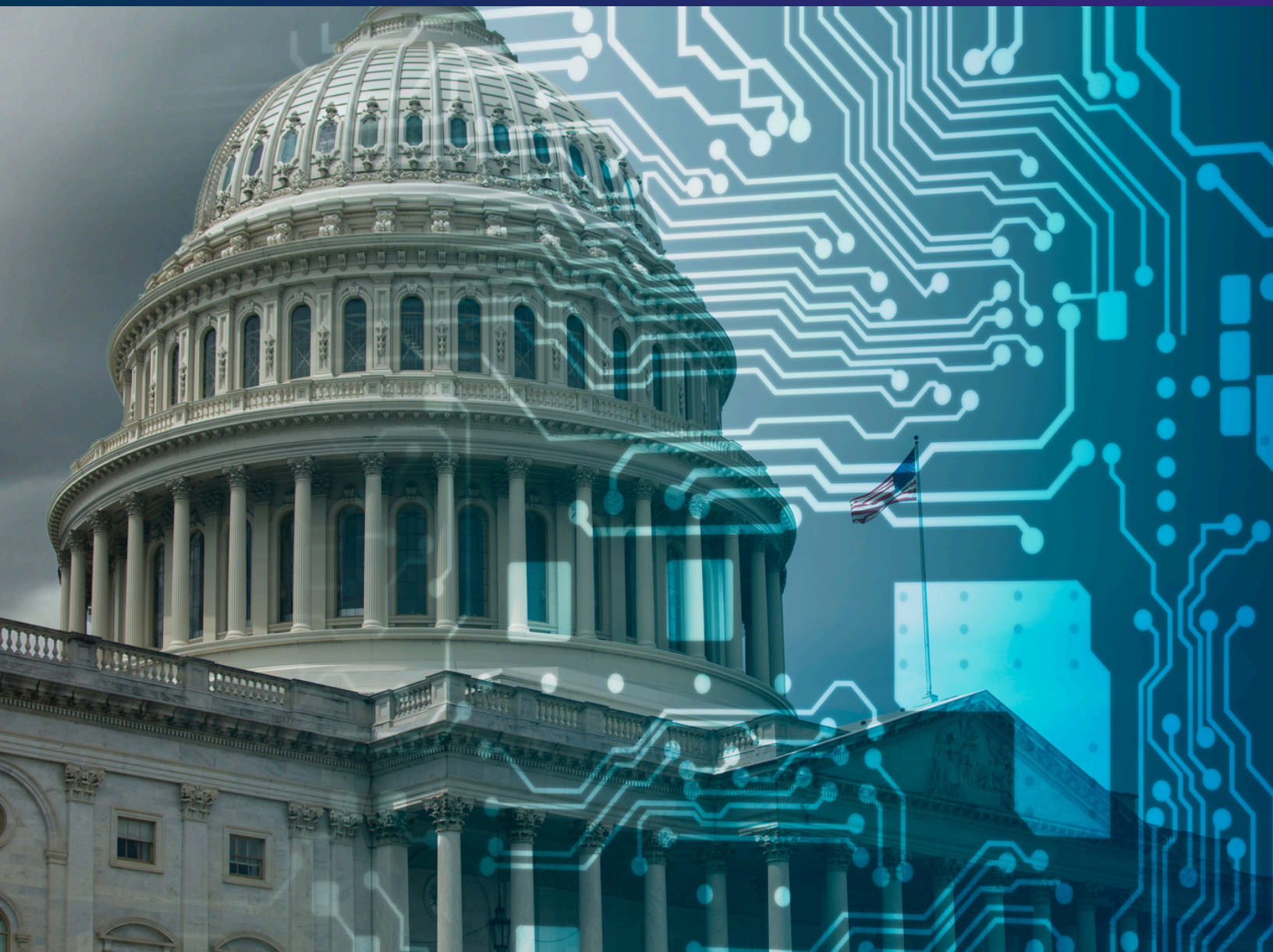


From Policy to Practice: Essential Competencies for Federal Chief AI Officers

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From Policy to Practice: Essential Competencies for Federal Chief AI Officers

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Executive Summary

In recent years, federal agencies have witnessed a significant surge in their expenditure on artificial intelligence (AI). A recent study conducted by Brookings researchers highlighted this trend, revealing that the government's obligated contract spends skyrocketed by more than 150 percent, leaping from \$261 million to \$675 million between 2022 and 2023.³ Moreover, the anticipated spend increased by 1200 percent, soaring from \$355 million to \$4.5 billion during the same period. Consequently, the rise of AI in government is expected to expand. As AI use cases continue to scale in government, proper guidelines of governance and risk management are necessary to ensure responsible selection and use of public AI. To fulfill this mission, President Biden's Executive Order (EO) 14110 on the *Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence*, and the related Memorandum from the Office of Management and Budget (OMB Memo) was issued with efforts to facilitate the responsible adoption of AI in government. With the specific directive to appoint Chief AI Officers (CAIO) responsible for implementing and meeting the newly outlined requirements, the National Fair Housing Alliance® (NFHA™) launched an inquiry to gain insights into the ongoing appointment of CAIOs and their profile alignment with the detailed responsibilities of the pivotal role. This research was conducted to highlight the significance of CAIOs in government, underscore the importance of selecting suitable candidates with reasonable criteria, and emphasize the value of transparency from public agencies regarding their AI governance initiatives. We formulated a benchmark job description (JD) tailored for the CAIO position within government and applied it to assess the status of current appointees. Our investigation of shortlisted CAIOs demonstrated key strengths and weaknesses of their applied profiles when compared to actual CAIO responsibilities. In response to the identified gaps in current profiles and additional considerations for the success of CAIOs, we present five policy recommendations centered on: Transparency of CAIO roles, Alignment Criteria, Development and Engagement initiatives, and Measures of Success. We hope our findings provide useful insights for agencies to become more transparent in their

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³ Denford, J. S., Desouza, K. C., Dawson, G. S., and Larson, J. (2024). The evolution of artificial intelligence (AI) spending by the US government.



implementation of the EO and OMB requirements, utilize the key takeaways highlighted in their assessment of potential CAIO appointees, or enhance existing CAIOs' suitability and readiness to lead the responsible use and governance of AI in government.

Introduction

President Biden's EO⁴ 14110 on *the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence* required federal agencies to appoint CAIOs to oversee their use and governance of AI. In addition, the related OMB Memo⁵ requires agencies' appointment of CAIOs within the 60 days of its issuance on March 28th, 2024, and outlines specific requirements for the CAIO's role. Though some agencies had preexisting CAIOs⁶ or equivalent leadership positions per the EO 13960,⁷ the OMB Memo provides a comprehensive directive for standardizing the scope and management of AI governance within the federal government. In the rapid proliferation and experimental era of AI technologies, CAIOs are expected to serve a critical role in the effective implementation, adoption, and oversight of AI in federal agencies. The appointed officials, in coordination with respective leadership, will lead their agency's AI strategy, use cases, cross-functional collaboration and innovation, talent development, and risk mitigation efforts for both safety and rights impacting technologies. In principle, the role of CAIO signifies the federal government's commitment to establishing a thorough oversight body to guide and maximize the benefits of AI. Therefore, the success of appointed CAIOs is immensely vital for agencies to model the safe, secure, and trustworthy use of AI in the public and private sectors.

As agencies continue to designate CAIOs, an investigation of the existing appointments provides the opportunity to examine how their expertise aligns with their responsibilities, and how agencies can best ensure transparency, accountability, and public literacy in their development and use of AI. The research conducted by NFHA examines the

⁴ Executive Order 14110 on *The Safe, Secure, and Trustworthy Development and Use of AI*:

<https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/>

⁵ The Office of Management and Budget's Memorandum (OMB Memo) (M-24-10) on *Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence*: <https://www.whitehouse.gov/wp-content/uploads/2024/03/M-24-10-Advancing-Governance-Innovation-and-Risk-Management-for-Agency-Use-of-Artificial-Intelligence.pdf>

⁶ The Department of Health and Human Services: <https://www.meritalk.com/articles/greg-singleton-named-chief-ai-officer-at-hhs-oki-mek-returns-to-private-sector/>; The Department of Homeland Security: <https://www.dhs.gov/person/eric-hysen#:~:text=Chief%20Information%20Officer%20%26%20Chief%20Artificial%20Intelligence%20Officer&text=Eric%20Hysen%20serves%20as%20the,the%20Department%20of%20Homeland%20Security>

⁷ Executive Order 13960 on *Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government*:

<https://www.federalregister.gov/documents/2020/12/08/2020-27065/promoting-the-use-of-trustworthy-artificial-intelligence-in-the-federal-government>



appointments of 16 CAIOs across various federal agencies, with a closer assessment of those with significant influence or indirect impact on housing and lending: Department of Housing and Urban Development (HUD), Federal Housing Finance Agency (FHFA), Department of Veterans Affairs (VA), Department of Agriculture (USDA), General Services Administration (GSA), Department of Energy (DOEN), Department of Treasury (DOTREA), and Department of Justice (DOJ).

