

Preparing for an Al World

The Future of Data in State & Local Government

Introduction

luid. Context. Quality."

"Secure. Transparent. Integrated."

"Fuzzy. Skilled. Responsible."

If you ask state and local government officials to describe the future of data in just a few words, you'll hear a diverse range of responses. These perspectives not only highlight the critical role data plays in modern government but also underscore the unique challenges agencies face in transforming and leveraging data across the enterprise.

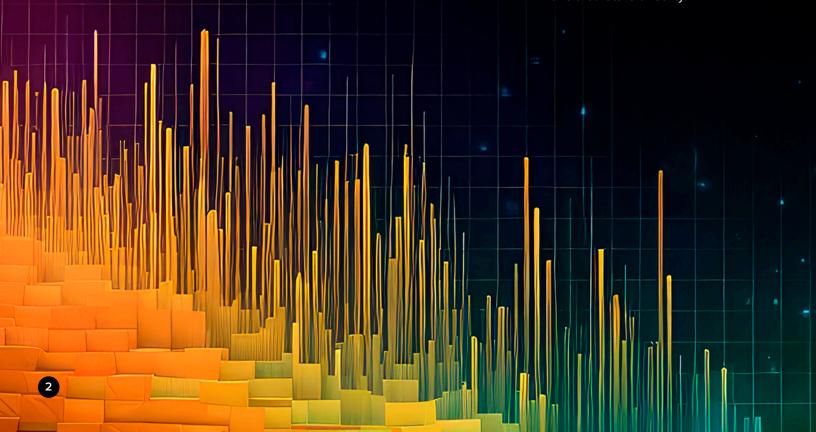
Research from the National Association of State Chief Information Officers (NASCIO) shows this tension. In a recent survey of state CIOs, chief data officers (CDOs) and other data managers, 89% of officials said they consider data quality important or critically important. But less than a quarter — 22% — said their state had a data quality program in place.1

Data quality and good data management have become even more urgent given the rapid rise of Al and generative Al (GenAl). Ninety-five percent of officials in the NASCIO survey said Al and GenAl will increase the importance of data management. But governments are unprepared, from a data standpoint, to embrace Al.

To be Al-ready, governments must be data-ready. Data plays a foundational role in Al and machine learning models, along with managing Al governance and privacy. This means CDOs, who have traditionally overseen data management, governance and security, now must take a larger role in shepherding their organization's Al strategy.

To provide a roadmap for how CDOs and their organizations can accomplish the significant task before them, the Center for Digital Government (CDG) interviewed and gathered insights from various government officials and experts whose roles involve data, Al and technology enablement. Many of these leaders are members of CDG's Future of Data Council, a nationwide working group that supports state and local IT leaders - including CDOs, ClOs, chief technology officers, chief privacy officers, data analysts, artificial intelligence leaders and more in their efforts to turn data into a strategic asset.

Here's what the future of data could look like in government — and the bold steps necessary to make that future a reality.



The Growing Importance of Data — and the CDO

ata is an invaluable strategic asset in government, but it traditionally hasn't been leveraged that way.

Siloed data systems and slow adoption of advanced data analytics have often limited governments' ability to use their data for purposes beyond basic reporting and compliance.

But some state and local agencies have made strides in evolving their use of data.

- New York City's Open
 Data Portal gives residents
 transparent access to data
 about government services
 and helps agencies improve
 decision-making and service
 delivery.²
- Maryland's Total Human Services Integrated Network (MD THINK) is a cloud-based platform that integrates data across health and human services agencies to facilitate a whole-person approach to constituent care.³
- Colorado has employed a similar strategy with its C-Stat initiative, which integrates and analyzes data across departments to improve performance and outcomes in child and family services.⁴

As data and analytics grow more important in government, so should the role of the CDO.



"The responsibilities of the chief data officer will continue to expand," says Teri Takai, CDG senior vice president and the former CIO for the U.S. Department of Defense and the states of Michigan and California. "Up until now, many of those positions were only housed within a single agency. And they were focused on policies as opposed to strategy for how the data would be used. My prediction is that you're going to see more of them, and that their role is going to broaden."

That expanded role will include ensuring data quality and accessibility to support Al applications. CDOs also need to promote cross-agency collaboration and improve data and Al literacy and skills. And they should encourage

their organizations to integrate Al into existing data governance and privacy policies, rather than treat Al as its own siloed domain.

