

Ken Ambrose
Senior Advisor, CDO Council
Office of Shared Solutions and Performance Improvement,
General Services Administration
Washington, D.C.

November 15th, 2021

RE: CDO RFI 86 FR 57147 - Request for Information on Behalf of the Federal Chief Data Officers Council

Dear Mr. Ambrose:

The Data Foundation is a non-profit organization that seeks to improve government and society by using data to inform public policymaking. Our Data Coalition Initiative is America's premier voice on data policy, advocating for responsible policies to make government data high-quality, accessible, and usable. An important part of that effort is supporting the development and implementation of the Foundations for Evidence-Based Policymaking Act and the Federal Chief Data Officers Council.

The success of CDOs in the federal government hinges on their ability to perform expected and critical tasks. If they are successful, government data can be an asset, creating a robust data infrastructure that will serve a variety of purposes, including improving operational decision-making and evidence-based policymaking capabilities. While there are challenges, the progress of CDOs over the past year is commendable.

The Data Foundation, in partnership with Grant Thornton, surveyed federal CDOs over the past two years to assess the progress in fulfilling their responsibilities and supporting agency missions. In addition, the Data Coalition Initiative hosted a public forum in November 2021 with experts from industry, academia, non-profits, state and local government, and the general public to gather input for this request for information. With these resources to support our recommendations, the Data Coalition, on behalf of its members, offers the following 12 recommendations to support CDOs.

We hope to continue a productive working relationship and dialogue with the Council going forward and are happy to respond to any questions you may have regarding these recommendations. Please feel free to contact me or our Policy Director, Corinna Turbes (corinna.turbes@datafoundation.org).

Sincerely,

Nicholas R. Hart, Ph.D.
President, Data Foundation

Section 1: General

Recommendation 1 – CDOs should work with their agency CFO and OMB to increase CDO funding flexibilities and direct resources. Most CDOs do not have adequate resources to fulfill their statutory responsibilities and support agency missions. CDOs need sustained, predictable, and adequate resources to implement data priorities. Congress should authorize CDOs to use additional funding flexibilities and set-aside authorities, as well as provide increased direct appropriations for CDOs to succeed. This longer-term resourcing plan aligns with the congressional intent in establishing the CDO role through the Evidence Act, which created the position indefinitely rather than for a short-term period.

Recommendation 2 – CDOs should work with OMB to clarify responsibilities and expectations. While CDOs are operating with their peer community of practice and under the general framework of the Evidence Act and the Federal Data Strategy, additional guidance from OMB can help align emerging priorities from the administration with the activities implemented by CDOs. In addition, CDOs will benefit from clearer expectations on reporting requirements, including how to address required due dates and expectations about what should be reported to OMB, Congress, and the American people. Additional guidance could also include more tactical direction about what steps CDOs should take, how to prioritize the steps, and areas for interagency cooperation and collaboration.

Recommendation 3 – Congress should remove the statutory sunset of the CDO Council. Currently the CDO Council is scheduled by law to sunset in 2025. It has proven itself to be a valuable coordinating body and community of practice for CDOs. The CDO Council provides vital technical assistance and a valuable community of practice to convene and share knowledge. Since most CDOs and their offices are relatively new to the role and responsibilities, additional support from the CDO Council and peers in the form of technical assistance, resources for strategic planning, and other planning processes can support the entire CDO community, including for CDOs operating with limited staff and capacity. With the expectation that CDO roles continue indefinitely, the coordination of the CDO Council should as well. The CDO Council or OMB should include this request in an appropriate forum, such as the package of FY 2023 President's Budget legislative proposals.

Section 2: Data Skills and Workforce Development

Recommendation 4: The CDO Council should work to create an ecosystem of data-literate and data-fluent workers. The need for more staff capacity was the top request articulated by CDOs in the Data Foundation's CDO Insights Survey.¹ CDOs did not just request FTEs, but rather to add specific highly-skilled data scientists, data architects, and data engineers required to successfully carry out data governance and management activities. One cross-agency effort that was viewed positively by participants was the January 2021 joint hiring initiative coordinated by the Office of Personnel Management. Ten agencies joined together to put out the call to hire 50 senior data scientists.

In addition to getting high-level expertise into CDO offices, it is important that there are base levels of data literacy throughout the workforce in order to support a culture of data. CDOs should create a shared

¹ Hart, N., Jones, T., Lawton, J., Sheldon, L., & Willey, J. *CDO Insights: 2021 Survey Results on the Maturation of Data Governance in U.S. Federal Agencies*. Washington, D.C.: Data Foundation, 2021. Available at: <https://www.datafoundation.org/cdo-insights-report-2021#executive-summary>.

framework for data skills needed to support their agencies as well as definitions for various roles throughout their agencies and the types of skills required.

Recommendation 5: CDOs should emphasize their role as designated leaders to promote training and data fluency among staff of departments. Commitment from agency leadership to establish a strong data culture in agencies is critical for a coordinated training and retention strategy. This should include identifying current gaps in skills, capitalizing on existing training programs and models, and developing training programs when necessary. Specific limitations of privacy frameworks in which agencies are operating should also be addressed as part of training.