This policy brief overviews the alignment between the experience of appointed CAIOs and the requirements of their roles to assess their suitability to uphold their agencies' commitment to safe, secure, and trustworthy development and use of AI. Additionally, it proposes strategies that CAIOs may use to fulfill their responsibilities, and considerations for enhancing agency accountability and transparency to the public.

CAIO Responsibilities according to OMB Directives

The role of CAIOs is multifaceted, requiring a robust combination of skills, knowledge, and expertise to effectively lead and govern agency use of AI. Their primary responsibility lies in coordinating, innovating, and managing risks associated with AI within their agency:⁸ (1) This consists of advising senior agency leadership on AI initiatives, maintaining oversight of agency AI activities, and developing compliance plans and strategies. Key responsibilities include ownership of AI inventories, workforce upskilling plan, setting AI standards, promoting equitable outcomes within AI governance, gathering diverse perspectives for decision-making operations, etc.⁹ (2) Additionally, CAIOs are tasked with promoting innovation by implementing AI solutions that enhance the agency's mission, foster responsible use of AI, and emphasize the value of AI.¹⁰ The tasks are focused on identifying opportunities to leverage AI ethically and extract the benefits of digitization. In this process, CAIOs will also collaborate with agency officials to ensure custom AI data, code, and testing are properly documented and compliant with the minimum conducts.¹¹ (3) Moreover, they play a crucial role in managing risks arising from AI use. Key responsibilities include conducting risk assessments,¹² governing the exceptions for safety-impacting or rights-impacting AI,¹³ leading the required minimum

⁸ Section 3(b)(i). OMB Memo. <https://www.whitehouse.gov/wp-content/uploads/2024/03/M-24-10-Advancing-Governance-Innovation-and-Risk-Management-for-Agency-Use-of-Artificial-Intelligence.pdf>

⁹ Section 3(b)(ii). *Id.*

¹⁰ *Id.*

¹¹ Section 3(b)(ii)(M). *Id.*

¹² Section 3(b)(ii)(R). *Id.*

¹³ Section 3(b)(ii)(T). *Id.*



practices for performance and impact evaluation,¹⁴ ensuring regulatory compliance,¹⁵ evaluating the effectiveness and accuracy of implemented AI,¹⁶ and collaborating with agency leaders to develop AI standards and policies.¹⁷ Overall, CAIOs are expected to guide their agency's strategic approach to AI adoption while mitigating associated risks and fostering innovation in alignment with organizational goals.

As for candidate criteria, the OMB memo does not list specific qualifications regarding education, years of applied experience, specialty training, etc. Hence, we assess the specific qualifications of incumbent CAIOs of agencies in the context of the responsibilities listed in the OMB guidance. The required seniority of the role is defined at a Senior Executive Service (SES) level, Scientific and Professional, or Senior Leader level, or equivalent for CFO Act agencies, and GS-15 or equivalent for other agencies.¹⁸ In addition, CFO Act agencies are required to establish AI Governance Bodies to support the CAIO in executing the required actions.¹⁹ Given the comprehensive list of requirements outlined for AI governance, it is imperative for the CAIO appointee to possess the requisite skills, knowledge, and applied expertise for agencies' successful implementation of EO mandates.

Figure 4: OMB Memo CAIO responsibilities²⁰ and the related areas of expertise

CAIO Responsibilities (21)					
Coordinating Agency Use of AI (10)	Areas of Expertise	Promoting AI Innovation (4)	Area of Expertise	Managing Risks from the Use of AI (7)	Area of Expertise
(A) serving as the senior advisor for AI to the head of the agency and other senior agency leadership and within their agency's senior decision-making forums;	<ul style="list-style-type: none"> Applied knowledge of AI Strategic leadership Policy advocacy Governance and compliance 	(K) working with their agency to identify and prioritize appropriate uses of AI that will advance both their agency's mission and equitable outcomes;	<ul style="list-style-type: none"> Applied knowledge of AI Technology and implementation Mission alignment and prioritization Equity impact assessment 	(O) managing an agency program that supports the enterprise in identifying and managing risks from the use of AI, especially for safety-impacting and rights impacting AI;	<ul style="list-style-type: none"> Applied knowledge of AI Risk management Program management Knowledge of AI's safety and civil-rights implications

¹⁴ Section 3(b)(ii)(O). *Id.*

¹⁵ Section 3(b)(ii)(Q). *Id.*

¹⁶ Section 3(b)(ii)(P). *Id.*

¹⁷ Section 3(b)(ii)(S). *Id.*

¹⁸ Section 3(b)(iii). *Id.*

¹⁹ Section 3(a)(ii). *Id.*

²⁰ CAIO Responsibilities per Section 3(b)(ii). OMB Memo. <https://www.whitehouse.gov/wp-content/uploads/2024/03/M-24-10-Advancing-Governance-Innovation-and-Risk-Management-for-Agency-Use-of-Artificial-Intelligence.pdf>



<p>(B) instituting the requisite governance and oversight processes to achieve compliance with this memorandum and enable responsible use of AI in the agency, in coordination with relevant agency officials;</p>	<ul style="list-style-type: none"> • Governance and compliance • Risk management • Responsible AI practices • Cross-functional collaboration • Audit and accountability systems 	<p>(L) identifying and removing barriers to the responsible use of AI in the agency, including through the advancement of AI-enabling enterprise infrastructure, data access and governance, workforce development measures, policy, and other resources for AI innovation;</p>	<ul style="list-style-type: none"> • Applied knowledge of AI • Technology planning and implementation • Risk management • Policy development and governance 	<p>(P) working with relevant senior agency officials to establish or update processes to measure, monitor, and evaluate the ongoing performance and effectiveness of the agency's AI applications and whether the AI is advancing the agency's mission and meeting performance objectives;</p>	<ul style="list-style-type: none"> • Performance measurement • Process improvement • Executive collaboration
<p>(C) maintaining awareness of agency AI activities, including through the creation and maintenance of the annual AI use case inventory;</p>	<ul style="list-style-type: none"> • Data governance • Process management • Technology assessment and evaluation 	<p>(M) working with their agency's CIO, CDO, and other relevant officials to ensure that custom-developed AI code and the data used to develop and test AI are appropriately inventoried, shared, and released in agency code and data repositories in accordance with Section 4(d) of this memorandum;</p>	<ul style="list-style-type: none"> • Leadership collaboration • Data management and governance • Compliance and regulatory understanding 	<p>(Q) overseeing agency compliance with requirements to manage risks from the use of AI, including those established in this memorandum and in relevant law and policy;</p>	<ul style="list-style-type: none"> • Risk management • Compliance management • Legal and policy knowledge
<p>(D) developing a plan for compliance with this memorandum, as detailed in Section 3(a)(iii) of this memorandum, and an agency AI strategy, as detailed in Section 4(a) of this memorandum;</p>	<ul style="list-style-type: none"> • Applied knowledge of AI • Technology planning and implementation • Policy development 	<p>(N) advocating within their agency and to the public on the opportunities and benefits of AI to the agency's mission;</p>	<ul style="list-style-type: none"> • Applied knowledge of AI • Advocacy • Strategic communication • Deep understanding of AI implications 	<p>(R) conducting risk assessments, as necessary, of the agency's AI applications to ensure compliance with this memorandum;</p>	<ul style="list-style-type: none"> • Applied knowledge of AI • Risk management • Compliance management
<p>(E) working with and advising the agency CFO on the resourcing requirements necessary to implement this memorandum and providing recommendations on priority investment areas to build upon existing enterprise capacity;</p>	<ul style="list-style-type: none"> • Resource allocation • Cost-benefit analysis • Investment prioritization 			<p>(S) working with relevant agency officials to develop supplementary AI risk management guidance particular to the agency's mission, including working in coordination with officials responsible for privacy and civil rights and civil liberties on identifying safety-impacting and rights-impacting AI within the agency.</p>	<ul style="list-style-type: none"> • Applied knowledge of AI • Risk management • Collaboration and coordination • Privacy and civil rights knowledge
<p>(F) advising the Chief Human Capital Officer (CHCO) and, where applicable, the Chief Learning Officer, on improving workforce capacity and securing and maintaining the skillsets necessary for using AI to further the agency's mission and</p>	<ul style="list-style-type: none"> • Applied knowledge of AI • Workforce development • Diversity, equity, and inclusion initiatives • Change management 			<p>(T) waiving individual applications of AI from elements of Section 5 of this memorandum through the processes detailed in that section;</p>	<ul style="list-style-type: none"> • Applied knowledge of AI • Risk management • Compliance procedures • Technical documentation



