Board of Governors of the Federal Reserve System

# The Board Can Enhance Enterprise Practices for Data Management Roles and Responsibilities



#### Office of Inspector General

Board of Governors of the Federal Reserve System Consumer Financial Protection Bureau



Executive Summary, 2023-MO-B-001, January 18, 2023

#### The Board Can Enhance Enterprise Practices for Data Management Roles and Responsibilities

#### Findings

The Board of Governors of the Federal Reserve System uses a decentralized data management model. As a result, the sections of Board divisions that we reviewed have established and defined roles and responsibilities for data management suitable to their business needs. Specifically, we found that the sections used differing processes and nomenclature to establish and define roles and responsibilities for data management and responsibilities for data management and responsibilities for data management and generations used and responsibilities for data management and differing methods to train personnel on these roles and responsibilities. In addition, the sections we reviewed used varying approaches to inventory their data.

We also found that the Board's chief operating officer has used the agency's delegations of authority to redelegate certain administrative responsibilities and authorities to other officials. However, the chief operating officer has not used a delegation of authority to redelegate to the chief data officer the administrative responsibilities and authorities related to data management and governance.

#### Recommendations

Our report contains recommendations designed to enhance enterprise practices related to data management roles and responsibilities, training, and data inventory management. Our report also recommends that authority for data management and governance be delegated to the chief data officer. In its response to our draft report, the Board concurs with our recommendations and outlines actions that have been or will be taken to address our recommendations. We will follow up to ensure that the recommendations are fully addressed.

#### Purpose

We conducted this evaluation (1) to describe the roles and responsibilities for managing data at the Board, including how they are established and defined, and (2) to identify opportunities for the Office of the Chief Data Officer to enhance enterprise frameworks, tools, and practices related to roles and responsibilities for managing data.

#### Background

The mission of the Office of the Chief Data Officer is to lead and coordinate the development and execution of the Board's data strategy and to support the agency's efforts to define and organize repeatable processes throughout the data life cycle so that it manages data consistently and efficiently.

The chief data officer issued the 2022–2025 Board Data Strategy in January 2022. This strategy outlines the goals and objectives that support the execution of the Board's strategic plan. The vision outlined in the strategy includes (1) transitioning from a decentralized data management model to a federated data management model to enable consistent use of data best practices and (2) empowering data operations through intentional communication and coordination.



Recommendations, 2023-MO-B-001, January 18, 2023

#### The Board Can Enhance Enterprise Practices for Data Management Roles and Responsibilities

# Finding 1: The OCDO Can Support Divisions by Establishing Roles and Responsibilities for Data Management and by Providing Training

Number	Recommendation	Responsible office
1	Finalize Boardwide data management roles and responsibilities and obtain BDC approval.	Office of the Chief Data Officer
2	Develop and obtain BDC approval for a Boardwide policy to facilitate the adoption of the finalized data management roles and responsibilities.	Office of the Chief Data Officer
3	Develop and provide training related to Boardwide data management roles and responsibilities to foster consistent messaging and expectations.	Office of the Chief Data Officer

#### Finding 2: The OCDO Can Support Divisions by Establishing Data Inventory Management Guidelines

Number	Recommendation	Responsible office
4	Develop guidance for creating and managing data inventories, including roles and responsibilities and metadata standards.	Office of the Chief Data Officer

# Finding 3: The COO Can Formally Empower the CDO to Implement Board Policies Related to Data Management and Governance

Number	Recommendation	Responsible office
5	Delegate administrative responsibilities and authorities for data management and governance to the CDO and communicate to all stakeholders the updated delegation of authority.	Office of the Chief Operating Officer



Office of Inspector General Board of Governors of the Federal Reserve System Consumer Financial Protection Bureau

### MEMORANDUM

**DATE:** January 18, 2023

**TO:**Patrick J. McClanahanChief Operating OfficerBoard of Governors of the Federal Reserve System

Katherine Tom Chief Data Officer Board of Governors of the Federal Reserve System

**FROM:** Michael VanHuysen *Will Multifug* Associate Inspector General for Audits and Evaluations

**SUBJECT:** OIG Report 2023-MO-B-001: *The Board Can Enhance Enterprise Practices for Data Management Roles and Responsibilities* 

We have completed our report on the subject evaluation. We conducted this evaluation (1) to describe the roles and responsibilities for managing data at the Board of Governors of the Federal Reserve System, including how they are established and defined, and (2) to identify opportunities for the Office of the Chief Data Officer to enhance enterprise frameworks, tools, and practices related to roles and responsibilities for managing data.