Katie Regan, the state data services manager for the California Department of Technology, says she envisions the role of CDOs as more service-oriented, helping agency leaders and data owners take full advantage of the information at their disposal.

"They're going to serve almost like a consultant who can come in and support the folks who own their topic area and their data," Regan says. "GenAl and traditional Al reinforce that service model, that these are enabling technologies to take data to the next level."



Closing the Data Gap

eorgia's chief digital and Al officer, Nikhil Deshpande, says data readiness is the biggest challenge for most states — including his — in their efforts to deploy Al models.

"Al truly is the catalyst that made the light shine on data," Deshpande says. "Without good data, it's not going to be good Al."

A majority (57%) of the IT leaders in the NASCIO survey said their organization has a reactive posture when it comes to managing data quality. Many respondents expressed concern about the integrity of the underlying data their organizations would use to support AI and GenAI applications. They are concerned some agencies will try to circumvent these issues with siloed data cleansing and curation efforts instead of taking a holistic approach to improving data quality or incorporating Al into data governance policies.

"Effective data quality management moves the [monitoring and integrity] effort as much as possible to the start of any data lineage, preventing data errors on the front end rather than data correction activities later in that lineage," NASCIO said in its report, adding that it's crucial to "solve data quality problems at the source rather than downstream."

Poor data quality leads to inaccurate and biased AI outputs, so data needs to be curated, validated and properly governed.

Many state and local governments are addressing these data issues head on, though it will be important to make sure addressing potential bias and ensuring fairness are explicit parts of GenAl policies.

Half (49.5%) of state and local governments are developing an AI strategic plan, according to a 2024 survey from the Center for Public Sector AI. Another 5% said they already have a plan in place. But barely half of all current and draft policies (54%) will address bias and fairness, according to survey respondents.⁵

Case Studies in Al-Ready Data

Georgia:

Developing an innovation lab

Georgia is implementing several measures to advance its data maturity, including creating the Georgia Data Analytics Center (GDAC) to enable cross-agency collaboration and data sharing agreements.⁶ Led by GDAC, the state is standardizing data formats across agencies to improve interoperability. It's also exploring developing data lakes and data warehouses to serve as centralized repositories that allow for shared access while maintaining strong security controls. Georgia doesn't yet have a CDO, but the state plans to create this role in the future, Deshpande says.

The state is also laying the groundwork to experiment with Al. Georgia is setting up an innovation lab where agencies and private sector partners collaborate on pilot projects and proofs of concept. The state has tapped pre-approved vendors to speed procurement, deployment and expansion of GenAl solutions.

Deshpande says the lab is designed to be an environment where agencies can fail fast, adapt and safely develop Al-ready use cases they can use to immediately serve constituents.⁷

"Right now, we're working on an overall roadmap for our Al strategy," Deshpande says. "The lab is the critical operational piece for where we can take our governance and have all the guardrails in place, but then also expedite innovation."



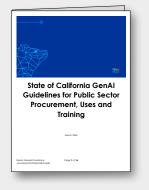
California:

Embracing a data products strategy

California has taken a data products approach to managing its data environment. Regan says a big part of her role is to help departments focus on their most impactful data and then work to inventory and manage it for better utilization.

"Having that product approach to the data is becoming so much more important, especially as generative Al is part of the conversation, because the data doesn't ever stand on its own," Regan says. "It exists within a larger context. Having a product mindset really brings that to light."

It's important to "right-size" potential use cases to match the capabilities of GenAl, she adds, rather than trying to apply the technology to every potential problem or government service.



This year, California released GenAl guidelines⁸ that balance strategic use of the technology with its potential risks. The guidelines cover areas like use cases, procurement and workforce training.

The state has also released an RFI ("request for innovative ideas") to explore proofs of concept for GenAI across different areas, such as transportation, tax administration, and health and human services. This will allow the state to test use cases in a secure sandbox environment before pursuing large-scale implementations.

Seattle:

Creating a collaborative vision

Data and AI are core elements of the One Seattle Plan, a roadmap for how the city will grow over the next 20 years and invest in areas such as housing, jobs, transportation, utilities, parks and other public assets.⁹ Chief Technology Officer Rob Lloyd says the city is taking several steps to improve data readiness to support AI solutions.

Part of this effort involves working with the Department of Homeland Security (DHS) on crafting AI governance. Seattle Mayor Bruce Harrell sits on the DHS Artificial Intelligence Safety and Security Board, which brings together industry, government, nonprofits and academic institutions to develop responsible AI practices. The collaboration aims to ensure federal guidance and policy around AI is driven by informed, proactive legislation rather than reactive restrictions, Lloyd says.

