

The Era of AI-Empowered Cities

Generative AI creates massive opportunities for local and regional governments to rapidly deliver secure, modern, and sustainable experiences.



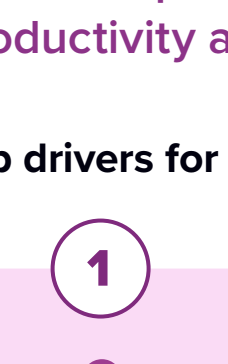
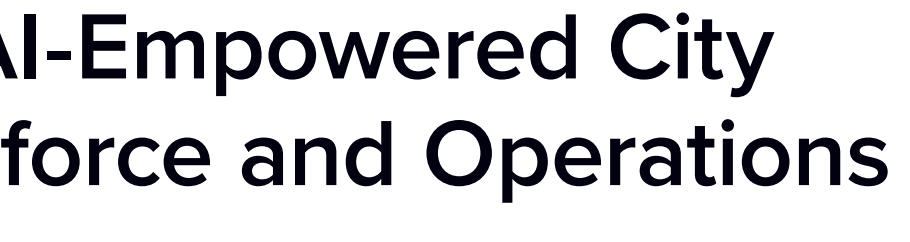
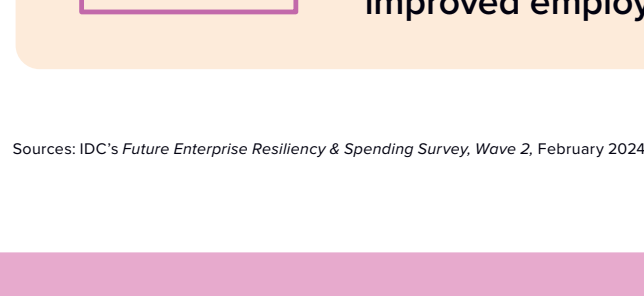
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GenAI Has an Increasing Role in Government Transformation

GenAI is a form of artificial intelligence to **create text, audio, video, images, and code** in response to short prompts and based on the data used to train it.



Governments globally have embraced GenAI and are already investing significantly in GenAI tools.



AI and automation projects such as GenAI initiatives are **some of the least likely projects to be subject to budget reductions**. Governments see GenAI as a net-positive investment and a force multiplier for improved employee experiences and productivity.

Sources: IDC's Future Enterprise Resiliency & Spending Survey, Wave 2, February 2024, and Wave 5, May 2024; IDC's Industry Tech Path Survey 2024, August 2024

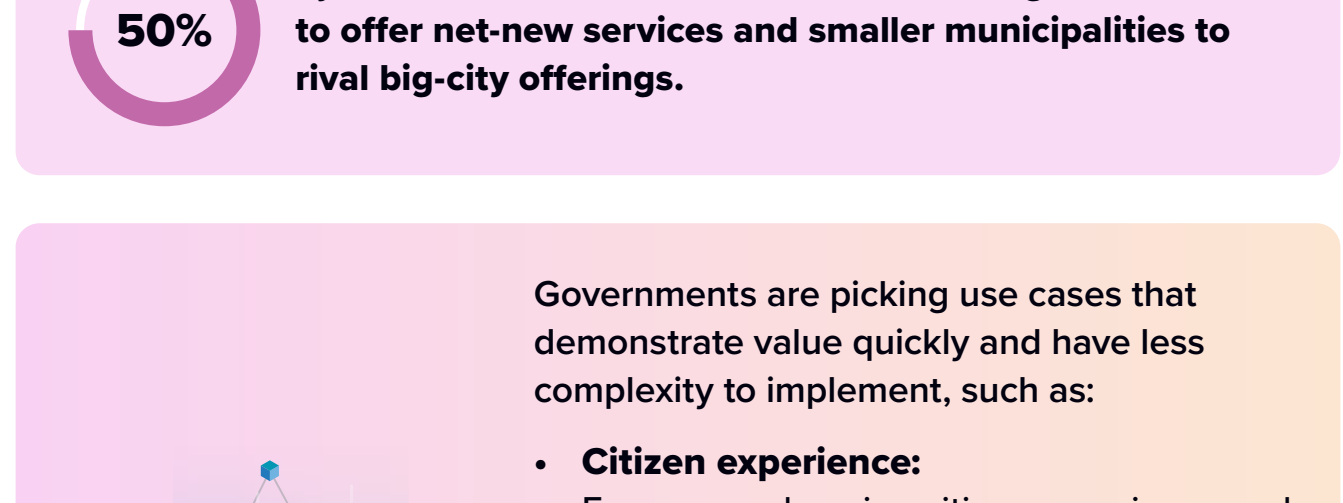
GenAI-Empowered City Workforce and Operations

GenAI enables regional and local governments to automate processes to reduce risk and improve productivity and the employee and user experience.

