

Ready, Set, Al

Global issues and applications for Al use in local government

BY JAMES J. KLINE AND GREG HUTCHINS

rtificial Intelligence (AI) is a blisteringly hot topic worldwide in both the public and private sectors. Government finance professionals will increasingly need to find the right ways to employ it in government, and in fact, local government staff are already playing a greater role in identifying and managing organizational risks than has been recognized. These risks include cybersecurity and AI.

The black box and its modes

A survey of AI use by local governments in the United Kingdom observes that "modern AI is usually built using machine learning algorithms. The algorithm finds complex patterns in data which can be used to form rules."1 Essentially, AI is a large and sophisticated set of computer codes that draw upon huge amounts of information to perform the tasks associated with the programmed functions—a black box. The user is therefore dependent on the black box performing its intended function consistently, fairly, and accurately.

AI model types are developing rapidly. Currently, there are four main model types:

- Perceptive—systems that recognize faces and fingerprints, and analyze images, audio, or video.
- **Predictive**—systems that try to make predictions about an outcome.
- Generative—systems that generate text or images, such as ChatGPT and DALL-E.
- Simulation—a system that attempts to simulate conditions such as digital twins and agent-based modeling.

Each system has a purpose or function that attracts users, but users are trusting that the system will operate as advertised. That doesn't always happen, which means there are risks associated with using AI systems. Some of these risks can be catastrophic.

Al risks

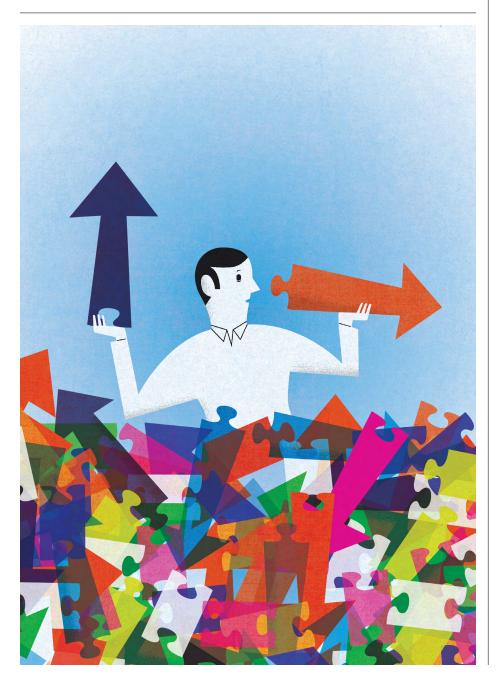
In a recent GFR article, Justin Marlowe indicated that local government chief financial officers will be the "responsible stewards" of AI implementation.2 He cites two risk examples, which are worth repeating because they help frame

the AI risks to government finance administrators. To these, three more have been added.

- 1. Marlowe used Python programming language to carry out complicated data analysis. It saved hours of coding.
- 2. Marlowe's daughter had a European map examination. He used ChatGPT to draw a map of Europe. Many countries were drawn correctly, but others were drawn incorrectly and misnamed.
- 3. Greg Hutchins, the co-author of this article, used Hamlet motif for his book, Trust Me: AI Risk Management. The AI program had problems drawing a robot in the Hamlet pose, holding a human skull. Adjustments had to be made manually.
- 4. Asked to create an image of George Washington, an AI program got the color of his skin wrong.
- 5. An AI-powered coding tool wiped out a software company's database—and then said it was sorry.

These five examples highlight the issues with AI. Number 1 indicates the promise-greater efficiency. Number 3 is a case where the AI system can only

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accomplish part of what the user wants, and the user must develop the finished product. There would be some efficiency gain, but not as much as in number 1.

Numbers 2, 4, and 5 are hallucinations and other issues internal to the black box. Numbers 2 and 5 might be the results of glitches in the code used to develop the AI. Number 4 is coding bias. In each case, the end users may not recognize the problem until the system is used. Numbers 2 and 4 cause delays in operation but not much damage. In the case of number 5, recognition of the problem occurs only after the data is wiped out. Given that local government has lots of stored data, such a loss would be substantive. In addition to the cost of reacquiring the data, the organization's reputation would be damaged. (See the "Protecting the End User" sidebar for details about AI regulations.)

