic Health Record Initiative (Oct. 2010)

collaboration, and responding to change over processes and tools, comprehensive documentation, and following a plan.

The agile implementation approach described in the Draft White Paper contains certain aspects that align well with an agile project management approach. Treasury officials told us that the agile approach is generally appropriate for the DATA Act since project outcomes are not sufficiently known at the present time. However, these officials acknowledged that since not all workstreams fit this structure, a mix of agile and traditional project management practices are being used. The Draft White Paper did not describe the project management methodology to be used for each workstream.

In response to our inquiries regarding a project management plan for the DATA Act implementation, officials within the DTO provided us a copy of their 12 Month Plan. As previously discussed, the 12 Month Plan is a project schedule listing tasks, duration, and start and end dates. We reviewed the 12 Month Plan together with the Draft White Paper and Executive Dashboard and were able to determine that Treasury did in these documents, provide a vision for the implementation and had developed tools designed to track the implementation's progress at a high level. However, we found that the documents lacked several key attributes called for by project management best practices.

Specifically, the documents did not clearly describe how the detailed tasks associated with the implementation would be accomplished nor did they clearly show how the tasks in the various workstreams tie together to produce the desired end result. It may be understandable that given Treasury's implementation approach, documentation connected with traditional project management such as a cost management plan, human resources plan, procurement plan, or a quality management plan would not be prepared. However, we noted that the documents provided did not fully reflect recognized artifacts (documentation), tools, and metrics associated with an agile project management methodology

either. Agile artifacts may include, for example, a framework, user stories, backlog tracking, and burn down charts.^{22,23}

As noted previously, certain detail workstream project plans, such as the Blueprint/Roadmap between Data Elements and the Data Definition Standards workstreams, had not been completed or were not provided to us. For other areas, such as evaluating stakeholder input, no formal process to track the information received had been developed. In addition, we noted inconsistencies between the statuses reported in the 12 Month Plan and the Executive Dashboard which cause us to question whether the 12 Month Plan is being adequately maintained and monitored.

The absence of expected project management documents and inconsistencies such as those described above may be attributable, in part, to the lack of definition surrounding the method of project management to be followed for each of the various implementation workstreams. In addition, Treasury's inability to timely fill the program manager position may be a contributing factor. Subsequent to the completion of our fieldwork, Treasury officials did fill the position with an internal transfer.

In conclusion, we found that Treasury has made progress toward implementing the DATA Act. Without a doubt, this implementation is a complex project involving multiple agencies and systems and the development of new data handling methodologies, coupled with aggressive deadlines. Accordingly, we cannot emphasize enough the criticality for Treasury to have a well-defined project

In the agile methodology a framework defines management processes and roles. The user story, developed in consultation with the customer or product owner, is a high-level definition of work to be done that contains just enough information so that the developers can produce a reasonable estimate of the effort needed to implement it. Backlog tracking is a list of features or technical tasks which the team maintains and which, at a given moment, are known to be necessary and sufficient to complete a project. Burn-down charts are graphical representations of the amount of work remaining to do versus time it took to complete it.

Maintaining documentation is a fundamental tenet of government accountability and transparency. Treasury established its own documentation requirements in Treasury Directive 80-05, which states that all program officials shall create and maintain adequate and proper documentation of the program for which they are responsible. This means a record of the conduct of government business that is complete and accurate to the extent required to document the organization, functions, policies, decisions, procedures, and essential transactions of their office and to protect the legal and financial interests of the government and of persons directly affected by the activities of their office.

management plan overseen by a qualified program manager to facilitate the successful, timely completion of the implementation and to adequately document project activities.

Recommendations

We recommend that the Fiscal Assistant Secretary:

 Strengthen project management over the DATA Act's implementation efforts by defining the project management methodology being used for each significant workstream and ensuring that project management artifacts appropriate to those methodologies such as project planning tools, progress metrics, and collaboration documentation are adopted and maintained.

Management Response

Treasury agreed that strong project management is important for successful DATA Act implementation. To that end, shortly after enactment of the DATA Act, Treasury identified a number of potential implementation challenges including the transformative nature of the DATA Act, challenging statutory deadlines, funding constraints, and the need to consider ongoing and evolving stakeholder interests. Due to these potential implementation challenges, Treasury made the decision to implement a recognized agile (and iterative) development approach for each workstream, rather than a traditional project management approach, to the extent practicable.

In addition, Treasury recognized that there are improvements to be made with the artifacts as well as the processes for the agile approach. For example, Treasury has begun using the agile scrum methodology to facilitate the development of a prototype broker in the Implementation Pilot. In executing the scrum methodology, Treasury has named all the key roles: the product owner, a Certified ScrumMaster®, and the team. The team is tracking the scope of individual sprints in user stories captured on a virtual story board. In addition, Treasury is committed to improving workstream documentation to identify and document when the agile approach is being used.

OIG Comment

Treasury's corrective actions are responsive to the recommendation.

 Ensure the individual charged with program management has the requisite qualifications, resources, and understanding of project management methodologies used to effectively fulfill that role.