adequately manage its risks;					
(G) sharing relevant information with agency officials involved in the agency's major AI policymaking initiatives;	<ul style="list-style-type: none"> • Applied knowledge of AI • Information dissemination strategy • Interagency collaboration • Stakeholder engagement • Policymaking 			(U) in partnership with relevant agency officials (e.g., authorizing, procurement, legal, data governance, human capital, and oversight officials), establishing controls to ensure that their agency does not use AI that is not in compliance with this memorandum, including by assisting these relevant agency officials in evaluating Authorizations to Operate based on risks from the use of AI.	<ul style="list-style-type: none"> • Partnership establishment and coordination • Control implementation • Risk evaluation and assessment
(H) supporting agency involvement with appropriate interagency coordination bodies related to their agency's AI activities, including representing the agency on the council described in Section 10.1(a) of Executive Order 14110;	<ul style="list-style-type: none"> • Applied knowledge of AI • Interagency coordination strategy • Council representation and engagement • Policy advocacy and alignment 				
(I) supporting and coordinating their agency's involvement in AI standards-setting bodies, as appropriate, and encouraging agency adoption of voluntary consensus standards for AI, as appropriate and consistent with OMB Circular No. A-119, if applicable;	<ul style="list-style-type: none"> • Applied knowledge of AI • Standards development • Voluntary consensus standards advocacy • Regulatory compliance alignment 				
(J) promoting equity and inclusion within the agency's AI governance structures and incorporating diverse perspectives into the decision-making process.	<ul style="list-style-type: none"> • Knowledge of AI's safety and civil-rights implications • Diversity, equity, and inclusion integration • Inclusive decision-making practices • Bias mitigation and fairness measures 				



Methodology

Research on Appointed CAIOs

Agency list

NFHA's work on fair housing and equitable lending is centered on this principle: *"Where you live matters."* Since 1988, we have led interdisciplinary efforts to ensure equitable access to housing and well-resourced communities for all people. This quest persists as the emergence of housing technologies presents promising opportunities for increasing home equities, but also raises risks such as discrimination and digital redlining. Housing is a critical force in shaping individuals' lives, forming the foundation of their ecosystem, and influencing access to opportunities and resources such as healthcare, education, employment, financial services, and more. While many agencies impact housing, we prioritize agencies with significant responsibilities in housing-related activities, alongside their core obligations, for our study. HUD, FHFA, VA, and USDA are among the agencies considered for this study.

HUD works to address the general public's housing needs and community development. As an independent agency, FHFA oversees the regulation of the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac), and the Federal Home Loan Bank System to ensure the secure and dependable operations of funding housing opportunities and community investments.²¹ The VA provides housing support in both lending²² and voucher assistance programs²³ for eligible veterans, whereas the USDA permits rural housing development and homeownership programs.²⁴ In addition, the GSA manages surplus federal buildings for housing assistance,²⁵ the DOTREA has established home assistance programs to minimize foreclosures,²⁶ and the DOJ is tasked with maintaining lawful standards and extending civil rights protections to combat discriminatory practices. Notwithstanding the list of agencies for this work, our findings provide broader insights applicable for all agencies that have identified CAIO roles and responsibilities.

²¹ FHFA Statement: <https://www.fhfa.gov/AboutUs>

²² VA Home Loans: <https://www.va.gov/housing-assistance/home-loans/loan-types/>

²³ VA Housing: <https://www.va.gov/homeless/housing.asp>

²⁴ USDA Rural Housing: <https://www.rd.usda.gov/about-rd/agencies/rural-housing-service>

²⁵ GSA Surplus Federal Buildings: <https://www.gsa.gov/real-estate/real-estate-services/real-property-disposition/surplus-real-property-available-for-public-use>

²⁶ Treasury Home Relief: <https://home.treasury.gov/data/troubled-assets-relief-program/housing/overview>



Data collection

To identify the appointed CAIOs and delve into their relevant professional backgrounds, an online search was conducted between January 26 and February 14, 2024, encompassing government press releases, third-party articles, and role reviews on LinkedIn. The finalized list of CAIOs included is reflective of all updates made through July 2024. To support the qualitative analysis, a database was created to capture CAIO profile details, including education, years of relevant experience, agency expertise, etc.

Figure 2: Identified CAIOs for shortlisted agencies.²⁷

	Agency	Education Level	Field of Study	Est. Yrs. of AI / Tech. Exp.	Est. Total Yrs. of Exp.	Exp. Domain	Agency Exp.	Related previous roles at agency
1	HUD	Master of Business Management (MBA)	Management, Accounting	-	25+	Private and Public	2022-present	Chief Financial Officer
2	FHFA	Bachelor of Science (BS)	Management Information Systems and Decision Science	17	25+	Private and Public	2023-present	Supervisor, Office of Financial Technology and Innovation
3	VA	Bachelor of Arts (BA)	Social Studies	8	15+	Private and Public	2017-present	Chief Technology Officer
4	USDA	Master's	-	14	30+	Private and Public	2008-present	Chief Data Officer Director of the Data Analytics
5	GSA	Doctor of Philosophy (PhD)	Hazard and Disaster Management	7	14+	Private and Public	2023-present	Chief Data Scientist
6	DOE	Master of Public Policy (MPP)	Urban Studies, Public Policy	4	22+	Private and Public	2012-present	Director of Critical and Emerging Technology
7	DOTREA	Master of Business Management (MBA)	Data Analytics	5	22+	Private and Public	2010-present	Chief Data Officer Chief Information Officer
8	DOJ	Doctor of Philosophy (PhD)	Computer Science	8	12+	Public and Academia	New Hire	None

Developing the CAIO Benchmark

Strategy

Overall, the role of CAIO is emerging and has evolving JDs dependent on industry and organizational strategic priorities. To comprehensively assess the role-profile fit of CAIOs across various agencies, a multi-faceted benchmarking approach has been employed to

²⁷ All CAIO background details are gathered from their public LinkedIn profiles, and agency biography pages.



develop a JD benchmark.²⁸ The JD is not meant as a strict requirement, but a baseline to consider what criteria is a reasonable expectation for a given CAIO, in alignment with agency obligations, public input, and industry norms. First, an analysis was conducted on the EO and OMB Memo to capture the details pertaining to CAIO appointments and related requirements. This allows us to understand the scope of responsibilities assigned to the CAIOs, and their related domain areas. Secondly, a sample of industry job descriptions was analyzed to assess candidate and role criteria for a CIAO or similar positions. In addition, government job listings with SES or GS-15 level requirements were reviewed to identify the standard criteria for senior positions. To incorporate stakeholder perspectives, a brief public survey and follow-up interviews were conducted to finalize the JD benchmark.

