



# HUD Data Analytics Office of the Chief Data Officer Charter

Version 1.0

03/15/2019

### **General Services Administration**

Data Analytics — Center of Excellence

# Approval

This charter requires approval from the following	HUD executive leadership.	
Todd Richardson, Acting PD&R AS	Approval Date	
DSAG Representative	Approval Date	
HUD Executive (TBD)	Approval Date	
HUD Executive (TBD)	Approval Date	



# **Revision History**

The charter's revision history is updated after each review and modification of the document. The log identifies the version number, revision date, a brief description of the changes, and the author.

Version No.	Date	Author	Revision Description
1.0	3/29/2019	Data Analytics CoE & DSAG	Initial OCDO charter

<sup>&</sup>lt;sup>1</sup> In 2018, KPMG created a Draft Enterprise Data Governance Charter pertaining to the Office of Housing. It was never formally signed by the Data Stewardship Advisory Group. This was used as starting point for the OCDO Charter's structure and content areas. Appendix D references KPMG's charter.



# **Table of Contents**

Table of Contents	3
1. Introduction	4
2. CDO Mission	6
3. CDO Vision	6
4. CDO Authoritative Functions and Responsibilities	6
5. Data Governance Organizational Structure	9
5.1 OCDO Team	9
5.2 Data Governance Operating Units	14
5.3 Data Governance Communication Plan	16
6. Critical Success Factors	17
APPENDIX A: Research and Recommendations on the OCDO	19
A1. Organizational Location and Reporting	19
A2. OCDO Structure	24
APPENDIX B: Data Governance Organization Operating Units	26
B1. Data Governance Steering Committee	26
B2. Data Stewardship Advisory Group	28
B3. Data Stewards	29
APPENDIX C: CDO Authorities and Responsibilities from FEBP	31
APPENDIX D: Acronyms	32
APPENDIX E: References	34



## 1. Introduction

The Foundations for Evidence-Based Policymaking Act<sup>2</sup> (FEBP) requires that each executive branch agency "designate a career appointee...in the agency as the Chief Data Officer" (CDO). Broadly speaking, the CDO shall possess "demonstrated training and experience in data management, collection, analysis, protection, use and dissemination of data". More specifically, FEBP identifies three pillars of work for which the CDO bears responsibility: data governance; the Open, Public, Electronic, and Necessary (OPEN) Government Data Act<sup>3</sup>; and the Paperwork Reduction Act (PRA).<sup>4</sup>

In addition, official reports and internal assessments have identified various data governance-related gaps and opportunities within the Department of Housing and Urban Development (HUD). For example, HUD Office of the Inspector General (OIG) Audit Report 2018-FO-0001<sup>5</sup> states the Office of the Chief Financial Officer's (OCFO) did not comply with the Digital Accountability and Transparency Act (DATA Act) because the Office did not: follow financial data standards, maintain adequate internal controls, and establish governance policies, roles and responsibilities. HUD OIG Memorandum No. 2018-NY-0801<sup>6</sup> found multiple risks related to grant data, including duplicate records and inaccurate reporting. Internal assessments further supported additional findings, as they discovered an absence of data-related taxonomies enterprise wide, inadequate data literacy, lack of suitable data-related documentation, and general uncertainty in how best to leverage existing data assets to improve mission delivery.

To meet its statutory requirements, comprehensively implement federal policy and corresponding guidance, and address current data challenges, HUD is establishing an Office of the Chief Data Officer (OCDO). The CDO will serve as the senior executive responsible for enterprise data governance, OPEN data, and PRA.

• Enterprise data governance will combine and enhance current siloed governance efforts to create a structured and sustainable organization that is dedicated to defining standards, policies, and procedures, developing business processes, and optimizing

https://www.oversight.gov/sites/default/files/oig-reports/2018-FO-0001.pdf

<sup>&</sup>lt;sup>6</sup> "Risk Assessment of HUD's Grant Closeout Process." 2018-NY-0801. Sept. 27, 2018. https://www.hudoig.gov/sites/default/files/documents/2018-NY-0801.pdf



<sup>&</sup>lt;sup>2</sup> "The Foundations for Evidence-Based Policymaking Act of 2018." H.R. 4174. Jan. 14, 2019. https://www.congress.gov/115/bills/hr4174/BILLS-115hr4174enr.pdf

<sup>&</sup>lt;sup>3</sup> The OPEN Data Act is part of H.R. 4174.