We provided you with a draft of our report for review and comment. In your response, you concur with our recommendations and outline actions that have been or will be taken to address our recommendations. We have included your response as appendix B to our report.

We appreciate the cooperation we received from the Office of the Chief Data Officer and the Board Data Council division representatives. Please contact me if you would like to discuss this report or any related issues.

cc: Phillip Daher John Stevens Ricardo A. Aguilera Cheryl Patterson

# Contents

Introduction	6
Objectives	6
Background	6
Office of the Chief Data Officer	6
The Board Data Council	7
The 2022–2025 Board Data Strategy	7
The OCDO's Planned Actions	7
Data Management Leading Practices	8
Finding 1: The OCDO Can Support Divisions by Establishing Roles and Responsibilities for Data Management and by Providing Training	9
The OCDO Should Finalize Boardwide Roles and Responsibilities for Data Management	9
The OCDO Should Provide Training on Boardwide Data Management Roles Once Established	10
Recommendations	11
Management Response	11
OIG Comment	11
Finding 2: The OCDO Can Support Divisions by Establishing Data Inventory Management Guidelines	12
The OCDO Should Develop Data Inventory Guidance	12
Recommendation	13
Management Response	13
OIG Comment	13
Finding 3: The COO Can Formally Empower the CDO to Implement Board Policies	
Related to Data Management and Governance	14
The COO Should Delegate to the CDO Authority for Data Management and Governance	14
Recommendation	15
Management Response	15
OIG Comment	15
Appendix A: Scope and Methodology	16
Appendix B: Management Response	17
Abbreviations	20

# Introduction

# **Objectives**

The objectives of this evaluation were (1) to describe the roles and responsibilities for managing data at the Board of Governors of the Federal Reserve System, including how they are established and defined, and (2) to identify opportunities for the Office of the Chief Data Officer (OCDO) to enhance enterprise frameworks, tools, and practices related to roles and responsibilities for managing data.

To achieve our objectives, we selected one section to review from each of the following Board divisions: Information Technology, International Finance, Monetary Affairs, Research and Statistics, Reserve Bank Operations and Payment Systems, Supervision and Regulation, and the Office of the Chief Operating Officer. We interviewed Board officials and reviewed documentation to understand the roles and responsibilities for managing data within the selected sections. We also benchmarked with other federal agencies and reviewed literature to identify any leading practices related to roles and responsibilities for managing data. Additional details on our scope and methodology are in appendix A.

# Background

The mission of the Federal Reserve System is to foster the stability, integrity, and efficiency of the nation's monetary, financial, and payment systems to promote optimal economic performance. Multiple Board divisions execute aspects of this mission by conducting research, analysis, and policymaking; supervising and regulating certain financial institutions and activities; overseeing important aspects of the nation's payments system; and promoting consumer protection, fair lending, and community development. Each of these divisions relies extensively on data for decisionmaking purposes. Historically, the Board's data management approach has been decentralized, which allowed divisions to manage their data assets and establish roles and responsibilities for managing data assets specific to their business needs. In 2012, the Board established the OCDO to improve data governance and support the Board's growing quantity of data while ensuring the operational flexibility required by data users.

# Office of the Chief Data Officer

On April 12, 2013, the Board announced the appointment of its first chief data officer (CDO). The CDO reports to the chief operating officer (COO) and leads the OCDO. As part of its mission, the OCDO leads and coordinates the development and execution of the Board's data strategy. In addition, the OCDO is responsible for supporting the Board in defining and organizing repeatable processes throughout the data life cycle so that the agency manages its data consistently and efficiently.