Profile Selection

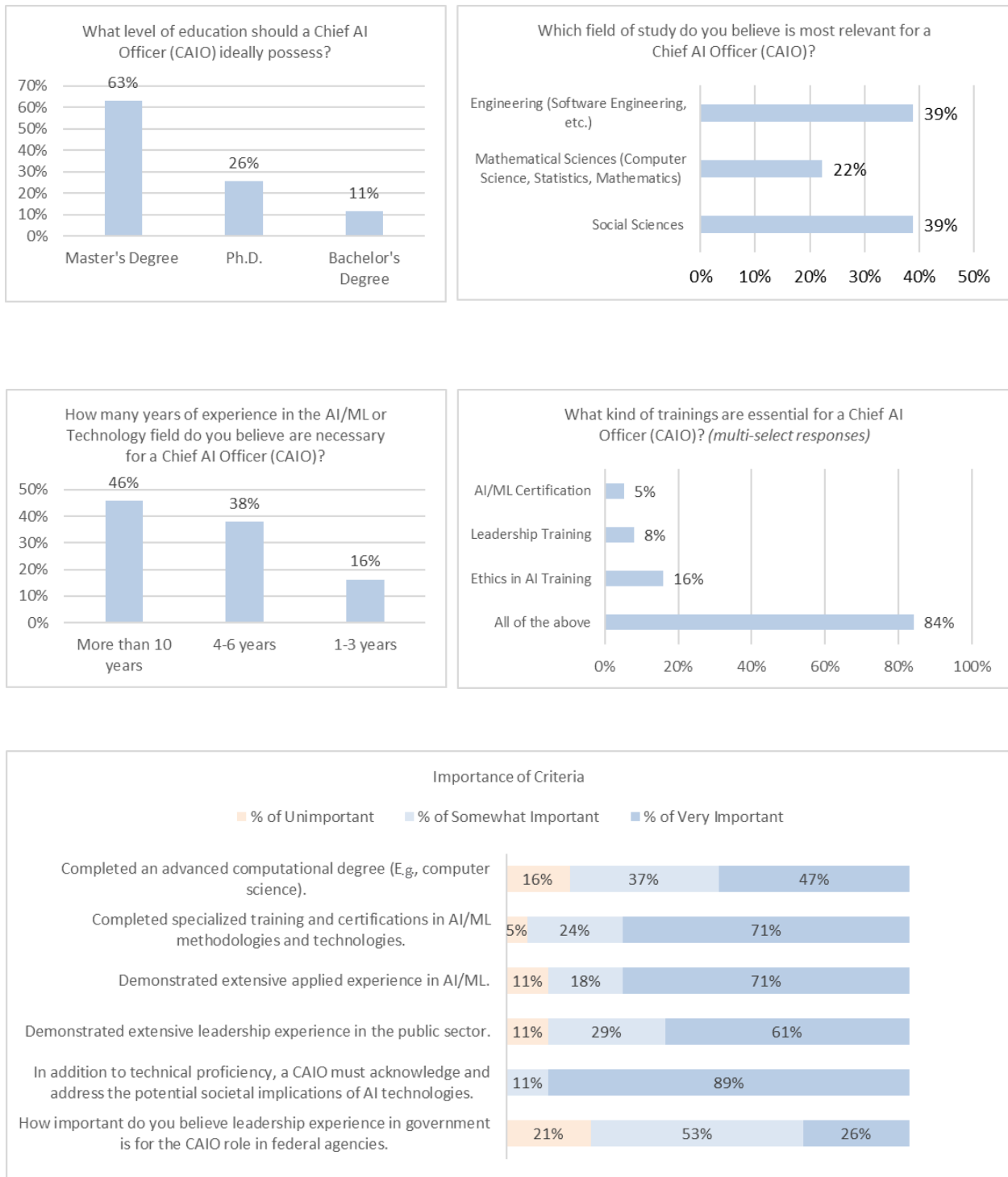
The EO and OMB Memo list the responsibilities for the CAIO role and Section 3(b)²⁹ of the OMB Memo provides a detailed description for the CAIO role which was used to develop the JD benchmark. For industry examples, an online search was conducted, and a database was developed to reference 14 identified CAIO or related roles (Chief Responsible AI Officer, VP of AI, Head of AI, etc.). These JDs included criteria for candidate education level, subject specialty, related experience, and preferred qualifications. For stakeholder input, NFHA conducted an anonymous survey from February 9 to 16, 2024. The survey was shared with some task force groups, NFHA's member organizations, and across NFHA's social media channels. A total of 38 responses were generated, 61 percent of which were affiliated with consumer rights groups, 13 percent government employees, 13 percent members of the public, 11 percent industry representatives, and 3 percent from academia. To apply data quality standards, the results were reviewed for missing data and consistency in input format and type. To ensure relevancy of the key takeaways, data underwent normalization to remove noise.

²⁸ NFHA's Benchmark Job Description - Chief AI Offer for Agencies: <https://nationalfairhousing.org/wp-content/uploads/2024/08/Benchmark-Job-Description-Chief-AI-Offer-for-Agencies-.pdf>

²⁹ The Office of Management and Budget's Memorandum (OMB Memo) (M-24-10) on Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence: <https://www.whitehouse.gov/wp-content/uploads/2024/03/M-24-10-Advancing-Governance-Innovation-and-Risk-Management-for-Agency-Use-of-Artificial-Intelligence.pdf>



Figure 3: Key summaries from the CAIO benchmarking survey





Although this methodology enabled the inclusion of valuable insights for the JD benchmarking, it is essential to acknowledge known limitations of the survey. These findings may lack representativeness due to selection bias, and anonymity of results cannot guarantee the uniqueness of the respondents. While these are reasonable constraints, the survey findings did contribute key considerations for evaluating CAIO candidacy and effectiveness. To gain deeper insights into respondents' preferences, seven additional interviews were conducted upon expressing interest to follow-up. Virtual interviews were conducted between February 26 and 28, 2024, to allow participants to elaborate on their survey results and offer any additional criteria that were not previously captured on the survey. A member of NFHA's staff joined all interviews as the primary witness and to support interview procedures. All interviews were hand-transcribed for direct quotes.

Analysis

A qualitative assessment was employed to identify the primary strengths and potential knowledge gaps of appointed CAIOs, in relation to their respective OMB responsibilities, and the JD benchmark to gauge their suitability for this pilot position. It is significant to note that this analysis was dependent on the public availability of CAIOs' announcements, related accomplishments, and expertise. In addition, although the benchmark considerations include education type and degree specialty, these details alone are not definitive indicators of a candidate's holistic fitness. However, when coupled with applied experience, they may credit the technical competency required to successfully undertake a leadership position in AI governance. By examining these factors, the brief provides insights into the qualifications essential for establishing effective AI leadership within federal agencies to address the key requirements outlined both in the EO and OMB directives.

Ethics and Positionality

This study recognizes its followship of research ethics and positionality. All online data collected was sourced from publicly available information, ensuring data privacy and legal compliance. Prior to participation, the survey contributors were informed of their anonymity, and adherence to NFHA's data privacy policy for safeguarding confidentiality. Similarly, interview participants were briefed on the project scope and their voluntary participation status. Before conducting interviews, informed consent forms were completed and obtained from all participants. In acknowledging positionality, we recognize that researcher perspectives may also shape the research processes and reflective outcomes. By raising the awareness of the potential biases influencing data



discovery, collection, review, and understanding, we aim to enhance reader trust and reliability of its findings. This awareness allows for a more nuanced understanding of the research context and encourages critical reflection of study's outcomes.

Key Takeaways

Lack of Transparency of CAIOs

During this study, researching CAIOs posed unique challenges due to several key factors. Firstly, the absence of standardized announcements of appointments complicated the process, as agencies are only required to notify OMB of appointments³⁰ without a public disclosure mandate. Consequently, uncovering information about appointees relies heavily on online research procedures, including reviewing press articles, government blogs, and LinkedIn role announcements. However, this approach presents a challenge in establishing a single credible source of truth, leading to potential inconsistencies for public discourse. As of July 2024, the official ai.gov website has published the list of appointed CAIOs, however key transparency challenges regarding their suitability still apply.³¹ Secondly, the lack of accessibility to agency JDs restricted a comparative review and the identification of specific candidate criteria. Despite outreach efforts to the shortlisted agencies, no copies of CAIO JDs were provided. Thirdly, the variability and absence of profile details on appointed individuals, both on government and public platforms, added an extra layer of difficulty to the research. These challenges broadly illustrate the difficulties the public may encounter in researching agency use of AI and in efforts to understand, evaluate, and comment on agencies' appointments of CAIOs responsible for leading AI initiatives. Given the magnitude of responsibilities assigned to CAIOs, agencies should seek to prioritize and standardize transparency practices regarding the expertise relevancy of appointments. This objective will also depict a clear rationale for their selections, enhance credibility, and foster public trust in agency processes. The guided policy recommendations will define the actions needed for implementation.

