


# Generative AI at the Tipping Point

With generative AI adoption accelerating, public sector agencies need an enterprise-grade governance approach to increase value and mitigate risk.



**State and local governments** are approaching the deployment of generative AI (GenAI) cautiously. While a few pioneers are developing sophisticated strategies to address the potential risks and rewards of GenAI, many are in the early stages of their governance journey.

But GenAI adoption is poised to expand dramatically in the public sector as the technology proves its value. Agencies leading the way on GenAI deployment are building holistic, enterprisewide use case strategies focusing on areas like back-office efficiencies, workforce productivity, cybersecurity and user experience. Just as important, they are creating structures such as governance committees and centers of excellence that will spread successful use cases and best practices across departments and jurisdictions.

These are key takeaways from new research by the Center for Digital Government (CDG) in collaboration with IBM. CDG conducted in-depth interviews with 17 IT leaders and other executives from state and local governments across the U.S. to better understand their approaches to GenAI governance and deployment.

Agencies often already use traditional forms of AI, and many individuals interviewed by CDG are warming to the potential of GenAI, although some continue to block GenAI use altogether. Agencies are grappling with the ramifications of GenAI because it represents something distinct from other forms of AI: It can automatically generate new content like written text, audio and video, computer code and more.

GenAI has the potential to become a tipping-point technology — giving governments transformative tools for serving constituents, reengineering internal workflows and augmenting the skills of their workforce. But GenAI also creates new or magnified risks around accuracy, fairness and equity, and data security. These factors are driving urgency for agencies to develop policies to govern their overall use of AI and put specific guardrails around GenAI.

These uncertainties help explain why so many agencies are treading carefully on GenAI. Yet too much caution may carry a price. “One of the biggest risks is to not leverage the benefits of a sea-change technology like this,” says David Fletcher, a CDG senior fellow and former Utah chief technology officer who consulted on the research project.

This report explores:

**What’s happening now.** We examine current GenAI activities and show where state and local governments are headed. We summarize the boldest approaches.

**What we learned.** We look at how interviewees are developing governance guidelines and finding safe, ethical ways to deploy GenAI.

**What enterprise AI governance looks like.** We summarize the value of a holistic, enterprisewide strategy for AI and GenAI governance and deployment and show what it looks like.



## Part 1: The Big Picture

Many of the agencies we interviewed are just getting started with developing GenAI governance and deployment.

But leading jurisdictions are experimenting with use cases and assessing risk levels on a spectrum from low to high. They're also creating governance councils, steering committees and similar organizations to share information on popular use cases and promote best practices for governing risk and compliance. And they're spreading good ideas across jurisdictions through groups like the GovAI Coalition of dozens of city, county and state governments.

### Assessing Use Case Risks →

Agencies are assessing risk levels — low, medium, high — as they experiment with AI use cases. A simple chatbot that uses language-based AI to interpret the intent of people contacting a call center might have relatively low risk. A GenAI application that potentially allows agency staff to enter sensitive private information into a large language model's public training data creates bigger concerns.

Agencies are examining and mitigating these risks as they experiment with GenAI. For example, South Carolina plans to conduct AI experiments in “enclosed spaces” disconnected from the internet.

Agencies are especially concerned about protected data being entered into public GenAI tools like ChatGPT. “We're not even going to entertain the exporting of anything associated with these tools until we are comfortable with our entire process,” said Rick Talbert, an operational leader with the Washington State Auditor's Office.

Another key worry: inaccurate or biased material created by GenAI tools. Agencies must thoroughly assess GenAI risks and have ways to document why large language models produce specific outputs. “State and local agencies that use GenAI to make mission-critical decisions like optimizing business operations might want every single output to be auditable and explainable,” says Phaedra Boinodiris, IBM Consulting's global leader for Trustworthy AI and author of AI for the Rest of Us.

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## Developing Governance and Leadership →

Agencies are creating governance councils, steering committees and similar organizations to establish AI guardrails and address GenAI risks, according to our research.

IT leaders typically drive the governance conversation, but these committees often include other stakeholders from across a jurisdiction. Some agencies have created AI-specific committees, while a few rely on existing IT governance structures. State agencies may depend on guidance from statewide IT authorities.

Key governance activities include creating action plans, crafting management and acceptable-use policies, assessing security, managing risks and evaluating use cases. Minnesota's IT agency assigns an AI lead for each state agency. These AI leads form a Center of Excellence (COE) that assures consistent governance statewide.