Top drivers for using GenAI in order of priority are:



Governments anticipate the greatest impact of GenAI on workforce and operations transformation:

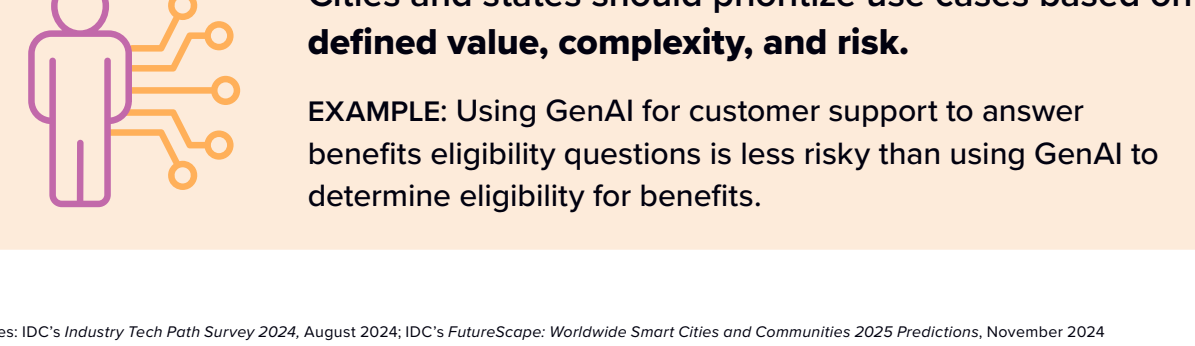


Sources: IDC's Industry Tech Path Survey 2024, August 2024; IDC's Future Enterprise Resiliency & Spending Survey, Wave 2, February 2024

Near-Term GenAI Use Cases

Use cases demonstrate the possibilities and impact from GenAI for smart cities and communities.

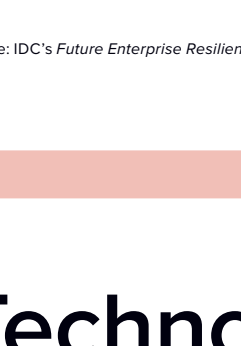
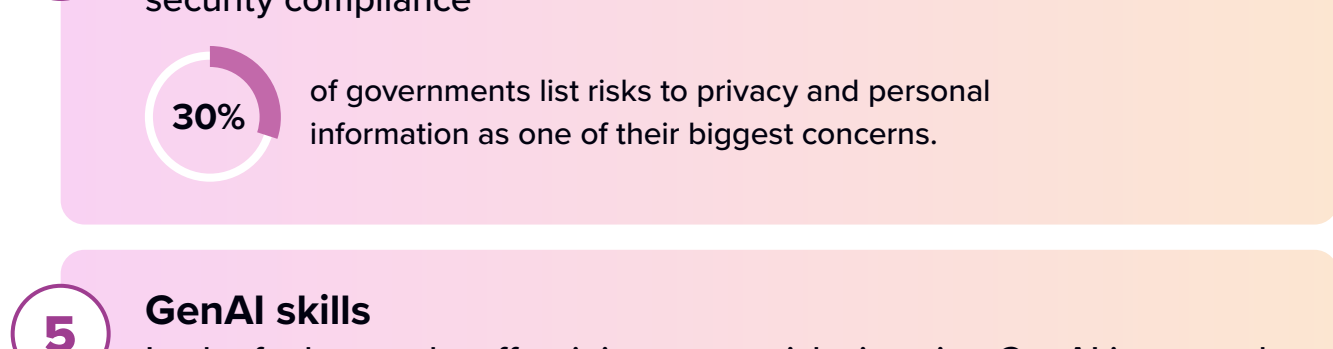
IDC predicts that GenAI-augmented services will grow



Governments are picking use cases that demonstrate value quickly and have less complexity to implement, such as:

- **Citizen experience:** Focus on enhancing citizen experience and trust through AI and automation by quickly communicating community alerts and incident updates.
- **Knowledge discovery:** Leverage AI for knowledge discovery to uncover insights and patterns across multiple departments and agencies and data silos.
- **Process optimization:** Optimize using GenAI to support workflow automation and the compression of discrete tasks.

Government respondents believe GenAI will be critical for:



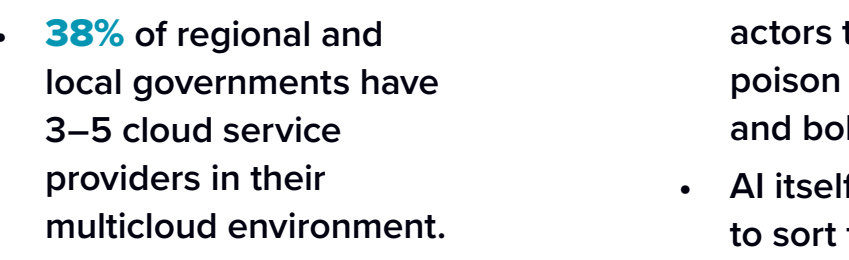
Cities and states should prioritize use cases based on **defined value, complexity, and risk**.

EXAMPLE: Using GenAI for customer support to answer benefits eligibility questions is less risky than using GenAI to determine eligibility for benefits.