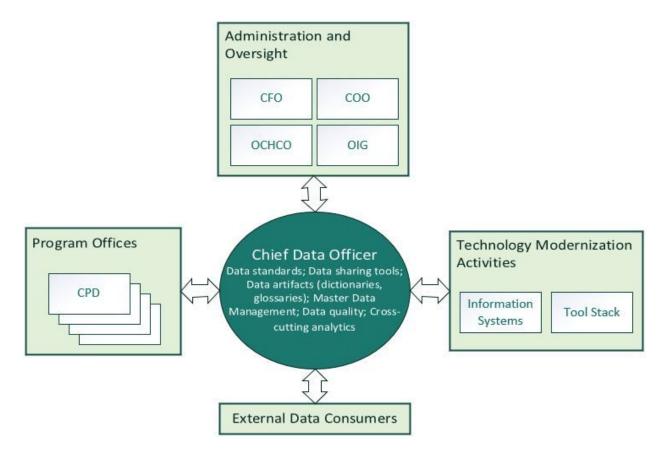
<sup>&</sup>lt;sup>4</sup> In addition to FEBP, administration policy published by the Office of Management and Budget titled "Managing Information as an Asset"# (M-13-13) declares that executive departments and agencies "must manage information as an asset throughout its life cycle to promote openness and interoperability, and properly safeguard systems and information." Corresponding policy requirements detailed in M-13-13 include the adoption of data standards, the development of common core metadata, and the creation and maintenance of an enterprise data inventory.

<sup>5</sup> "HUD's Office of the Chief Financial Officer Did Not Comply with the Digital Accountability and Transparency Act of 2014." 2018-FO-0001. Nov. 3, 2017.

- stakeholder interaction required to manage HUD data as a strategic asset and enhance data-driven decision making across the enterprise
- OPEN data will continue through identification and preparation of applicable data assets, as well as augmentation of open data portals
- PRA Office will transition over from the Office of the Chief Information Officer (OCIO) and include an additional core function to provide a full life-cycle view of data, so that approved collections contain information useful for both evaluative and administrative purposes

Ultimately, the CDO and team serve as an integrating force amongst program offices delivering citizen services, departments that support them, and data-related technology modernization activities. An effective CDO ensures data is fully integrated within HUD and made available to decision makers, policy makers, and researchers who can leverage it. The following graphic is intended to illustrate this critical integrator role played by CDO, in which a variety of internal stakeholders and external data consumers are connected through a common and consistent data understanding.

Figure 1: Integrator Role of the CDO



<sup>&</sup>lt;sup>7</sup> Page 8 defines the OCDO's PRA functions.



# 2. CDO Mission

To promote the inherent intersection between policies, processes, and people responsible for using and managing data as a strategic asset that supports HUD's mission.

# 3. CDO Vision

Establishment of a centralized analytics hub through effective management and integration of data assets that supports a self-service model to drive decision-making, research, strategy and public engagement by internal and external stakeholders.

# 4. CDO Authoritative Functions and Responsibilities

As described below, the CDO has the authority to:

#### Leadership & Guidance

- A. Establish, communicate, and enforce a comprehensive lifecycle data management strategy that promotes data-driven mission delivery and modern mission support across the enterprise and down through program offices
- B. Lead establishment and coordination on data standards, policies, and best practices across the enterprise for data collection, data generation, data storage, and data sharing in a way that flows down to existing and new systems and datasets
- C. Champion the development and deployment of self-service data tools, including advanced analytics, and corresponding training to support the use and implementation of those tools
- D. Drive adoption and implementation of OPEN data requirements, oversee management of HUD content on the data.gov portal, and prioritize data assets for publication
- E. Set, communicate, and reinforce data access and sharing guidelines for internally sharing data, including development of tools or technologies for internal data access
- F. Promote data literacy and data sharing to drive the cultural changes needed to achieve a more transparent, data-driven and OPEN data focused organization
- G. Collaborate with the Chief Information Security Officer and the Chief Privacy Officer to ensure consistent care and privacy of data in accordance with federal law and regulations
- H. Serve as the primary authority for decisions related to enterprise data governance, OPEN data, and PRA, and designate other decision making authorities as needed