In January 2019, Congress enacted the Open, Public, Electronic, and Necessary Government Data Act, which required that federal agencies designate a nonpolitical appointed employee as the CDO.<sup>1</sup> Although the CDO position had already been established at the Board, the COO met the act's requirement by issuing a memorandum on August 6, 2019, designating the Board official who was already serving as the

<sup>&</sup>lt;sup>1</sup> Open, Public, Electronic, and Necessary Government Data Act, Pub. L. No. 115-435, 132 Stat. 5534.

CDO. The memorandum states that the CDO is responsible for executing the requirements of the act, including data governance and life cycle data management.

#### The Board Data Council

The Board Data Council (BDC) was established in 2013 to provide guidance to the OCDO and to act as an approving body on enterprise data governance and data management matters. The BDC's charter, revised in January 2021, outlines the structure and responsibilities of the BDC.

The CDO chairs the BDC, which consists of members and advisors from 14 of the 15 Board divisions.<sup>2</sup> The BDC provides a forum for functional leaders and Board stakeholders to discuss, develop, influence, and approve enterprise-level strategy, priorities, and policies regarding the agency's data management, governance, and capabilities. The BDC is responsible for helping to implement the Board's data strategy and aligning division-level data-related activities with the strategy. The BDC is also responsible for reviewing and approving data-related policies, processes, standards, and requirements for use throughout the Board's data environment.

### The 2022–2025 Board Data Strategy

The CDO issued the 2022–2025 Board Data Strategy in January 2022. This strategy outlines the goals and objectives that support the execution of the Board's strategic plan and provides a foundation and vision for improving the agency's ability to obtain, integrate, analyze, and share data. Two of the data strategy's objectives relate to data roles and responsibilities and data discoverability. One of these objectives is to "enhance data operational discipline by clearly defining roles and responsibilities for the management of data and data processes," and the other objective is to "improve discoverability of data and data-related expertise within the Board."

The vision outlined in the strategy includes transitioning from a decentralized data management model to a federated data management model to enable consistent use of data best practices and to empower data operations through intentional communication and coordination. According to the data strategy, although a decentralized model can provide flexibility, it can also create silos and result in duplicated efforts across the enterprise. The Board's vision is that in the federated model, a central body—the OCDO—develops and oversees enterprise data practices with bottom-up input from data professionals throughout the Board. The data strategy includes an action plan that specifies that the BDC, with support from the OCDO, will formalize a Boardwide federated data governance program that contains the necessary processes and tools to help build trust, confidence, and shared accountability for Board data and data products.

### The OCDO's Planned Actions

In June 2022, OCDO management informed us that they are developing Boardwide data management roles and associated responsibilities intended to cover the entire data life cycle. The goal is to make these roles both comprehensive and adaptable to the needs of each Board division. The CDO informed us in September 2022 that the OCDO intends to initiate a workgroup through the BDC to gather input and

<sup>&</sup>lt;sup>2</sup> The Office of Inspector General is the only division not represented on the BDC.

modify the roles and responsibilities before sending a draft to the full BDC for approval. The OCDO's plan aligns with an objective stated in the 2022–2025 Board Data Strategy: "to enhance data operational discipline by clearly defining roles and responsibilities for the management of data and data processes."

#### Data Management Leading Practices

The Enterprise Data Management (EDM) Council is a cross-industry global association composed of over 350 member organizations, including the Board. The EDM Council developed the Data Management Capability Assessment Model (DCAM),<sup>3</sup> which is a data management framework for use by member organizations that includes strategies, organizational structures, and operational practices to drive data management.<sup>4</sup> The framework defines the goals of data management and establishes the operational requirements for sustainable data management. From this framework, we identified several leading practices relevant to this evaluation, including (1) defining and communicating data management roles; (2) establishing a data management training program; (3) identifying and cataloging data, including establishing metadata standards; and (4) establishing data management policies and standards.<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> The System is also an EDM Council member, and the System's Data Management Leadership Team has endorsed the use of DCAM as the standard tool for assessing data management maturity.