Seattle has GenAl pilots in areas such as marketing and communications, records management and permitting. In partnership with Washington state government, including State Sen. Joe Nguyen and the Washington State Department of Commerce, the city established the "Al House" innovation incubator in downtown Seattle to bring public and private partners together to drive innovation.

Additionally, Seattle is part of the GovAl Coalition, a consortium of more than 350 local, state and federal officials and entities working to address Al implementation, risks and governance.

"Al works with learning and scale," Lloyd says. "We want to come up with solutions that we can apply to different cities, problems and data sets, and then span out so that not every city has to solve each problem every time by itself."



A Data Roadmap for CDOs

hese leading practices can help organizations develop a more thoughtful and effective plan for AI and data deployment.

Center on data

Integrate data governance with Al to optimize service delivery and decision-making.

Embed Al principles and responsible use considerations into your existing data governance policies. Incorporate Al-related assessments and requirements into existing processes, such as privacy impact assessments, to streamline implementation.

Improve data quality and accessibility, and refine data sharing agreements. Establish clear roles — and methods of collaboration — for data, privacy, security and Al leaders.

Build Al skills

Cultivate data and AI skills for your team — and yourself. CDOs in particular should advance their knowledge around tools and governance for large data models and large language models (LLMs). And they must engage in deeper due diligence with third-party

vendors to better understand how data is organized and protected within their solutions.

Some states are focusing on upskilling employees. Maryland has launched a data and Al fellows program,¹⁰ while efforts are underway in Georgia to train employees on Al tools and help them make informed decisions about how to best use the output of these tools.

Nurture collaboration

As in Seattle, jurisdictions should work across all levels of government and with the private and nonprofit sectors to evolve their Al strategy.

Some states are developing an Al community of practice and forging partnerships with academia. New York, for example, has developed the Empire Al Consortium to bridge the gap between cuttingedge technology companies and public interest organizations and researchers. Maryland has created a new IT sub-agency, the Maryland Digital Service, to house a team of state product managers, user researchers, designers and engineers to drive better Al and technology procurements. 12

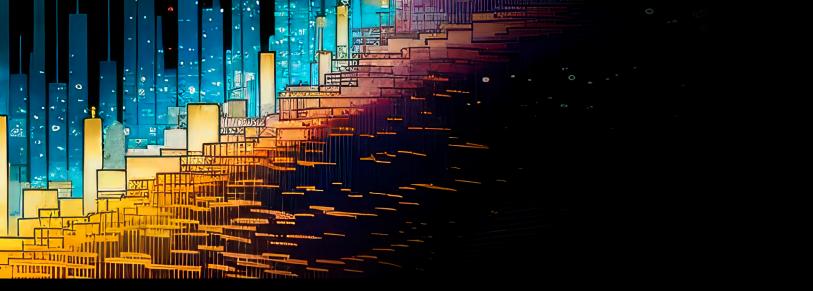
Engage the public

As governments collaborate with internal stakeholders, intergovernmental leaders and outside experts, they cannot ignore their most important stakeholder group — constituents.

If the data that feeds AI models isn't properly cleaned and secure and AI models aren't carefully deployed, it could undermine the public's trust. Craft data and AI initiatives with constituents in mind. Solicit and incorporate their feedback into the procurement, testing and continuous improvement of AI applications.

California's Regan says this is where managing data as a product can be particularly valuable, because this approach establishes clear ownership for data quality, accessibility and usability.

"There's so much conversation around human-centered design and user experience. Having a product mindset around data requires a similar emphasis on who the audience is and who the consumer is," Regan says. "Most people don't want to deal with data. They just want the good information that the data feeds."



Conclusion: Data-Ready, Al-Ready

As governments prepare for an Al-driven world, they have an opportunity right now to govern technology properly and help guide it in the right direction. Many members of the CDG Future of Data Council said that both private and public sector organizations may have missed this opportunity with cybersecurity and social media. They don't want to make the same mistake with Al.

"After spending 10 or 15 years with social media, we are seeing the kind of havoc and the chaos that it has created," says Georgia's Deshpande. "If we fail to look at GenAl through ethical lenses — to figure out the possibilities and what the impacts will be — we're going to repeat history."

By treating data as a strategic asset and properly governing it, state and local governments can build a responsible and high-performing Al future.

Endnotes

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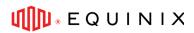
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