Management Response

Treasury agreed that the individuals charged with program management responsibility must have the requisite qualifications, resources, and understanding to successfully carry out their responsibilities. Treasury filled the program manager position within the DTO in December 2014, and determined that the individual had the requisite qualifications, knowledge, and skills. Treasury will continue to ensure that DTO program management personnel have the requisite qualifications and skills to perform the coordinating functions necessary to achieve the larger business goal of DTO. For example, the program manager is a Certified ScrumMaster®. A scrum master understands scrum methodology values, practices, and applications, and provides a level of knowledge and expertise above and beyond that of a typical program manager. An important role of DTO is to provide overall strategic leadership as well as oversight and coordination of the overall project-level activities, or workstreams. Deploying the skill of a program manager, who is also certified in scrum methodology, will effectively position DTO to carry out this important role. Treasury will endeavor to increase the staff and other resources of DTO going forward to the extent possible b based on funding availability.

OIG Comment

Treasury's corrective actions are responsive to the recommendation. As part of our ongoing oversight over Treasury's DATA Act implementation efforts, we plan to review how DTO is carrying out its role and the resourcing of this office.

* * * * *

We appreciate the courtesies and cooperation provided to our staff during the audit. If you wish to discuss the report, you may contact me at (202) 927-6345 or Andrea Smith, Audit Manager, at (202) 927-8757. Major contributors to this report are listed in appendix 3.

/s/ James L. Lisle, Jr. Director, Fiscal Service Audits

Our audit objective was to determine the sufficiency of plans and actions taken by the Department of the Treasury (Treasury) and its Bureau of the Fiscal Service (Fiscal Service) as of October 31, 2014, to timely comply with the Digital Accountability and Transparency Act of 2014 (DATA Act), including but not limited to those plans and actions to (1) establish Government-wide financial data standards for any Federal funds made available to or expended by Federal agencies and entities receiving Federal funds by May 2015; (2) ensure this financial data is accurately posted and displayed on USAspending.gov (or a successor system) by May 2017; (3) ensure the established data standards are applied to the financial data made available on website by May 2018; and (4) establish a data analysis center or expand an existing service to provide data, analytic tools and data management techniques to support the prevention and reduction of improper payments by Federal agencies and improving efficiency and transparency in Federal spending. This audit is the first of a series of audits on Treasury's implementation of the DATA Act.

To accomplish our audit objective, we

- Reviewed the DATA Act which outlined the requirements for Treasury to establish Government-wide financial data standards and increase the availability, accuracy, and usefulness of Federal spending information.
- Reviewed Treasury's DATA Act implementation planning documents including:
 - Draft "White Paper: Implementing the DATA Act" dated June 26, 2014
 - "Implementing the DATA Act: Treasury Roadmap": presentation to the Chief Financial Officers (CFO) Council dated June 4, 2014
 - "DATA Act: Implementation Efforts" presentation to the CFO Council dated July 2014
 - "DATA Act Implementation Executive Dashboard" dated October 1, 2014
 - "DATA Act Implementation (12 Month Plan)"
- Obtained an understanding of the Data Transparency Office (DTO) structure and staffing by reviewing Fiscal Service 2014-2015 Tactical Priorities, the DTO organizational chart, and a listing of project team members and their respective roles.

- Reviewed agendas and minutes from meetings with the Interagency Advisory Council and Executive Steering Committee from August 12, 2014, through October 31, 2014.
- Reviewed the Memorandum of Understanding between the Recovery Accountability and Transparency Board (Recovery Board) and Fiscal Service effective June 30, 2014.
- Reviewed the Interagency Agreement between the General Services Administration and Treasury effective March 1, 2014
- Reviewed Treasury's Intelligent Data Prototype Pilot Performance Work Statement.
- Reviewed the vendor's Intelligent Data Prototype Pilot Technical Proposal prepared for Fiscal Service dated May 6, 2014.
- Reviewed Treasury's Intelligent Data Executive Briefing Data Centric – Validation, Reporting and Analysis Proof of Concept presentation.
- Reviewed the vendor's Department of the Treasury Study Program Plan prepared for Fiscal Service dated June 27, 2014. The purpose of the study was to demonstrate how the DATA Act information could be visualized on a website for open data publication.
- Interviewed Treasury's Fiscal Assistant Secretary and Deputy Assistant Secretary for Accounting Policy, and the Office of Management and Budget's (OMB) Chief of Management Controls & Assistance Branch, Office of Federal Financial Management, to gain an understanding of Treasury's and OMB's DATA Act implementation efforts.
- Interviewed the Recovery Board Chair and Executive Director to gain an understanding of the Recovery Board's activities and its interactions with Treasury as it relates to the DTO, USAspending.gov, and the DATA Act.
- Visited the Recovery Board's Recovery Operations Center, observing demonstrations of its analytical capabilities.
- Reviewed Project Management Institute: A Guide to the Project Management Body of Knowledge (PMBOK), Fourth Edition, 2008 to establish criteria related to traditional project management.
- Reviewed the Government Accountability's (GAO) report Software Development: Effective Practices and Federal Challenges in Applying Agile Methods (GAO-12-681) to establish criteria related to agile project management.