Al use in local government

Two 2024 surveys of local governments' use of AI indicate the level of use, the impediments, and the disparity among countries. The surveys were conducted by the International City/ County Management Association (ICMA) in the United States and by the Local Government Association in the United Kingdom.3,4

In the United States, the survey found that 48% of the respondents indicated that AI use is a low priority. Only 6% indicate it is a high priority. In the United Kingdom (UK), 85% of the respondents reported either using or exploring the use of AI.

The most common AI system is generative AI. In the United Kingdom, 70% of the respondents report using it to generate text or images. Predictive AI is being used by 29% of the UK respondents (to predict outcomes).

While the ICMA survey found little interest in the use of AI in the United States, interest in the United Kingdom has grown in the last two years. Fifty-five percent of respondents indicated they started using the application in either 2023 or 2024.

U.S. respondents indicated that the greatest barriers to implementation were lack of AI awareness (76.6%), insufficient number of trained personnel (53%),

and insufficient funding to upgrade or procure AI technologies or tools (39.3%). UK respondents noted similar barriers, listing lack of funding (64%), lack of staff capabilities (53%), and lack of staff capacity (50%).

UK respondents were asked to identify the AI support that would be most beneficial. The top three of the seven supports identified were:

- 1. A set of use cases specific to local government.
- A "usability framework" focused on identifying AI risks and opportunities, and supporting the identification of appropriate governance approaches.
- 3. Training support for officers and members.

Recognizing that the use of AI in local governments around the world is still in its infancy, examples of use are diverse in terms of location and application.

Below are some examples from around the world for each support area.

Training

A lack of AI literacy is a major impediment to AI implementation. This gap is going to close as more governments and professional organizations start supporting AI implementation. In 2025, the Australian Digital Transformation Agency issued an AI training module titled "AI in government: fundamentals training." It covers three major topics: what AI is, using AI in an accountable way, and putting AI to work. The New Zealand government has implemented a "three-part AI masterclass series." Public Services Minister Judith Collins said, "I want public service leaders to embrace AI and support their teams to use it safely and effectively."6

GFOA is an example of a professional organization that is putting AI on its training agenda. For instance, on March 13, 2025, GFOA sponsored a webinar on AI, and more are scheduled. The March webinar was designed to explore "the essential components of an effective and sustainable approach to integrating generative AI in local government."

Useable framework

The National Institute of Standards and Technology's AI guides (see the "Protecting the End User" sidebar for details about the frameworks mentioned in this section) are among the best worldwide at identifying and addressing AI risks. NIST AI guides provide a risk management process that can be applied on an enterprise-wide basis. Local governments in the British Commonwealth use an enterprise-wide risk management process.

Many guides have been developed for general AI and generative AI, and many have been developed by national governments for federal agency use. Most cover AI applications generally, but guides for generative AI are increasingly being published. The UK national government published its generative AI guide in 2024. The Centralian Regional Council of Canada published "Generative Artificial Intelligence (AI) Policy: Guidance Document for Local Governments" the same year. These guides, while specific to a geographic region or governmental level, are both general and detailed enough to be useful to any who wants additional information.

The number of case studies is increasing, but few sites aggregate them. The U.S. Department of Homeland Security Playbook⁸ reviews its three pilot projects. ICMA provides a list that includes a wide range of policies. Most on the list have developed AI policies. The Local Government Association in the United Kingdom also provides a list of local governments and a description of how AI is being used. The list includes policies and implementation cases.

Case studies

Below are four examples of how AI is being used by local governments in the United Kingdom and the United States.

Coventry City Council UK—Family Support

In 2024, the Coventry City Council participated in a six-week pilot project using Microsoft 365 Copilot in social

care. The project focused on case notes, chronologies, and forms for supporting families. AI tools were developed to automate and streamline administrative tasks. To ensure accuracy, regular audits and checks were conducted. The results were: 1) increased time for social workers to reflect and engage in early intervention with families; 2) improved staff morale and reduced administrative burden; and 3) A decrease in the administrative to direct work ratio from 70:30 to 30:70.

Hertfordshire County Council UK-Accounts Payable

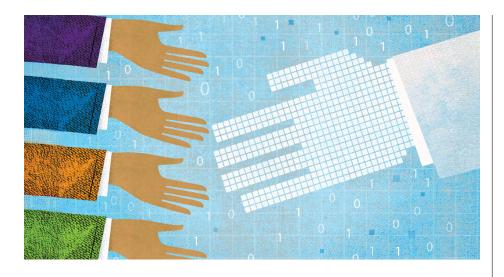
The council partnered with Arvato to apply machine learning to create a program that would examine invoices or documents as they entered the accounts payable system. The AI system would examine the validity of the invoice's purchase order number, invoice reference, and invoice date. If any invoice does not pass the validation check, it will be sent back to the vendor. As a result, 87% of the invoices are filled out correctly.