Section 3: Data Inventory

Recommendation 6: The CDO Council should work with the OMB to ensure that forthcoming implementation guidance to agencies on data inventories prioritizes machine readability and interoperability. Implementing and updating the metadata necessary for data inventories across federal agencies can be an intense process, representing a significant workload. In order to deploy automation technologies that reduce workload, as well as improve the quality of data inventories and the quality of aggregating services like data.gov, the metadata standards associated with these inventories should be machine readable and interoperable. Machine readable, interoperable metadata supports easier discovery and use of data, especially as the number of data sets within data inventories continues to grow. In addition to ease of discovery, machine readability allows for the automation of several processes that can help reduce burden on custodians of data inventories.

Section 4: Data Sharing

Recommendation 7: CDOs should focus on data sharing standards that facilitate interoperability, data linkage, and privacy. Standardization and creation of data standards are emphasized in the recently released Advisory Committee on Data for Evidence Building Year 1 report.² The report provides a review of the state of data for evidence building in the federal government, particularly on opportunities for secure data sharing. There are a number of examples of entities that securely aggregate, integrate, and share information. We strongly urge the CDO Council to align its work with the efforts undertaken by the Advisory Committee. Additionally, data sharing approaches must prioritize application of robust confidentiality and privacy safeguards. Various tiers of access and pilot projects testing the use of privacy-enhancing data linkage and multiparty computation offered limited preliminary evidence about potential promise for such approaches, however, further investment into privacy-enhancing technologies is needed in government prior to operating at scale.

Recommendation 8: Publicly accessible data must be prioritized. Ensuring that government data are easily accessible and usable aligned with efforts to promote transparency and accountability for government. Accessibility also facilitates collaboration with researchers, the private sector, and other levels of government, which can lead to more efficiency and innovation in public service.

Section 5: Value and Maturity

² Advisory Committee on Data for Evidence Building. (2021, November). *Year 1 Report*. Washington, D.C.. Available at: <https://www.bea.gov/system/files/2021-10/acdeb-year-1-report.pdf>

Recommendation 9: CDOs can improve communication about how they demonstrate the value of using data. Where possible, in coordination with the Evaluation Officer and the Statistical Official appointed under the Evidence Act, CDOs should engage in deliberate steps to provide metrics, summaries, and, when possible, evaluations that highlight the impact and cost savings of their efforts. To gain support within their organizations, CDOs need to show their leadership strategically, including valuable accomplishments that improve the ability for other staff to better perform the roles. In so doing, CDOs may help build a more compelling case about the need for resources to create and grow the staff and gain leadership buy-in within their agency. If the CDO is able to show programmatic savings in time and/ or dollars caused by their activities, they establish a base for justifying the use of existing resources and requesting greater resources in the future. Even small wins are vital to building support. CDOs also benefit in helping to manage organizational change, encourage data literacy, and increase the influence of evidence-informed decision making.

Recommendation 10: CDOs should conduct regular maturity assessments to accurately gauge existing data capacity and needs. Maturity assessments like the one required by the Evidence Act should be a continuous process rather than simply for compliance. Understanding the day-to-day operational needs for data and data skills will allow CDOs to effectively direct resources and training to areas within their agencies that may be in most need of support. By measuring levels of data literacy, use of data, and other aspects at the project level, CDOs can ensure that they are facilitating the growth of a strong data culture within their agency.

Section 6: Ethics and Equity

Recommendation 11: The CDO Council should create a permanent data ethics working group to ensure the Data Ethics framework continuously meets emerging needs, to provide resources and guidance to agencies, and to partner with relevant professional associations for ongoing education and training on data ethics. There is a need for clear, unified guidance from the CDO Council in regard to ethics and equity standards for data. Existing frameworks, such as the Federal Data Strategy ethics framework, provides guidance for developing a single standard going forward, but the CDO Council should collaborate with ethics-focused organizations outside of government to encourage application of best practices and continuous improvement to those practices.

Section 7: Technology

Recommendation 12: The CDO Council should work with CIOs to facilitate the adoption of appropriate modernized technology. Data collection, management, and analysis present unique challenges and needs for technology, such as automation to optimize data collection and tools that can streamline data collection, analysis, and storage. When adopting new technology to help support data functions, we encourage the CDO Council to partner with CIOs and other relevant stakeholders to leverage existing technologies, where possible, in order to avoid “reinventing the wheel.”

Appendix: Data Coalition Forum: CDO Mission and Vision

On November 9, 2021, the Data Coalition and data experts. hosted a virtual public forum to discuss the mission, focus areas, and vision of the federal Chief Data Officer (CDO) community. The forum provided an opportunity for the data community to offer feedback, recommendations, and advice to the federal [CDO Council](#), which is seeking public feedback in its [Request for Information](#).

Speakers included:

Alex Howard, The Digital Democracy Project
Quinn Chasan, Google Cloud
Michael Anderson, Informatica

Sherry Bennett, DLT Solutions
Talal Said, Hyperscience
Owen Ambur, StratML Committee

Gerard Valerio, Tableau, a Salesforce Company
Robert Audet, Guidehouse
Robert Han, Elder Research

Lindsey Marchessault, Open Contracting Partnership
Campbell Pryde, XBRL US
David Corliss, Peace-Work

Tyler Kleykamp, Beeck Center-Georgetown University/State Chief Data Officers Network
David Stringfellow, State of Utah

Andrew Churchill, Qlik
Sean McKitrick, MSCHE
Patrick McGarry, data.world

Full video of the event is available [here](#).