<sup>&</sup>lt;sup>4</sup> Enterprise Data Management Council, *Data Management Capability Assessment Model v2 (DCAM™)*, EDM Council, copyright holder, 2021. Used with permission of the EDM Council.

<sup>&</sup>lt;sup>5</sup> *Metadata* are data that provide structural or descriptive information about other data.

# Finding 1: The OCDO Can Support Divisions by Establishing Roles and Responsibilities for Data Management and by Providing Training

We found that the sections of Board divisions we reviewed used differing processes and nomenclature to establish and define roles and responsibilities for data management. We also found that these sections used differing methods to train personnel on data management roles and responsibilities. DCAM states that the success of an organization's data management initiative relies, in part, on establishing organizationwide standard data management processes. Further, DCAM states that data management training ensures that those with data responsibilities are operating in accordance with established data policy and standards and understand that they are responsible for ensuring that the organization has the high-quality data it needs, and that data use is appropriate. Because the Board has historically followed a decentralized data management model, divisions have used differing approaches to establish, define, and provide training on roles and responsibilities for data management roles and responsibilities to be implemented as part of divisions' data processes, the OCDO could help strengthen collaboration among sections and divisions by establishing a common nomenclature. In addition, by developing and providing training, the OCDO can help ensure common understanding of the Boardwide roles and responsibilities.

# The OCDO Should Finalize Boardwide Roles and Responsibilities for Data Management

We found that the sections we reviewed used varying approaches to establish and define roles and responsibilities for data management.<sup>6</sup> For example, some sections that are responsible for acquiring or collecting data have formally established roles and responsibilities that are executed through division-level policies and procedures, and other sections establish roles and responsibilities for individual datasets or for projects at the section or team level. Additionally, we found that the sections we reviewed did not use consistent nomenclature; some use differing names—for example, *data manager* and *data owner*—for roles with similar responsibilities or, conversely, used the same name for roles with different responsibilities. Specifically, one section tasks its data managers with establishing roles and responsibilities and training staff on data best practices, while another requires data managers to approve data access requests. Further, data owners in one section are responsible for executing, managing, and monitoring data collection throughout the data life cycle.

<sup>&</sup>lt;sup>6</sup> The approaches are not directly comparable because the sections we reviewed participate in different phases of the data life cycle and, in some cases, rely on or collaborate with other sections for certain aspects of data management.

DCAM states that the success of an organization's data management initiative relies, in part, on establishing organizationwide standard data management processes. Standard data management processes are especially important when business units collaborate because process variations can inhibit the organization's ability to achieve interoperability through its data management initiative. Additionally, DCAM states that roles and responsibilities must be established with operational processes in place. Further, DCAM states that the adoption of standard processes across the organization must be required by policy.

Additionally, through our benchmarking efforts with three federal agencies, we learned that these agencies all have begun standardizing data management roles and responsibilities. Two agencies have tasked their CDOs with developing guidelines and standard operating procedures to harmonize roles and responsibilities across business units. One of these two agencies noted that as part of its guidelines, it is creating discrete data management roles to establish clear lines of authority, support auditability, and manage individuals' workloads. The third agency has tasked its senior officials, including the CDO, with developing organizationwide policies and procedures for data management. This agency noted that these policies are high level by design to afford flexibility to the various agency offices.

Because the Board has historically followed a decentralized data management model, divisions have taken different approaches to establishing and defining roles and responsibilities for data management. Further, the OCDO has not established enterprise roles and responsibilities for the management of data and data processes.

As noted, the OCDO is developing Boardwide data management roles to be implemented as part of divisions' data processes. We believe that implementing these data management roles and associated responsibilities could help establish a common nomenclature and strengthen collaboration among sections and divisions at the Board. In addition, by developing an associated policy, the OCDO could help facilitate the adoption of these Boardwide roles and responsibilities within the divisions.

# The OCDO Should Provide Training on Boardwide Data Management Roles Once Established

We found that the sections we reviewed used various methods to train personnel on data management roles and responsibilities. For example, some sections used external training classes, while others relied on informal training methods, such as job shadowing. In addition, we found that the content and focus of the training varied based on the sections' business needs. Some of the training was specific to the job function or was more technical in nature, while other trainings focused more broadly on data management practices.