Alignment of Existing CAIO Profiles with Requirements

The success of preliminary AI initiatives in government can have downstream effects. Agencies are positioned to shape the evolving landscape of AI regulation, both domestically and globally, whilst serving as a model for best practices in AI governance

³⁰ Section 3(a)(i): OMB Memo. <https://www.whitehouse.gov/wp-content/uploads/2024/03/M-24-10-Advancing-Governance-Innovation-and-Risk-Management-for-Agency-Use-of-Artificial-Intelligence.pdf>

³¹ List of Federal CAIOs: <https://ai.gov/ai-in-gov/>



that can be adopted by private entities. The following section delves into the suitability of chosen CAIO appointees based on their publicly available information. This brief acknowledges that the lack of relevant details pertaining to CAIO accomplishments and profiles that are not publicly accessible may limit the accuracy of this assessment. Additionally, although there is immense value to diverse experiences, the OMB directives emphasize the need for CAIO candidates to possess a strong blend of technical expertise and agency acumen to competently navigate the intricate tasks of AI initiatives. As a result, this assessment attempts to illuminate the strengths and potential limitations of the appointed CAIOs, recognizing the pilot circumstance of this influential role.

Figure 4: Strengths of Appointed CAIOs’ Public Profiles

Strengths	
Area of Expertise	Description
Leadership	Appointees possess extensive leadership experience across both government and private sectors, with the demonstrated ability to lead diverse teams, drive strategic initiatives, and cultivate organizational change. Many of the current CAIOs have also held advisor positions to senior federal executives for efforts related to technology and security governance.
Public Service	Most CAIOs have held multiple positions in federal agencies, contributing to policy development, program implementation, and service delivery. In addition, they have advisement, interagency, and cross-functional experience in public service operations.
Technology Management and Modernization	In past roles, the majority of CAIOs have spearheaded initiatives aimed at modernizing IT infrastructure, integrating emerging technologies, enhancing cybersecurity protocols, and facilitating government digitization efforts. Their strategic foresight and technical proficiency have been instrumental in driving projects that enhance operational efficiencies across government functions.
Data Analytics	Numerous CAIOs have leveraged their technical expertise to lead initiatives encompassing data management, analytics, and cybersecurity. Additionally, some CAIOs possess advanced technical degrees, further enhancing their capabilities in these domains.
Policy Development	Experienced CAIOs with a background in government operations and research actively participate in policy development and advocacy, influencing federal security and technology policies.



Figure 5: Potential limitations of Appointed CAIOs’ Public Profiles

Potential Limitations	
Area of Expertise	Description
AI Expertise	While CAIOs boast considerable experience in technology implementations, data management, and system operations, there’s a notable dearth of reference to applied AI expertise among most appointees.
Agency Operations	Several CAIOs are relatively new to their agencies, lacking innerworkings knowledge of specific agency operations and government entities.
Risk Management	While some CAIOs possess cybersecurity expertise, EO and OMB guidance emphasize specific risk management requirements for safety and rights-impacting AI. Therefore, a robust understanding of applied risk management for AI systems is essential.
Civil Rights	There’s limited indication of appointed CAIOs’ awareness and experience in safeguarding and promoting civil liberties in the agency’s utilization of AI technologies.
Compliance	There’s a lack of direct experience in the legal evaluation of AI systems to ensure compliance with regulatory requirements and adherence to OMB’s responsible AI principles among appointed CAIOs.
Public Engagement	There’s noticeable ambiguity regarding the CAIOs’ prioritization of public engagement. More clarity is needed to highlight how they have historically engaged with affected or vulnerable communities.

The assessment of the fitness of shortlisted CAIOs reflects a notable consensus in certain criteria. First, there is a clear preference for selecting an appointee from the existing senior leadership of an agency, with backgrounds primarily rooted in data-intensive, operational, or policy roles. However, there is a lack of consistency in educational backgrounds or disclosure of core AI-related accomplishments among appointees. While many CAIOs appear to demonstrate an established knowledge of their respective agencies, some exceptions exist, with certain individuals possessing government experience in direct public service roles or advisory capacities. However, public information indicates a noteworthy level of uncertainty regarding the AI expertise of most CAIOs, particularly concerning their ability to fulfill the core AI requirements outlined by the EO and OMB directives. Effective leadership in AI implementation, procurement, and responsible governance necessitates a deep understanding of AI architecture and functions, an aspect that appears to be clearly omitted in several appointments. Furthermore, as illustrated in the accompanying table, some CAIOs may be adjusting to their new agencies and navigating internal and inter-agency processes, which presents a natural learning curve in their roles.



Considering the pivotal opportunity a CAIO position represents in shaping the federal government's responsible development and use of AI, the success of an incumbent is contingent upon their comprehensive understanding of AI technologies. As the central figure tasked with fostering AI innovation and compliance within their agency, the CAIO must possess applied knowledge of AI and the underlying infrastructure required for scalable AI deployment. This expertise is imperative for “identifying and removing barriers to the responsible use of AI,”³² conducting risk assessments,³³ or waiving AI systems from minimum risk management requirements by establishing “an unacceptable impediment to critical agency operations.”³⁴ Moreover, experience in technology or AI-related implementation should be essential for navigating the complexities of system integration, adoption, and maximizing the projected benefits. Ultimately, a CAIO equipped with the foundational knowledge and applied experience of AI is well positioned to successfully execute and deliver on the outlined requirements. Reflective of the findings above, the following section will highlight the reasonable expectations for a CAIO based on NFHA’s benchmark JD.

Benchmark Expectations for the CAIOs

In order to continuously assess and align the profile of a CAIO with their role and responsibilities, it is essential to establish reasonable expectations regarding the suitability and ongoing preparedness of candidates. This entails tenure of core skills and accomplishments that will support the execution of the responsibilities they are expected to fulfill. In addition, agency leadership can also proactively invest in specialized training to develop CAIOs’ advanced skills in AI. In addition to assessing CAIO suitability, agencies should delve into their strategies for evaluating and quantifying the effectiveness of AI governance within their organization, including the specific contributions of CAIOs in this process. While agency criteria will govern the specific requirements of the suitable candidate, the benchmark JD provides the following areas of reasonable expectations to strive for.

1. Applied Knowledge of AI

Given the thorough list of tasks and responsibilities assigned to the CAIOs, a profound understanding of AI technologies is indispensable for their envisioned success. This perspective is strongly emphasized by the research conducted to develop a benchmark JD. In today’s interconnected nature of AI developments and the evolving role of CAIOs,

³² Section 3(b)(ii)(L): OMB Memo: <https://www.whitehouse.gov/wp-content/uploads/2024/03/M-24-10-Advancing-Governance-Innovation-and-Risk-Management-for-Agency-Use-of-Artificial-Intelligence.pdf>

³³ Section 3(b)(ii)(R). *Id.*

³⁴ Section 5(c)(iii). *Id.*



it is crucial to benchmark against industry standards. This approach ensures alignment with best practices, fostering market competitiveness and driving innovation. Of the 14 industry positions reviewed, the average direct experience in AI or related domain was nine years, 13 out of 14 indicated an educational background in computational sciences, and 11 out of 14 required either a master's or PhD. The survey of stakeholders revealed that 89 percent hold a preference for candidates with a master's or PhD degree. For related experience, 46 percent preferred "more than 10 years" and 38 percent indicated "four to six years." Additionally, 61 percent chose computational sciences or engineering as the preferred field of study, demonstrating the importance of technical competencies. As partnerships between public and private sectors evolve, it becomes increasingly crucial for public officials to possess robust AI expertise. This ensures that initiatives and governance of AI are not solely influenced by private sector interests, but rather reflect a balanced approach that considers broader societal implications and benefits. Recently, the Department of Homeland Security announced their inaugural Artificial Intelligence Safety and Security Board, composed of 22 executives, to advise on the nation's safe and secure development of "critical infrastructure".³⁵ At a closer look, 59 percent of the members were from the top AI companies, 27 percent were from non-profit organizations, and only 14 percent were from public offices. The government requires AI practitioners who are not only technically versed, but also capable of guiding and leading the decision-making process.