Sources: IDC's Industry Tech Path Survey 2024, August 2024; IDC's FutureScope: Worldwide Smart Cities and Communities 2025 Predictions, November 2024

Inhibitors, Fears, and Challenges in Adoption

There are **known and unknown risks** in the responsible use of GenAI. Address the known risks now as part of a strategic AI road map, and create responsible AI policies and governance.



Sources: IDC's Future Enterprise Resiliency & Spending Survey, Wave 2, February 2024

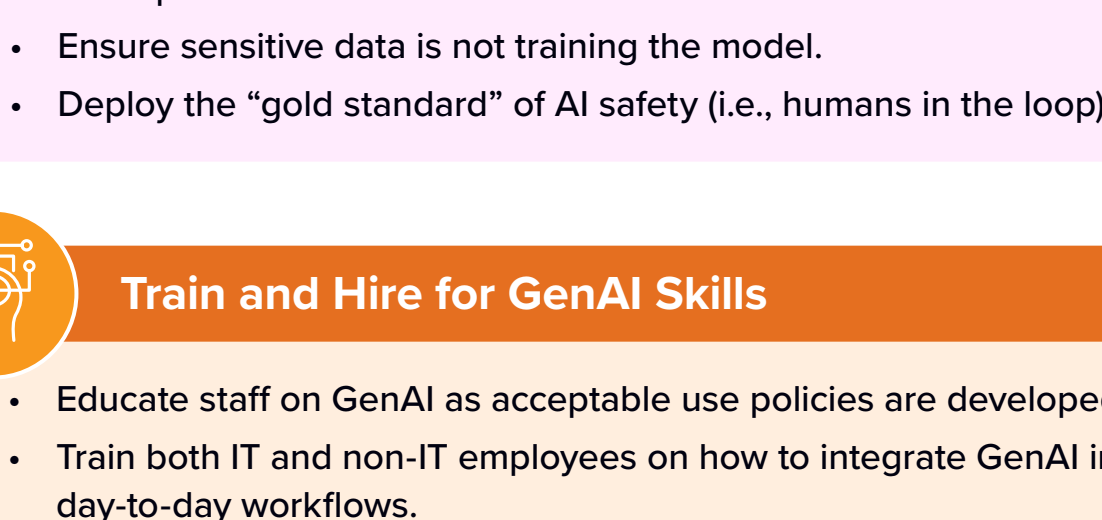
Technology Considerations

Technical decisions around **compute infrastructure, AI platforms, and data-readiness** highlight the importance of trusted external partners.

INFRASTRUCTURE

1 Compute power: GenAI requires compute power for its large language models and training data, as well as data processing.

- Cities report that cloud infrastructure to support GenAI has the most impact on budgets.
- Many governments worry about technical debt given the current rapid rate of change in GenAI infrastructure related to processor and network technologies.
- **47%** will use a mix of public cloud and dedicated infrastructure-as-a-service solutions to offer options and flexibility to respond to the rapid developments in GenAI technologies.



2 Cloud requirements

- **60%** of regional and local governments have hybrid and multicloud environments.
- **38%** of regional and local governments have 3–5 cloud service providers in their multicloud environment.
- **38%** of governments agree that ease of data repository integration across hybrid/multicloud architectures is most important for GenAI compute and storage infrastructure.

3 Cybersecurity

- GenAI can also enable bad actors to create malware, poison open source code, and bolster hacker abilities.
- AI itself will be necessary to sort through massive amounts of cybersecurity information to help protect against these threats.
- **38%** of governments worry that security policies do not yet account for GenAI.

Sources: IDC's Future Enterprise Resiliency & Spending Survey, Wave 2, February 2024

Guidance and Recommendations

Smart cities and communities are adopting GenAI quickly. It is important to proactively manage this adoption to benefit from the opportunities of GenAI while managing the risks and challenges.

Focus on Trust

- Understand the value of GenAI applied to government data.
- Develop a responsible GenAI policy for guardrails and compliance.
 - Banning GenAI use is not an effective, sustainable, long-term policy. GenAI use must be transparent and not “shadow IT.”
 - Only **21%** of governments have responsible AI governance policies that they have shared organizationwide, and even fewer have a responsible AI code of conduct.
- Ensure sensitive data is not training the model.
- Deploy the “gold standard” of AI safety (i.e., nines in the loop).

Train and Hire for GenAI Skills

- Educate staff on GenAI as acceptable use policies are developed.
- Train both IT and non-IT employees on how to integrate GenAI into their day-to-day workflows.
- Create new job descriptions.
- Acquire new skills (e.g., prompt engineering, grounding, model construction, and code interpretation).
- Use a variety of skills and cross-functional expertise for decision-making. **64%** of government organizations have a cross-functional team of IT and non-IT leaders making GenAI investment decisions.

Scale GenAI

- Assess build-versus-buy strategies for AI workloads and infrastructure.
- Partner with trusted suppliers.
- Conduct sandboxed experimentation for prioritized use cases.
- Develop an intelligence architecture.

Sources: IDC's Future Enterprise Resiliency & Spending Survey, Wave 2, February 2024