DCAM states that data management training ensures that those with data responsibilities are operating in accordance with established data policy and standards. Further, it states that training helps individuals to understand that they are responsible for ensuring that an organization has the high-quality data it needs and that data use is appropriate.

In conjunction with developing Boardwide roles and responsibilities related to managing data, we believe that the OCDO should develop and provide training to facilitate the adoption and consistent implementation of the roles and responsibilities. This training would supplement any existing sectionspecific data management training. Such training can help provide a common understanding of the Boardwide roles and responsibilities while still providing the sections autonomy to provide training related to their mission or business needs.

### **Recommendations**

We recommend that the CDO

- 1. Finalize Boardwide data management roles and responsibilities and obtain BDC approval.
- 2. Develop and obtain BDC approval for a Boardwide policy to facilitate the adoption of the finalized data management roles and responsibilities.
- 3. Develop and provide training related to Boardwide data management roles and responsibilities to foster consistent messaging and expectations.

### **Management Response**

In response to our draft report, the Board concurs with our recommendations. Regarding recommendation 1, the response states that the BDC has commissioned a data governance workgroup to establish a data governance framework and develop high-priority data governance policies and standards across the full data life cycle. In addition, the workgroup will define common data management roles and responsibilities at each phase of the data life cycle. The Board anticipates that the workgroup will submit its recommendations on the roles and responsibilities to the BDC by the second quarter of 2023 and obtain BDC approval.

Regarding recommendation 2, the response states that the OCDO expects to obtain BDC approval by the third quarter of 2023 for a Boardwide policy that outlines the finalized data management roles and responsibilities.

Regarding recommendation 3, the response states that the OCDO will work with the Board's Office of Development and Learning to develop, test, and implement training on the data management roles and responsibilities outlined in the finalized policy by the fourth quarter of 2023. Further, the OCDO will help Board divisions integrate this policy into their data management processes after the training has occurred.

# **OIG Comment**

The planned actions described by the Board appear to be responsive to our recommendations. We will follow up to ensure that the recommendations are fully addressed.

# Finding 2: The OCDO Can Support Divisions by Establishing Data Inventory Management Guidelines

The sections we reviewed use different approaches to inventory their data. We believe that these differences prevent the Board from having a comprehensive view of its data assets, which can hinder data discoverability. According to the 2022–2025 Board Data Strategy, detailed metadata can facilitate improved discoverability and help answer common data questions. Further, DCAM highlights that basic metadata are necessary as part of the data discovery process and are required to make data accessible. In addition, the three benchmark agencies we interviewed told us that they have or intend to create comprehensive data inventories to improve data discoverability across their respective agency. Because the Board has historically used a decentralized data management model, the divisions have taken different approaches to inventorying data. By developing guidance that provides baseline requirements for the information that divisions should include in their inventories, the OCDO can help improve data discoverability for users throughout the Board.

# The OCDO Should Develop Data Inventory Guidance

We found that the sections we reviewed used varying approaches for inventorying data. For example, one section uses a data inventory that is governed by policies and procedures, including specific metadata standards. Another section uses data dictionaries to identify data stored in various databases, and yet another uses a data catalog to identify data stored in various databases. We also found that the format and type of metadata documented differed among these approaches. For example, one section only collected basic metadata, while another section had detailed standards describing the format and expected content of the metadata. Additionally, one section's division is in the process of developing a data inventory.

We noted that the 2022–2025 Board Data Strategy includes an objective focused on improving the discoverability of data. According to the data strategy, detailed metadata can facilitate improved discoverability and help answer common data questions, such as how to access the data. The importance of this objective was highlighted by the division officials we spoke with, who explained that data discoverability challenges can result in duplication of efforts and process inefficiencies. Division officials also noted that guidance from the OCDO could help them improve their data management practices, including data inventory management. We believe that using multiple approaches for inventorying data may hinder data discoverability.