Township of Mt. Lebanon, Pennsylvania—Department of Finance Invoice Management

Using the AI-enabled Stampli platform for the coding and electronic processing of invoices, the finance department increased its efficiency, taking its invoice processing time from a week or longer, using a paper-based system, to within a day or two, using the AI-enabled platform.

City of Atlanta, Georgia—Chatbot to direct non-emergency service requests

The City of Atlanta is adding an AI chatbot to its website, creating a self-service option that will provide a faster way to submit a service or general request. The ATL311 will be available 24/7 for non-emergency services, with a representative available upon request. The chatbot is expected to decrease the city's volume of calls and wait times and also enhance the speed of first-call resolution for cases.



As Al implementation expands, there will be an increasing need to ensure that Al models are complying with ethics and legal requirements, be they local, state, or federal.

New South Wales, Australia (forthcoming)

In New South Wales, Australia, 16 councils are conducting assessments of the use of AI for improving residential development applications, under a New South Wales, Australia, early adopter grant program. The councils receiving grant money are: Bayside Council, Blacktown City Council, Burwood Council, City of Canterbury Bankstown, Wagga Wagga City Council, and Wingecarribee Shire Council. The assessment results should be available later in 2025.

Conclusions

The use of AI by local governments around the world is in its infancy. Local governments in the United Kingdom and Australia are ahead of those in the United States. Most have only been engaged with AI for less than three years. The major impediments to use are a lack of Al literacy, a lack of funds to obtain Al

software, and the ability to understand and mitigate the risks associated with AI. But as more government organizations around the world implement AI models, AI literacy and the availability of case studies will increase. Similarly, if the AI applications can demonstrate efficiency, improvements, and cost effectiveness, management and governing bodies will be more willing to appropriate funds for pilot projects and eventually the full funding of AI projects.

The more persistent issue will be AI risk management, because of the volume and complexity of the AI code, combined with the vast amount of data the code draws upon, making it difficult for the end user to assess the associated risks. The European Union's approach is to make risk management the responsibility of the developer. In the United States, NIST's AI guides are mandated for all federal agencies.

In the United States, local governments have shown little interest in AI. There are few pilot projects or full AI applications. Consequently, few have considered the need to assess and manage the risks associated with AI. This will change, particularly for financial managers. As AI implementation expands, there will be an increasing need to ensure that AI models are complying with ethics and legal requirements, be they local, state, or federal. This will require both compliance and performance auditsand that finance departments have the staff and technical capabilities to conduct both. Additional pressure will occur as the public sector continues to evolve, requiring not only efficiency and effectiveness in managing resources but also resource conservation.

Resources should not have to be expended to deal with the adverse impacts of risks that were known ahead of time. This idea is not foreign to local government activities. Plat developments require certain distances between buildings to reduce the chance that a fire will spread to adjacent structures. Similarly, financial managers regularly review investment risks, making portfolio adjustments to minimize loss and maximize gain. This same logic is increasingly required in today's public sector environment, where resources are flat or declining and service demands are increasing. 🖪

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- 1 "Local Government: State of the Sector: AI," Local Government Association, February 2024.
- ² Justin Marlowe, "A New Role for CFOs: Babysitting Al." GFR, June 2025.
- ³ ICMA Artificial Intelligence in Local Government Summary of 2024 Survey Results, 2024
- "Local government: State of the sector." Local Government Association, 2024.
- "Al in Government: Fundamentals Training," Australian Government Digital Transformation Agency, 2025.
- ⁶ Judith Collins, "Al training to boost public sector productivity," May 28, 2025.
- "Leveraging Al Tools in the Finance Office." GFOA. March 13, 2025.
- 8 "DHS Playbook for Public Sector Generative Artificial Intelligence Deployment," U.S. Department of Homeland Security, January 2025.

Protecting the End User



A major issue and impediment to AI use is how the end user will be protected and receive some assurance that the AI system works as advertised. There is no local, national, or international standard that provides this type of assurance. There are, however, several laws and guidelines that provide broad parameters local governments can consider in AI implementation and risk management.

European Union's Al Act. The European Union's AI Act was passed in 2023 and updated in 2025. It provides specific requirements for the development and maintenance of Al models. Its primary focus is on the developers of AI systems.