Furthermore, insights gleaned from interviews echoed the importance of AI proficiency for CAIOs. One of our participants articulated their perspective by stating that, "You cannot put a lawyer in this role and expect results, we'll be outrun by industry. This is cutting-edge technology and super complex, so I think having someone who has real, in-depth technical knowledge in the CAIO role will head off the criticism that government is not fit to regulate AI. To be successful, they will require rigorous and informed advice." Additionally, Steven Shelton, a Staff Attorney at the Legal Services of Eastern Michigan shared that, "Any person that will be responsible for this technology, especially for decisions impacting vulnerable people, needs to know how the technology works. This will also involve statistics and data analytics, so outside of knowing how it works, you need to be able to properly analyze the outcomes." These multifaceted indicators collectively endorse the pivotal role of AI knowledge in shaping the efficacy and impact of CAIOs as they navigate the intricate terrain of responsible AI governance and innovation within government spheres.

³⁵ DHS Announcement of New AI Safety and Security Board: <https://www.dhs.gov/news/2024/04/26/over-20-technology-and-critical-infrastructure-executives-civil-rights-leaders>



2. *Interdisciplinary Expertise*

To fulfill their responsibilities, CAIOs must have interdisciplinary experience to effectively navigate the operations, ethics, policy, and compliance aspects of AI governance and innovation within federal agencies. The dynamic nature of AI necessitates comprehensive understanding that transcends single disciplinary expectations. CAIOs are tasked with addressing a diverse list of challenges posed by AI adoption that requires perspectives from socio-technical, legal, and policy frameworks. This holistic approach will equip CAIOs with the adaptability to collaborate with cross-functional stakeholders for AI initiatives. Angela McIver, Chief Executive Officer at the Fair Housing Rights Center in Southeastern Pennsylvania, who noted “cultural competence” and “trauma-aware” as key qualities for the role and shared that, “[CAIOs] must be dynamic enough to not only understand data science, but also have sociological perspectives, hold a high degree of ethics, and understand the significance of diversity...They must understand that they are not just dealing with numbers, but human beings. They are resilient of course, but also fragile and require intervention. We need someone who is going to be sensitive enough to understand that outputs, however they approach it, need not harm people.”

Additionally, Thomas Meier, the Chief Information Officer at the Massachusetts Office of the State Auditor Diana DiZoglio, shared that, “a [CAIO] must have the personal human quality of empathy and understanding for those that are not like yourself. We have the tendency to project from our own experience, and frameworks of who we are. To be effective in this space, you need to consider that others think of the future differently than you and look for applications from AI that mirror their experiences. Executives in this role need to be very aware of what systems they are putting out there, what effects they may have, and consider that as good as the quality of outcomes in terms of accuracy, they may not be [the decision makers’ expected outcomes].” Aligned with the OMB directive, our survey results captured that 89 percent of respondents hold the perspective that “in addition to technical proficiency, acknowledging and addressing the social implications of AI” is of high importance, while 11 percent assigned it as somewhat important. For additional training considerations, 100 percent included “Ethics in AI” as essential for the CAIO role. As demonstrated, the CAIO role necessitates an interdisciplinary background to adeptly address the diverse elements of responsible AI use and governance.

3. *Leadership*

For the CAIO role, leadership experience in organizational initiatives is not just desirable, but fundamental, particularly in the domains of operations, strategy, multi-stakeholder collaborations, and securing internal buy-in. While the OMB memo does require seniority to be considered for this position, details must go beyond governmental ranking. For an



incumbent CAIO to be successful, they should have applied experience in operational proficiencies to lead the complex process of implementing AI initiatives and creating governance mechanisms. Thomas Meier expressed that, “[it] is less around a particular degree, but more about direct experience, having an executive role in government or private sector, and being able to match the agency vision and goals to enablement technology ... what that means is organization, categorization, prioritization, and the ability to lead the steps required from problem to solution.” In addition, strategic acumen is equally vital, as CAIOs are tasked with crafting and executing comprehensive AI strategies that align with the overarching goals of their respective agencies, driving impactful outcomes across various functions. Furthermore, adept collaboration skills are essential for forging meaningful partnerships across diverse sectors, facilitating knowledge exchange, and catalyzing collective action towards AI-driven innovation. A successful CAIO appointee must possess the leadership skills to design and govern operations, define an adaptable strategy, prioritize collaborations, and gain internal support. These qualities are indispensable for CAIOs in driving meaningful change, facilitating agency-wide compliance, operationalizing responsible development and use of AI, and actualizing the full potential of technological innovation.

4. Agency Acumen

In December 2023, the Government Accountability Office (GAO) released a report on government’s acquisition of AI and identified 1,200 use cases in federal agencies.³⁶ As AI initiatives continue to scale, the critical assessment of possible solutions is essential to avoid hasty decisions driven by industry pressures to stay cutting edge. The emphasis must prioritize the selection of technologies that align with agency’s organizational goals and pursuits. CAIOs with agency knowledge possess a profound understanding of the agency’s unique mission, operations, culture, and specific challenges. This expertise enables tailoring of AI strategies and programs to support agency objectives, to ensure their contextual relevance and valuable impact. Additionally, agency acumen facilitates effective communication and collaboration with internal stakeholders, allowing for CAIOs to manage collective dynamics, develop trust, and secure internal stakeholder buy-in for AI initiatives. Applied experience with the agency-specific processes and regulatory norms will support management of compliance and risk mitigations associated with AI adoption. To elaborate further, a participant shared that, “[for] CAIOs, I think it also matters how well you can move the bureaucracy along. It is such an important skill to have, and there will be so much work and policy to be approached, so the government

³⁶ GAO-24-105980 Report, Artificial Intelligence: Agencies Have Begun Implementation but Need to Complete Key Requirements: <https://www.gao.gov/assets/d24105980.pdf>.



know-how-to is very important.” Additionally, Dana Lockwood, a Data Engineer at NFHA, highlighted the importance of “[CAIOs]’ ability to communicate and foster communication with different divisions they are overseeing, and successfully collaborate across different departments in government and with other CAIOs.” Knowledge sharing within agencies will also advance the identification of best practices and collective areas of improvement. Given the complex nature of public organizations, CAIOs equipped with agency experience are empowered to drive AI transformations and lead agency compliance of the requirements outlined by the EO directives.

5. Mission-advancing

Lastly, being mission-oriented should be a critical priority for CAIOs, as they are tasked with leading the AI vision and priorities as aligned with their agency’s measures of success. To go beyond values and defined principles, the core challenge remains in operationalizing responsible use and governance of AI technologies and unlocking their strategic leverage in addressing specific challenges and opportunities. This approach requires staying up-to-date with AI trends, opportunities, and limitations to comprehensively assess their relevance to the agency’s mission. To illustrate, Jacqueline Banks, Testing Coordinator and Fair Housing Investigator at the Fair Housing Center of Toledo, Ohio, expressed that, “[people] often make decisions, but cannot foresee the long-term implications. So, they [CAIOs] must be strategic thinkers when implementing technologies, and consider what possibilities might be on the horizon. These individuals must be able to strategize, be able to plan and advise organizational leadership, and policymakers. They must also be quick learners; and there is really no room for ego.” As CAIOs remain current of AI innovations, evaluate current impacts, and strategically plan for future enhancements aligned with the agency mission, the potential of AI for public benefit will be poised to actualize into tangible realities. Being mission-advancing also entails leading efforts to upskill staff while cultivating a workforce well prepared to harness the potential of AI.