DCAM highlights that basic metadata are necessary as part of the data discovery process and are required to make data accessible. In addition, the three benchmark agencies we interviewed reported that they have either developed or are developing a data catalog or inventory. One agency that has a centralized data catalog said that the goal of its inventory is to standardize naming conventions and improve data discoverability for agency staff. Another agency whose data inventory is in development said its OCDO is working on determining the approach to provide agency staff a single view of the agency's data.

Because the Board has historically used a decentralized data management model, the divisions have taken different approaches to inventorying data. We believe the Board can benefit from issuing a guidance document on managing data inventories; such a document should include the roles and responsibilities associated with inventory maintenance as well as metadata standards that divisions can build on to meet their specific business needs. Such guidance would be particularly important for those sections that rely on or collaborate with other sections for certain aspects of data management. Establishing baseline requirements for creating and managing data inventories can help improve data discoverability and help the Board move toward having a comprehensive view of its data assets.

# Recommendation

We recommend that the CDO

4. Develop guidance for creating and managing data inventories, including roles and responsibilities and metadata standards.

# **Management Response**

In its response to our draft report, the Board concurs with our recommendation. The response states that in November 2022, the metadata strategy workgroup developed and obtained the BDC's approval of common metadata standards for the Board and a road map to implement these new standards. In addition, the newly developed common metadata standards and the to-be-developed roles and responsibilities will be incorporated into a new cloud-based data governance and data inventory tool. The Board anticipates the OCDO will develop data inventory guidance to support adoption of the tool by the fourth quarter of 2023.

# **OIG Comment**

The planned actions described by the Board appear to be responsive to our recommendation. We will follow up to ensure that the recommendation is fully addressed.

# Finding 3: The COO Can Formally Empower the CDO to Implement Board Policies Related to Data Management and Governance

The CDO has not been formally granted the authority for data management and governance. DCAM recommends that once a data governance function is established, it must be formally empowered by senior management and its roles communicated to all stakeholders to secure the authority to implement data governance. The COO has the authority for data management and governance under a delegation of authority from the Board's administrative governor but has not redelegated that authority to the CDO.<sup>7</sup> Without formal administrative authority, the CDO may find it challenging to implement action plans outlined in the *2022–2025 Board Data Strategy* related to data management and data governance. In addition, we believe that delegating formal authority to the CDO will help foster consistent data management processes and standards throughout the Board.

# The COO Should Delegate to the CDO Authority for Data Management and Governance

We found that the CDO does not have formal authority for the Board's data management and governance. Instead, the COO has the authority to formulate, approve, and implement Board policies related to data management and governance under a delegation of authority from the Board's administrative governor.

DCAM highlights that governance is key to successful data management. Specifically, data governance establishes lines of authority and defines the organizational structure by which the data management initiative will be governed. DCAM also notes that once a data governance function is established, it must be formally empowered by senior management and its roles communicated to all stakeholders to secure the authority to implement data governance compliance.

The COO has used delegations of authority to redelegate administrative responsibilities and authorities to other Board officials, such as to the chief information officer, the chief financial officer, and the chief human capital officer. However, the COO has not used a delegation of authority to redelegate administrative responsibilities and authorities related to data management and governance to the CDO.

We believe that granting formal authority to the CDO for data management and governance can reduce challenges and help with implementing the action plans outlined in the 2022–2025 Board Data Strategy, including formalizing the federated data governance program. Such authority can empower the CDO and

<sup>&</sup>lt;sup>7</sup> The Board uses delegations of authority to establish which Board employees are authorized to execute the Board's internal administrative functions.

facilitate the adoption of Boardwide roles and responsibilities and data inventory standards to foster consistent data management processes at the Board.

# Recommendation

We recommend that the COO

5. Delegate administrative responsibilities and authorities for data management and governance to the CDO and communicate to all stakeholders the updated delegation of authority.

# **Management Response**

In its response to our draft report, the Board concurs with our recommendation. The response states that the OCDO will work with the Legal Division to formally delegate data management authorities to the CDO and to ensure that the BDC charter and processes are consistent with this delegated authority. The Board anticipates that the delegation of CDO authority will be completed by the second quarter of 2023.