Assistance & Implementation



- A. Oversee and ensure complete adoption of and adherence to the PRA in HUD's information collection activities
- B. Collaborate with administration and oversight officials as a trusted partner to ensure all data needs are fully met
- C. Engage with mission support and program offices to measure and improve data quality
- D. Research, assess and promote technologies, tools, approaches and methodologies to unlock the value of enterprise data through access, analytics, and visualization
- E. Designate points of contact for roles and responsibilities related to open data use and implementation

To supplement these areas of authority, the OCDO has *responsibility* for the following pillars as outlined in FEBP:

#### Enterprise Data Governance

- A. Create and maintain a comprehensive data asset inventory for all data assets created by, maintained, or collected by HUD (as required by FEBP)
- B. Oversee metadata management, master data management, business glossary development, and development of other enterprise-wide artifacts that enable effective use of data
- C. Develop, implement, and educate staff on quantitative and qualitative data quality measures and support monitoring and report efforts
- D. Develop, implement, and educate staff on data usage Key Performance Indicators (KPIs) to understand and improve data as key input to improved decision making
- E. Establish a behavior of governing and managing data assets using repeatable processes and standardized frameworks
- F. Establish and promote development of a robust team of data practitioners to enable and support a culture of data sharing and repurposing, including data scientists and subject-area (functional) data governance officers
- G. Assess, strategize, and define approaches to decreasing the cost of collecting, managing, and sharing data while increasing the value of data to the agency
- H. Create and institute a systematic and continuous, enterprise-wide assessment process to ensure data collection and data storage practices align with the Chief Information Security Officer (CISO) and Open Data best practices
- I. Collaborate with the Chief Privacy Officer to monitor data privacy mechanisms and implement new practices as needed
- J. In conjunction with OCIO and the Chief Technology Officer (CTO), provide input and recommendations on licensing for data-related systems, architecture, and tools

#### OPEN Data

- A. Develop and institute a process to evaluate and improve the timeliness, completeness, consistency, accuracy, usefulness and availability of data assets
- B. Promote and encourage adherence to open data standards, in-line with activities happening across federal agencies and according to the OPEN Data Act



- C. Engage HUD employees, the public, and contractors in using existing public data assets within and outside of HUD
- D. Provide the public with the opportunity to request and prioritize specific data assets for disclosure
- E. Lead the publication of open government data assets as machine-readable and not encumbered by access or consumption restrictions
- F. Identify and implement methods for collecting and analyzing digital information on data asset usage by users within and outside an agency, including designating a point of contact within the agency to assist the public and respond to issues

#### Paperwork Reduction Act (PRA)<sup>8</sup>

- A. Manage the PRA program office to review, evaluate, and process information collection requests to determine their suitability for submission to OMB (Office of Management and Budget)
- B. Ensure the prompt, efficient, and effective implementation of the information policies and information collection responsibilities established under the PRA
- C. Research, develop, and integrate new mechanisms that further minimize the paperwork burden on the public and other entities
- D. Reinforce a full data life cycle approach in establishing information collections that accounts for data needs beyond program administration to include program evaluation
- E. Develop cognitive testing capabilities as part of the information collection development process to improve data quality at the point of collection
- F. Provide signature and approval, or assign a designee approval and signature authority, for information collection requests before they are submitted to OMB

Additional responsibilities around advancing HUD's data culture and the maturity of its approach to data include:

#### Technical Responsibilities

- A. Support OCIO in managing HUD's enterprise data infrastructure and address any issues related to data accessibility, compliance, or integrity
- B. Collaborate with the National Archives and Records Administration (NARA) to archive and preserve HUD's critical documents
- C. Improve integration of HUD's enterprise data management (EDM) environment and program offices in support of robust, and increasingly self-service, reporting capabilities