Reviewed GAO's report Information Technology: Opportunities
 Exist to Improve Management of DOD's Electronic Health
 Record Initiative (GAO-11-50) to establish criteria related to
 traditional project management.

We performed our audit fieldwork principally from August 2014 through December 2014.

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.



DEPARTMENT OF THE TREASURY WASHINGTON, D.C. 20220

May 1, 2015

James L. Lisle, Jr.
Director, Fiscal Service Audits
Office of the Inspector General
U.S. Department of the Treasury
1500 Pennsylvania Avenue, NW
Washington, DC 20220

Dear Mr. Lisle:

Thank you for the opportunity to review and comment on the Treasury Office of Inspector General (OIG) draft audit report regarding Digital Accountability and Transparency Act of 2014 (DATA Act) implementation as of October 31, 2014.

Since the enactment of the DATA Act in May 2014, Treasury has embraced its new responsibility to lead the government-wide implementation of the DATA Act in partnership with the Office of Management and Budget (OMB). We believe that the DATA Act provides not only an opportunity to improve federal spending transparency for the public, but also an opportunity to improve the internal management of the federal government. Better data leads to better decisions and ultimately a better government.

In the initial six-month period after DATA Act enactment, Treasury, in partnership with OMB, focused on laying the groundwork for a successful government-wide implementation of the DATA Act. A successful implementation of such a transformative initiative requires strong leadership, clear lines of accountability, and appropriate consultation with federal and nonfederal stakeholders. Treasury and OMB were successful in establishing a comprehensive government-wide DATA Act governance and implementation structure. We also conducted initial stakeholder outreach and created virtual platforms for both the federal and non-federal communities to facilitate communication and collaboration.

The draft audit report makes two recommendations both aimed at continuing to improve project management. We concur with both recommendations. The first recommendation is to strengthen project management by defining the project management methodology being used for each significant workstream and ensuring that project management artifacts appropriate for each workstream (such as project planning tools, progress metrics, and collaboration documentation) are adopted and maintained. Treasury agrees that strong project management is important for successful DATA Act implementation.

To that end, shortly after enactment of the DATA Act, Treasury identified a number of potential implementation challenges including, the transformative nature of the DATA Act, challenging statutory deadlines, funding constraints, and the need to consider ongoing and evolving stakeholder interests. Due to these potential implementation challenges, Treasury made the

decision to implement a recognized agile (and iterative) development approach for each workstream, rather than a traditional project management approach, to the extent practicable.

Treasury acknowledges that a project management framework and disciplines are required for both the traditional and agile approaches. We recognize that there are improvements to be made with the artifacts as well as the processes for our agile approach. We are committed to implementing the agile approach in an appropriate and disciplined manner. For example, we have recently begun using the agile scrum methodology to facilitate the development of a prototype broker in the Implementation Pilot. In executing the scrum methodology, we have named all the key roles: the product owner, a Certified Scrummaster®, and the team. This team is iterating in two-week cycles called sprints with the standard scrum rituals (i.e. sprint planning, spring review, and daily stand-ups). In addition, the team is tracking the scope of the individual sprints in user stories captured on a virtual storyboard. In addition, Treasury is committed to improving workstream documentation to identify and document when the agile approach is being used.

The draft report's second recommendation is to ensure the individual charged with program management has the requisite qualifications, resources, and understanding of project management to effectively fulfill that role. Treasury agrees that the individuals charged with program management responsibility for DATA Act implementation must have the requisite qualifications, resources, and understanding to successfully carry out their responsibilities. Treasury filled the program manager position within the Data Transparency Program Office (DTO) in December 2014, and determined that the individual has the requisite qualifications, knowledge, and skills. Treasury will also continue to ensure that DTO program management personnel have the requisite qualifications and skills to perform the coordinating functions necessary to achieve the larger business goal of the DTO. For example, the program manager is a Certified ScrumMaster® who has received formal training. A scrum master understands scrum methodology values, practices, and applications, and provides a level of knowledge and expertise above and beyond that of a typical program manager.

An important role of Treasury's DTO is to provide overall strategic leadership as well as oversight and coordination of the overall project-level activities, or workstreams. We believe deploying the skill of a program manager, who is also certified in scrum methodology, will effectively position the DTO to carry out this important role. Treasury will endeavor to increase the staff and other resources of the DTO going forward to the extent possible based on funding availability.

Thank you for your effort and assistance in conducting this audit. We are committed to the continuous improvement of Treasury's DATA Act implementation efforts, and we look forward to working with you to achieve that goal.

David A Lebryk

Fiscal Assistant Secretary

Appendix 3 Major Contributors

Amni Samson, Audit Manager Andrea D. Smith, Audit Manager Maria M. McLean, Auditor-in-Charge David W. Younes, Program Analyst Kevin A. Guishard, Referencer

Department of the Treasury

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Deputy Fiscal Assistant Secretary for Accounting Policy
Office of the Deputy Chief Financial Officer, Risk and Control
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Commissioner
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Controller OIG Budget Examiner