## Focusing on Collaboration and Partnerships →

The COE model also creates a foundation for sharing knowledge and recommending use cases and best practices to other departments, jurisdictions, schools and businesses. "We're all in this together, and we can all benefit from these kinds of ecosystems," Boinodiris says.

One example of the ecosystems that will drive GenAI maturity and acceptance is the GovAI Coalition, an initiative launched by the city of San Jose in the heart of California's Silicon Valley. More than 250 city, county and state governments are members of the coalition, which offers a step-by-step guide for planning and implementing a governance program.<sup>1</sup>

These collaborations are expanding against a backdrop of AI and GenAI technologies that are proliferating at a breathtaking pace. Government leaders may feel pressed to rapidly drive business value while ensuring their IT teams and users understand GenAI's pros and cons. And they must secure and govern their environments appropriately. Avoiding paralysis in the face of uncertainty is essential.

"Governments need to realize they can do this," says Thomas Nisbet, IBM associate partner specializing in state and local government. "They just have to make sure they have the right skills, tools, processes and business needs in place to start."

As the CDG research findings and expert advice suggest, an enterprise approach to AI and GenAI governance will help agencies gain the most ground while managing risks.

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## Part 2: Research Findings

Most interviewees said their organizations have created safe areas to test new AI tools, and some are experimenting with limited pilots. More than 50% of respondents said they have created secure testing environments, while 35% are piloting use cases or proof-of-concept projects. But nearly a third of state-level interviewees said public AI tools like GenAI are blocked for their staff.

### Notable Use Cases and Experiments →

**CalPERS:** The California state workers' pension system has a pilot project for using conversational bots to automate customer service. The organization is exploring whether conversational AI can help it respond faster to constituent requests.

**Gwinnett County, Georgia:** The county allows employees to use GenAI tools like ChatGPT. AI apps also help the county analyze cybersecurity logs to find anomalies that suggest cyberattacks or other intrusions. Upcoming projects will target AI in utility billing, customer service and legal case management.

**Michigan Department of Treasury:** The state's top financial authority employs basic AI with chatbots but blocks GenAI.

**Mesa, Arizona:** AI generates voices for the city's automated phone tree system, sparing the city the cost of hiring an individual for this task.

**New York City:** GitHub Copilot, an AI-powered code assistant, helps the city's software developers by recommending lines or blocks of code in multiple programming languages. The city also deploys AI in an audio-visual app that analyzes resident-submitted videos reporting violations of an anti-idling law designed to improve air quality.

**San Diego, California:** AI powers a 311 service-request app, helping the city streamline its response to resident requests. It also works with license plate readers to enhance traffic enforcement. A pilot project uses AI to translate city council agenda summaries into multiple languages to serve the city's diverse population.

**San Francisco Department of Public Health:** AI applications help the agency optimize healthcare workflows. For instance, AI can help assess the risk of hospital readmission for specific health conditions.

**Texas:** The Department of Transportation uses AI models to identify high-risk areas like busy intersections. This helps police departments assign patrol officers so they can respond to accidents faster. The

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state's Workforce Commission uses AI on its unemployment benefits hotline, redirecting calls and reducing the workload for hotline agents.

### Key AI and GenAI Challenges →

**Learning and literacy.** Interviewees said their employees need more knowledge of how GenAI works. Approximately 50% of respondents said they are planning or developing staff training, and about a quarter said they are working on identifying specific AI skills workers will need. Just two respondents said they have already implemented staff training. A New York City IT executive commented: “We have a number of initiatives related to ensuring the city’s workforce has the skills it needs to be able to support and work with AI very intentionally.”

**Ambiguity.** An IT leader with the San Francisco Department of Public Health mentioned anxieties created by a lack of transparency from vendors about how their AI models work. “It may be explained to us, but we’re certainly not going to see their intellectual property.”

Agencies also need mature playbooks or toolkits for GenAI. IT leaders in Minnesota, Ohio and other jurisdictions are building their own playbooks to clarify their approach.

Interviewees said there is a fine line between productive use and misuse of GenAI toolsets. “Just because you can do some things doesn’t mean you should,” said an IT leader with the Missouri courts system.