#### Non-technical Responsibilities

A. Coordinate priorities and communicate achievements and challenges with senior executives and the Data Governance Steering Committee

<sup>&</sup>lt;sup>8</sup> FEBP stipulates that PRA functions be consolidated under agency CDOs. Version 2.0 of the United States Office of Personnel Management (OPM) Paperwork Reduction Act Guide lists the Chief Executive's responsibilities. <a href="https://www.opm.gov/about-us/open-government/digital-government-strategy/fitara/paperwork-reduction-act-guide.pdf">https://www.opm.gov/about-us/open-government/digital-government-strategy/fitara/paperwork-reduction-act-guide.pdf</a>, pg. 2.



- B. Consult with statistical, evaluation, and performance improvement officials within HUD to promote information collection, dissemination, and related resource development
- C. Support program offices by collaborating with functional area data governance officers to present policies and procedures, and ensure their needs are met
- D. Serve as the agency liaison to other agencies and OMB on the best way to use existing agency data for statistical purposes
- E. Implement policies, protocols and guidance related to statutory requirements and executive branch agendas, including FEBP and the President's Management Agenda data-related Cross Agency Priority (CAP) Goals

#### Advocatory Responsibilities

- A. Participate in inter-agency activities such as the CIO Council and Federal legal entity identification standardization/interchange efforts
- B. Establish relationships with external contacts in HUD-related industries, academia, other branches of government, and the general public to promote full utilization of HUD's data assets and data services

# **APPENDIX: References**

Enterprise Data Governance Roadmap. Data Analytics Center of Excellence.

HUD. Data Stewardship Advisory Group Charter.

 $\frac{https://hudgov.sharepoint.com/:w:/r/sites/OCIO/OCRPM/EA/DSAG/Governance/DSAG%20Char}{ter\_Final%20v1%204.doc?d=wfd6b35d77cae41a4b4e2ce6091de4ddc&csf=1&e=lhZZ0E$ 

"HUD's Office of the Chief Financial Officer Did Not Comply with the Digital Accountability and Transparency Act of 2014." 2018-FO-0001. Nov. 3, 2017.

https://www.oversight.gov/sites/default/files/oig-reports/2018-FO-0001.pdf

KPMG. Draft Enterprise Data Governance Charter. March 2018.

https://hudgov.sharepoint.com/sites/datagovernance/Shared%20Documents/DG%20Work%20P roducts/Draft%20DG%20Charter.docx

NTIS. Prepared by the Data Talent Working Group. "Final CDO Roles and Responsibilities Document." July

29. 2016.

https://www.ntis.gov/TheDataCabinet/assets/CDORolesAndResponsibilities.pdf

Office of Personnel Management. Paperwork Reduction Act Guide (PRA) - Version 2.0. April 2011.



https://www.opm.gov/about-us/open-government/digital-government-strategy/fitara/paperwork-reduction-act-quide.pdf

"Open Data Policy - Managing Information as an Asset." M-13-13. May 9, 2013.

<a href="https://obamawhitehouse.archives.gov/sites/default/files/omb/memoranda/2013/m-13-13.">https://obamawhitehouse.archives.gov/sites/default/files/omb/memoranda/2013/m-13-13.</a>

<a href="page-2013">pdf</a>

Project Open Data. "CDO Position Description." Feb. 12, 2019. <a href="https://project-open-data.cio.gov/cdo/">https://project-open-data.cio.gov/cdo/</a>

"Risk Assessment of HUD's Grant Closeout Process." 2018-NY-0801. Sept. 27, 2018. https://www.hudoig.gov/sites/default/files/documents/2018-NY-0801.pdf

Survey results provided in: "Final CDO Roles and Responsibilities Document", Data Talent Working Group.

July 2016, pgs. 3-4.

https://www.ntis.gov/TheDataCabinet/assets/CDORolesAndResponsibilities.pdf

"The Foundations for Evidence-Based Policymaking Act of 2018." H.R. 4174. Jan. 14, 2019. https://www.congress.gov/115/bills/hr4174/BILLS-115hr4174enr.pdf