### **OIG Comment**

The planned actions described by the Board appear to be responsive to our recommendation. We will follow up to ensure that the recommendation is fully addressed.

# **Appendix A: Scope and Methodology**

Our evaluation objectives were (1) to describe the roles and responsibilities for managing data at the Board, including how they are established and defined, and (2) to identify opportunities for the OCDO to enhance enterprise frameworks, tools, and practices related to roles and responsibilities for managing data.

To accomplish objective 1, we interviewed BDC division representatives to understand how divisions establish and define roles and responsibilities for managing data. Using information obtained during those interviews, the team established criteria to select divisions to review during fieldwork.<sup>8</sup> We selected a total of seven sections from seven divisions for further assessment during fieldwork.<sup>9</sup> We developed questions for each selected section to obtain information on roles and responsibilities for managing data. We analyzed written responses and obtained documents from selected sections to understand how roles and responsibilities for managing data and data inventories are established and defined. We also reviewed documents from selected sections, such as policies, procedures, guidance, data-sharing agreements, a participation agreement, and a memorandum of understanding, to understand how roles and responsibilities for managing data are established. We identified similarities and differences among selected sections relating to the roles and responsibilities each unit has established and defined for managing its data assets as well as the approaches used for managing data inventories.

To accomplish objective 2, we reviewed DCAM to identify potential leading practices related to roles and responsibilities for managing data. We also benchmarked with three federal agencies that are members of the Federal CDO Council and two Federal Reserve Banks to identify additional leading practices based on their approach to establish and define roles and responsibilities for managing data.

We conducted our fieldwork from January 2022 through November 2022. We completed this evaluation in accordance with the *Quality Standards for Inspection and Evaluation* issued by the Council of the Inspectors General on Integrity and Efficiency in December 2020.

<sup>&</sup>lt;sup>8</sup> The criteria we established included factors such as the division's size and role in data management at the Board.

<sup>&</sup>lt;sup>9</sup> We selected sections from the following divisions: Information Technology, International Finance, Monetary Affairs, Research and Statistics, Reserve Bank Operations and Payment Systems, Supervision and Regulation, and the Office of the Chief Operating Officer.

# **Appendix B: Management Response**



BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM WASHINGTON, DC 20551

December 16, 2022

Michael VanHuysen Associate Inspector General for Audits and Evaluations Board of Governors of the Federal Reserve System Washington, DC 20551

Dear Michael:

Thank you for the opportunity to comment on the draft report, *The Board Can Enhance Enterprise Practices for Data Management Roles and Responsibilities*, prepared by the Office of Inspector General (OIG).

We have reviewed the report and concur with the OIG's findings and recommendations. Our responses for each recommendation are listed below. We already have begun making progress toward achieving the OIG's recommendations.

In the report, the OIG makes the following recommendations:

1. Finalize Boardwide data management roles and responsibilities and obtain BDC approval

*Management response:* We concur with this recommendation. The Board Data Council (BDC) has commissioned a data governance workgroup, sponsored by the BDC Chair (the Chief Data Officer) and Vice Chair. Staff from the Office of the Chief Data Officer (OCDO) co-leads this workgroup and coordinates all the workgroup activities. The workgroup will establish a data governance framework and develop high-priority data governance policies and standards across the full data lifecycle. Common roles and responsibilities at each phase of the data lifecycle which contains data management will be defined. We expect that by Q2 2023, the workgroup will submit its recommendations to the BDC on the roles and responsibilities for data management and obtain BDC approval.

2. Develop and obtain BDC approval for a Boardwide policy to facilitate the adoption of the finalized data management roles and responsibilities



### BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM WASHINGTON, DC 20551

*Management response:* We concur with this recommendation. We expect to obtain BDC approval by Q3 2023 for a Boardwide policy that sets out the finalized data management roles and responsibilities.