To ensure progress, agency leadership must consider an appropriate list of key measures of success or key performance indicators (KPIs), more broadly for their AI-related practices and specifically for the effectiveness of appointed CAIOs who are uniquely positioned to lead agency AI initiatives and responsible oversight. To demonstrate the promised value of AI in public service, CAIOs must prioritize tangible outcomes that demonstrate the actualized benefits of AI programs in achieving agency objectives while mitigating risks and harms that AI poses to civil rights and human rights. With time, this includes setting actionable KPIs to track the impact of AI on various aspects of agency operations, services, and mission outcomes. When asked about his expectations of how



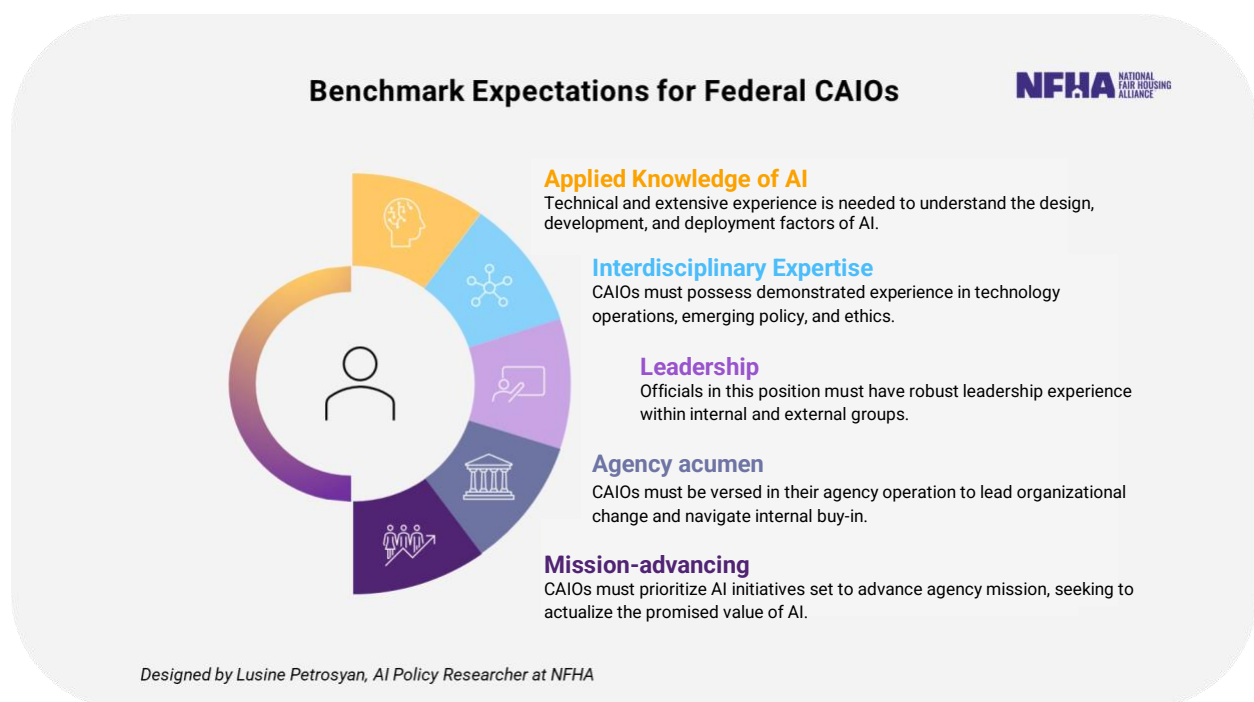
agencies can measure the effectiveness of CAIOs, Jake Akervik, Acting Director for HUD Minneapolis and a Deputy Director of Technology Management at HUD HQ, shared, “As someone who started my government career at the state level, I would like to see the federal government using more state-level best practices, e.g., incorporating more regional and local stakeholder groups, like citizen advisory boards, for market research, feedback, and continuous improvement. For example, an issue in Minneapolis may not have the same variables or priority in another city or state...In terms of measuring AI ‘success’ or progress, we optimally will not have just internal government employees participating in AI program and project evaluation. If we only use a list of our government and industry peers, we won’t have a balanced perspective that best serves our partners, stakeholders, and customers. I believe true AI success will include: (1) Inclusion in the usual reporting for strategic planning and transparency; (2) Sharing potential specific use cases for AI and ML before prototyping and implementation; (3) Making clear how a DEIA lens will be prioritized and consistently applied; and (4) Empowering CAIOs and other tech and innovation leaders to say ‘no’ when the negative risks or unknowns of a potential AI tool or solution outweigh the potential cost savings or contribution to the public good. Finally, we need to ask: What do accountability and responsibility mean in the CAIO role? And how do we bring accountability to the “mystery box” of AI outputs given how fast the tech is accelerating? I don’t have the answers to these questions. But if we stop asking them and just trust the technology or people behind the curtain, I think we’re likely to regret it sooner or later.”

To elaborate further, Steven Shelton shared that, “...it’s going to depend on the application of AI in those agencies. In HUD it will vary compared to NASA. In general, efficient and quick turnaround time in serving constituents would be a great measuring stick. For other things, such as policy changes and how they are affecting people that the agency is aiming to protect and serve, we should do statistical analysis of actual outcomes by independent assessors, because every agency is going to try to look good and need a third-party review.” Considering the importance of public review and information accessibility, a participant commented that, “[we] want to avoid a highly technical definition of success because then it doesn’t allow for the public assessment or the review of those measures. If the mission of the agency is being furthered, then that’s our measure. [We should] resist technical measures because then it is much easier to game the system, especially if you’re on the inside.” Ultimately, the ability to demonstrate concrete results is crucial for evaluating the effectiveness of AI governance efforts and determining the overall success of AI initiatives in advancing the greater mission of federal agencies.



The position of CAIOs offers a profound opportunity for advancing the responsible development, use, and governance of AI in the federal government. The benchmarked expectations outlined above highlight key areas for consideration. There are also intangible characteristics that should be factored in. In relation, Steven Shelton expressed that, “[with] great power comes great responsibility. This of course is hard to quantify in terms for candidates, but there are things that are just as important as tech; qualities such as credibility, open mindedness, the courage to lead but also compromise when needed, being able to get staff onboard, and at top of the list I would say a sense of compassion. Agencies make decisions that can disenfranchise thousands of people, so it is important to lead with compassion. Otherwise, it all just becomes another bureaucratic machine.”

Figure 7: Benchmark Expectations for Federal CAIOs



Policy Recommendations

1. Transparency of CAIOs

We advocate for increased transparency from agencies on the relevant backgrounds of appointed CAIOs. As noted previously, the discovery of CAIOs was not standardized, and



we had to review multiple non-governmental sources, including press releases, news articles, and LinkedIn profiles. This lack of transparency may compromise the civic engagement process, and potentially undermine the collective trust in agencies. Increased transparency is pivotal to ensure that stakeholders have access to essential information regarding the qualifications, expertise, and achievements of CAIOs. By establishing clear disclosure of CAIO details, agencies can strengthen public trust and embrace accountability for AI governance. In alignment with the EO 13960 Section 5(e) mandate for agencies to make their AI inventories available on their websites for public review,³⁷ agencies should be consistent in sharing information about appointed CAIOs, including relevant qualifications and experience to emphasize credibility, as this may inform the level of trust that the public may have in the safety of agencies’ AI products and services.

Figure 6: Recommended format of CAIO disclosure on agency websites

Chief AI Officer	<i>Name</i>
Biography	<i>Summary of Experience</i>
1. Education	<i>Degree and Field of Study</i>
2. Experience	<i>AI-Related Experience</i>
Years at Agency	<i>(yyyy-yyyy)</i>
Previous Roles at Agency	<i>Role (yyyy-yyyy)</i>
Advanced AI Trainings	<i>Program (credentials)</i>

2. Benchmark Criteria

Our investigation reveals a notable absence of standardized candidate criteria for the CAIO role within federal agencies when juxtaposed with industry standards. Nevertheless, discernible core competencies and experiences, particularly in computational and technical realms, highlight the importance of establishing a reasonable benchmark for agencies to evaluate prospective CAIO candidates. Like the role’s responsibilities, seniority, and scope of authority, the OMB should provide guidance on these standard criteria for the CAIO position, while allowing for agency flexibility as deemed appropriate. The benchmark we have developed can function as a blueprint for soliciting public input. As established by our research, there are visible preferences for both the field of study and degree type of ideal candidates. However, these preferences are driven by the collective perspective that the role of CAIO requires an interdisciplinary leader who is

³⁷ Executive Order 13960: <https://www.govinfo.gov/content/pkg/FR-2020-12-08/pdf/2020-27065.pdf>



socio-technically skilled. While specific requirements on degree types or levels may be exclusionary of qualified individuals who have diverse and applied technical experience to lead AI initiatives, there is value in considering industry norms, given the gravity of this pilot position. In practice, certain positions bear higher stakes, and do require reasonable expectations to demonstrate core competencies required to perform, such as for lawyers, doctors, or scientists. The benchmarked expectations in our study are established to provide insights into what it is important to consider in all suitable candidates. Recognizing the presence of organizational differences, agencies should also have the flexibility to include additional criteria specific to their agency's mission and functions. This dual approach enables agencies to evaluate CAIOs who meet the essential qualifications and possess specialized service knowledge critical for their responsibilities.