**Safety, privacy, ethics and security.** Fairness and risk management weighed on the minds of the CDG interviewees, three of whom said they have established ethical principles for AI use. Four interviewees mentioned the importance of data security. More than 40% of interviewees cited concerns about potential bias or discrimination in AI outputs. Because AI models can be “lawful but awful,” as IBM’s Boinodiris puts it, agencies must focus on the ethical variables of GenAI and ensure that humans validate AI outputs.

**Innovation speed.** The rapid evolution of GenAI technology makes it difficult for IT leaders to select the right solution for their needs. An IT leader in Ohio said the state has formed an AI special interest group to help agencies keep up.

“The complexity will start compounding, but the benefits will also start compounding and get better and better as we go along,” said Harry Meier, a city official from Mesa, Arizona. “But right now, we’re focused on, ‘Let’s start small and we’ll grow it from there.’”

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## Part 3: Enterprise AI Governance

AI governance helps state and local agencies clarify ambiguities and guard against hazards. AI experts recommend a holistic, enterprise governance strategy that applies across an organization's leadership, culture, skills, business strategy, reporting and controls.

Agencies participating in this research had AI governance policies with varying degrees of sophistication. Approaches to cybersecurity and data protection reflect this: About half of our interviewees said they have secure piloting of AI tools, while 30% said they emphasize data security. Slightly less than 20% said they collaborate with their cybersecurity team and a similar percentage have implemented AI-specific cybersecurity policies.

The leading agencies are adapting governance as their maturity with GenAI use cases grows. In San Diego, for example, governance includes testing to validate the impact of AI technologies and assess their effectiveness. "Part of that testing is getting user sentiment and making sure it's living up to the expectations of efficiencies and providing accurate information," a city official said.

Other examples of growing sophistication around enterprise governance include:

**Minnesota:** The state has trained more than 1,000 employees on AI usage. Agency IT leaders crafted a hybrid approach to the responsible use of AI with centralized and decentralized elements. The state's IT leadership also belongs to the Minnesota Transparent Artificial Intelligence Governance Alliance (TAIGA), an organization that helps agencies share what they've learned about governance best practices.

**New York City:** The city's AI Action Plan<sup>2</sup> lays out eight pillars of AI governance:

1. Establishing a citywide AI steering committee
2. Establishing guiding principles and definitions
3. Providing preliminary use guidance on emerging tools
4. Creating a typology of AI projects
5. Expanding public AI reporting
6. Developing an AI risk assessment and project review process
7. Publishing an initial set of AI policies and guidance documents
8. Monitoring AI tools in operation

**North Carolina:** A statewide AI framework emphasizes human-centricity, data literacy and continuous monitoring to ensure ethical and effective AI use. Training programs cover GenAI, privacy principles and AI risk management. Collaboration across departments ensures a well-rounded approach.

Leading agencies are adapting governance as they gain experience with GenAI use cases.

**Ohio:** The Ohio AI Council, a multi-department group formed to promote GenAI innovation and safe and accountable use of the technology, authored a responsible AI toolkit. The state also created an “AI Island” for exploring use cases without external connectivity. A major goal is making AI explainable and trustworthy to overcome hesitation and encourage user engagement.

**Texas:** The state’s AI Advisory Council, created by the Legislature, is investigating the adoption of an AI code of ethics. It also recommends frameworks for agencies using AI. The Texas Department of Information Resources oversees the state government’s use of AI, providing leadership and resources for AI implementation across agencies.

Boinodiris says staff training must accompany policy development. “It’s one thing to say, ‘I’m establishing AI governance standards or principles for my agency,’” she said. “It’s a very different thing to teach those in procurement what to be looking for.”

### Expert Guidance on AI Governance →

Experts recommend an enterprise approach to AI governance because it’s vital for expanding GenAI adoption, mitigating risk and gaining maximum value from investments in these technologies.

GenAI’s ability to create multiple types of content with amazing speed and scale makes it attractive to users. But agencies need a thoughtful strategy behind GenAI adoption, says Boinodiris.

“It’s extremely important to understand for what purposes you wish to use these AI models, so you can understand how they should be communicated and solutioned in a way that ultimately aligns with values that are really important to your government agency,” she says.

A holistic AI strategy must also account for the uncertainties of GenAI outputs. GenAI models may produce text that seems authoritative but is peppered with errors or bias.