The act sets AI regulations based on the perceived threat or risks that the AI system could pose. The risk levels used to determine the extent of the regulations are:

Unacceptable risk—This type of risk is prohibited. It includes social scoring systems and manipulative Al.

High risk—this type of risk is highly regulated. It includes safety components or products covered by EU laws and requires the developer to undergo a third-party conformity assessment, which includes having a risk management and quality assurance process. The risk management process is to be consistent with International Organization for Standardization (ISO) 31000:2018. The quality management process must be consistent with ISO 9001:2015. The quality management process must also be capable of being audited by a third

Limited risk—developers must ensure that end users are aware that they are interacting with AI systems such as chatbots and deepfakes.

Minimal risk-this area is unregulated. It includes Al-enabled video games and spam filters.

The ISO 3100:2018 risk management process recommended for High-Risk AI developers in the EU AI Act is the same risk management process recommended by the National Institute of Standards and Technology (NIST) in its Al guidelines.

NIST Al guides. NIST has issued two Al guides, "Artificial Intelligence Risk Management Framework" (AIRMF) 1.0 (2023) and "Artificial Intelligence Risk Management Framework: Generative Artificial Intelligence Profile" (2024), Each stresses risk management. AIRMF 1.0 notes: "Al risk management offers a path to minimize potential negative impacts of Al systems, such as threats to civil liberties and rights, while also providing opportunities to maximize positive impacts."

Like the EU AI Act, NIST's AI risk management framework is risk-based. There are differences. First, the NIST guides are for both developer and user, while the EU Al Act covers the developer, deployer, and user. Second, the Generative AI guide stresses risk management for the entire Al lifecycle, the stages of which are design, development, operation, and decommissioning. The EU AI Act does not stress the AI lifecycle. Lastly, NIST does not mention the need for ISO 9001:2015, a quality-management system.

The U.S. Department of Homeland Security (DHS) published a related Al guide. It is related because, by presidential executive order, the NIST guidelines (be they cybersecurity or AI) are mandates for all U.S. federal agencies. The NIST guidelines, therefore, underpin all U.S. federal agencies' Al guides and Al risk management suggestions.

DHS Public Sector Generative AI Playbook. In January 2025, DHS published "DHS Playbook for Public Sector Generative Artificial Intelligence Deployment." The playbook is based on DHS's experience with deploying three generative Al-related pilot initiatives: 1) Strengthening Investigative Leads with LLM-Enhanced Search and Summarization: 2) Helping Local **Governments Create Hazard Mitigation** Plans; and 3) Creating Novel Training Opportunities for Immigration Officers.

Based on DHS's experience with these pilot projects, the agency developed a set of actions to help organizations with AI implementation:

Public-sector organizations must ensure that GenAl deployments align with their mission. Narrowly scoped,

- mission-enhancing pilots are useful tools for exploring how an organization can use GenAl.
- Organizations should cultivate support for GenAl applications from top leadership and across functional teams to give GenAl the greatest chance for successful deployment and effective oversight.
- Organizations should evaluate the technical tools and infrastructure they already possess and consider what technical capabilities they require to deploy GenAl applications.
- From the very beginning, organizations should consider how to make sure GenAl is responsible and trustworthy, and how to address potential risks like privacy, security, bias, and safety.
- Teams that are developing GenAl applications should measure progress with appropriate metrics and report on that progress to leadership and other stakeholders.
- Organizations should train their staff on responsible and effective GenAl use and hire skilled employees who can support GenAl development.
- Organizations should incorporate iterative feedback from users and other stakeholders to develop and improve GenAl applications.

Another approach, which incorporates both the EU AI Act requirements and the lifecycle risk assessment, is the Irish Republic's "Guidelines for Responsible Use of Artificial Intelligence in the Public

Irish Republic's Al Guidelines for the Public Sector. The republic's guidelines were published in May 2025. This is a mandate for all governments in the Irish Republic.

Because the republic is part of the EU, the guide is consistent with the EU's AI Act. It also indicates that the guide will help "identify and address potential risks throughout an AI system's lifecycle." The guidelines add seven principles for Responsible AI:

- 1. Human agency and oversight
- 2. Technical robustness and safety
- 3. Privacy and data governance
- 4. Transparency
- 5. Diversity, non-discrimination, and
- 6. Societal and environmental well-being
- 7. Accountability