3. Development and Engagement

As illustrated in our benchmarking research, agencies should also prioritize investment in specialized AI training programs for CAIOs, focusing on the development of their socio-technical understanding of AI. The AI landscape is constantly emerging and central for the technological breakthroughs of other domains such as healthcare, education, and governance. For example, generative AI applications are expected to grow at an average annual rate of 42 percent over the next decade.³⁸ Given the rapid acceleration of AI discoveries and deployment cases, the quest to remain strategic and prepared for forthcoming transformations requires ongoing learning. By providing robust training opportunities, agencies will showcase proactiveness in preparing CAIOs to best lead and manage AI solutions, while also prioritizing the deep understanding of ethical considerations and implications. This effort can empower CAIOs to make more holistic decisions about potential opportunities, risk mitigation, and mandatory compliance. Additionally, fostering access to diverse stakeholders, such as civil rights organizations, consumer protection groups, and experts from various communities, will enrich the CAIO's understanding of AI impacts, limitations, and opportunities in practice. With advanced training and stakeholder engagement, agencies can develop more thorough strategies, policies, and initiatives that address public needs and concerns. This comprehensive approach enhances the agency's overall ability to stay at the frontier of AI innovation and promote equity, transparency, and accountability in governance practices.

³⁸ Bloomberg's 2023 Generative AI Report: <https://www.bloomberg.com/company/press/generative-ai-to-become-a-1-3-trillion-market-by-2032-research-finds/>



4. Prioritizing Civil Rights and Human Rights Protections

The OMB guidance delineates stringent criteria for compliant AI systems within the government, particularly those impacting safety and rights. It outlines the imperative for CAIOs to not only operationalize and govern responsible AI, but also grants them authority to determine potential waivers for relevant AI applications. Recognizing the profound influence AI-driven decisions can wield on public experiences, it's important to cultivate CAIOs who are deeply mindful of civil rights considerations in their endeavors. Our research showcased the necessity for CAIOs to embody this attribute tangibly, moving beyond mere verbal commitment or surface-level mentions. We advocate for a multifaceted approach. Firstly, ongoing training programs should be mandated for CAIOs to deepen their understanding of the intricate interplay between technology, civil rights, and equity. Additionally, in conjunction with the existing OMB directives on AI system risk management, CAIOs should be obligated to report on the concerted initiatives and priorities they've established to promote civil and human rights safeguards in agency AI deployments.

5. Measures of success

Agencies need to consider defining the success criteria for appointed CAIOs in line with their required responsibilities and objectives. This entails setting reasonable benchmarks and organizational performance metrics that reflect the agency's mission and desired outcomes. In this process, collaboration with diverse stakeholders is crucial, allowing agencies to incorporate valuable insights for informed decision-making that may be overlooked in siloed operations. By engaging with a wide range of stakeholders, including employees, industry experts, non-profit and community organizations, agencies ensure that success measures are relevant and representative. In addition, success measures should be publicly accessible in both format and language, to foster accountability and promote trust in agency operations. Through transparent reporting, agencies can demonstrate progress on defined objectives, and solicit feedback for improved governance. This collaborative approach enhances the effectiveness of CAIO implementation and reinforces the agency's commitment to transparent and accountable forms of civic service.

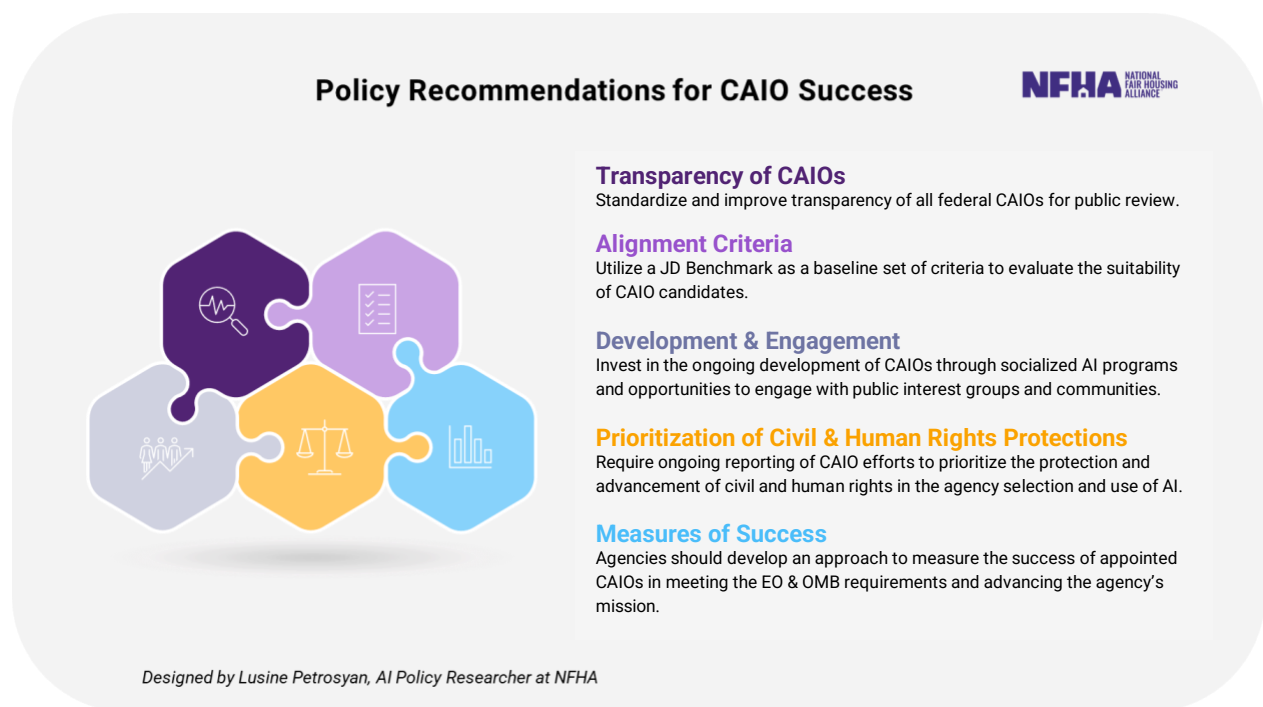
Potential measures of success:

1. **Developing an AI strategy** - Progress in developing and implementing an AI strategy aligned with agency goals.
2. **AI implementation** - Progress in utilizing AI technologies to improve agency operations and mission objectives.



3. **Use-case inventories** - An updated record of AI use cases deployed within the agency, including all their relevant details.³⁹
4. **Stakeholder engagement** - Efforts of engagement with diverse stakeholders to inform AI initiatives and decision-making.
5. **Compliance of minimum requirements for AI** - Proactively identifying and managing risks associated with safety and rights-impacting AI applications.
6. **Workforce development** - Progress in building and upskilling AI talent within the agency to support AI initiatives and foster a culture of innovation.
7. **Impact on mission outcomes** - Measurable impact of AI initiatives on achieving agency mission objectives, such as improved service delivery, decrease in discriminatory outcomes, and increase in societal equities.

Figure 8: Policy Recommendations for CAIO Success



³⁹ CIO Council's Guidance on AI Inventory Reporting: <https://www.cio.gov/assets/resources/2023-Guidance-for-AI-Use-Case-Inventories.pdf>



Conclusion

As a response to the EO and OMB directives, this policy brief represents a closer investigation of the role of CAIOs and their respective responsibilities within the federal government. Our research used both industry standards and stakeholder inputs, and as a result, we developed a benchmark job description that can be leveraged to evaluate candidates for the CAIO role of an agency. Through the assessment of current CAIO profiles, we identified notable gaps and interagency variations in appointment transparency and disclosure practices. Therefore, the key takeaways highlighted echo the importance of transparency and setting reasonable expectations for CIAO candidates. Our policy recommendations are aimed at agency leadership and governing bodies for their consideration. While our review of shortlisted agency CAIOs was due to their influence over housing-related issues, the insights generated are applicable across all CAIO appointments to improve agency transparency of AI development, use, and governance. With the collective effort in defining selection criteria, increasing transparency, and establishing clear expectations, we can help position leaders best fit to address the dynamic procedures of AI governance, enable operational excellence, and maximize the value of digitization for public services.

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