In addition, IBM’s Nisbet recommends agencies take an enterprise approach to deploying AI solutions instead of buying multiple tools for specific use cases. “You’re going to run into a stacking challenge,” he says. “You’ll have dozens of contracts for dozens of use cases. You’ll have to be managing them all. And you’re going to be paying a lot for them.”

Governance frameworks must be flexible enough to allow for progressively ambitious GenAI experimentation and the deployment of appropriate business use cases. Key aspects of AI governance include:

- **Policy.** Guidelines and guardrails spell out the right and wrong ways to use GenAI. Don’t neglect training on acceptable uses and proper compliance.

A holistic AI strategy must account for the uncertainties of GenAI outputs.



- **Standards.** Policy should align with industry standards and best practices for security, privacy, ethics and fairness. The expanding number of AI committees and centers of excellence will help drive this work. “One of the biggest challenges right now is increasing the amount of communication between state agencies about the AI solutions they have and how to make the best use of them,” says Romelia Flores, IBM distinguished engineer and master inventor.
- **Inventories.** IT leaders must inventory all AI and GenAI models and use cases implemented across their organization.
- **Automation.** Automated processes will be critical for monitoring GenAI applications and data sets to detect biased or inaccurate results. “You can’t do it all alone,” Flores says.

### Establishing and Sustaining Governance →

Boinodiris advises weighing two questions when building governance programs: “It’s important for every organization to ask, ‘What kind of relationship do we ultimately want to have with AI?’ and then consider, ‘What are the human values we expect to see reflected in the AI models we’re procuring or deploying?’”

- **Getting started:** Make sure business leaders are involved in establishing your jurisdiction’s policies and guidelines. Also understand that implementing governance is a journey. “This is an iterative project,” Nisbet says. “It’s about getting out there quickly, getting your feet wet and learning.” From the outset, make sure you know what your data means and how it’s gathered, protected and connected to other kinds of data. Use cases should drive measurable impact and reflect your agency’s values and goals.
- **Building maturity:** As your GenAI inventory grows, train your workforce to understand the risks inherent in these models. Audit AI models to ensure their outputs are explainable. Plan for continuous upgrades to training. “AI literacy never ends,” Boinodiris says.
- **Managing change:** Communication will be pivotal to encouraging safe, ethical GenAI use. From top executives to managers to front-line staff, agencies must communicate the value of AI and reassure people that technology augments skills but does not replace employees.
- **Finding partners:** Look for companies with demonstrated competence in public sector AI projects. “You want an implementation partner with the skill and experience to find the right way to use AI in your agency,” Nisbet says. “They can’t just have one way to get things done.”

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## Expanding AI Responsibly →

Public agencies must stay grounded in the needs and expectations of the people they serve and protect. Building a holistic governance program is the best way to ensure AI and GenAI support your agency’s mission and your community’s values while tempering potential risks.

“Trust is a very fragile thing,” Flores of IBM says. “Citizens want to trust the capabilities provided by the agencies they’re interacting with, and this trust can only be achieved through thoughtful planning and enablement of generative AI systems.”

## Research Methodology

For this project, CDG interviewed 17 officials in 10 state agencies and five local agencies in March and April 2024.

### State Agencies →

- California Public Employees’ Retirement System
- California Department of Rehabilitation
- Michigan Department of Treasury
- Minnesota Information Technology Services
- Missouri Office of the State Courts Administrator
- North Carolina Department of Information Technology
- Ohio Office of Information Technology
- South Carolina Technology Services
- Texas Department of Information Resources
- Washington State Auditor’s Office

### Local Agencies →

- Gwinnett County, Georgia, Information Technology Services
- Mesa, Arizona, Department of Innovation and Technology
- New York City Office of Technology and Innovation
- San Francisco Department of Public Health
- San Diego Department of Information Technology

### Job Roles →

Enterprise IT Leadership (9)  
Agency IT Leadership (4)  
Operational Leadership (2)  
Privacy/Legal Leadership (2)

*\* Mesa, Arizona, and North Carolina IT each had two interviewees.*

### Agency Function →

IT (9)  
Retirement (1)  
Audit (1)  
Treasury (1)  
Courts (1)  
Health and Human Services (2)

1. <https://www.sanjoseca.gov/home/showpublisheddocument/111880/638517555300570000>
2. <https://www.nyc.gov/assets/oti/downloads/pdf/reports/artificial-intelligence-action-plan.pdf>

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