3. Develop and provide training related to Boardwide data management roles and responsibilities to foster consistent messaging and expectations

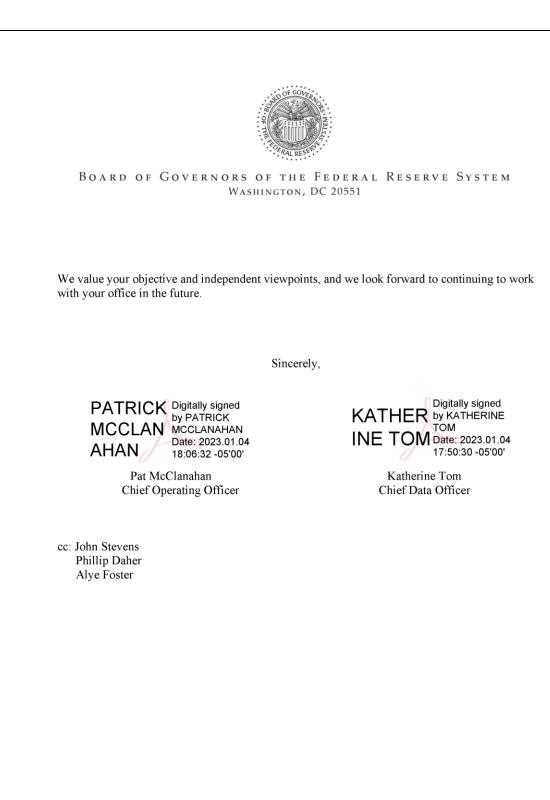
*Management response:* We concur with this recommendation. The OCDO will work with the Board's Office of Development and Learning to develop, test, and roll out training on the data management roles and responsibilities outlined in the finalized policy by Q4 2023. The OCDO also will assist Board divisions, upon request, to implement this policy into their data management processes after the training rollout.

4. Develop guidance for creating and managing data inventories, including roles and responsibilities and metadata standards

*Management response:* We concur with this recommendation. The BDC concluded a metadata strategy workgroup in November 2022. The workgroup developed and obtained the BDC's approval on common metadata standards for the Board and a roadmap to implement these new standards. We started a project led by the OCDO to implement Collibra, a cloud-based data governance and data inventory tool. The newly developed common metadata standards and the to-be-developed roles and responsibilities will be incorporated in this new tool, which will allow the Board to manage metadata actively and properly. Early-adopter use cases are expected to be completed by Q4 2023. At the same time, the OCDO will develop data inventory guidance to support the future Collibra adoption and the enhancement of other Board metadata activities.

5. Delegate administrative responsibilities and authorities for data management and governance to the CDO and communicate to all stakeholders the updated delegation of authority

*Management response:* We concur with this recommendation. The OCDO will work with the Legal Division, to formally delegate data management authorities to the CDO. The OCDO also will work with Legal to ensure the BDC charter and processes are consistent with this delegated authority. We expect this work to be completed by Q2 2023.



# **Abbreviations**

BDC	Board Data Council
CDO	chief data officer
COO	chief operating officer
DCAM	Data Management Capability Assessment Model
EDM	Enterprise Data Management
OCDO	Office of the Chief Data Officer

# **Report Contributors**

Shola Epemolu, Project Lead Andrew Luckman, Auditor Jennifer Rosholt-High, Auditor Lindsay S. Mough, OIG Manager, Management and Operations Andrew Gibson III, Senior OIG Manager for Management and Operations Michael VanHuysen, Associate Inspector General for Audits and Evaluations

### **Contact Information**

#### General

Office of Inspector General Board of Governors of the Federal Reserve System 20th Street and Constitution Avenue NW Mail Center I-2322 Washington, DC 20551

Phone: 202-973-5000 Fax: 202-973-5044

#### **Media and Congressional**

OIG.Media@frb.gov

# **I**OIG

### <u>Hotline</u>

Report fraud, waste, and abuse.

Those suspecting possible wrongdoing may contact the OIG Hotline by mail, web form, phone, or fax.

#### OIG Hotline

Board of Governors of the Federal Reserve System 20th Street and Constitution Avenue NW Mail Center I-2322 Washington, DC 20551

Phone: 800-827-3340 Fax: 202-973-5044