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AI in Local Government

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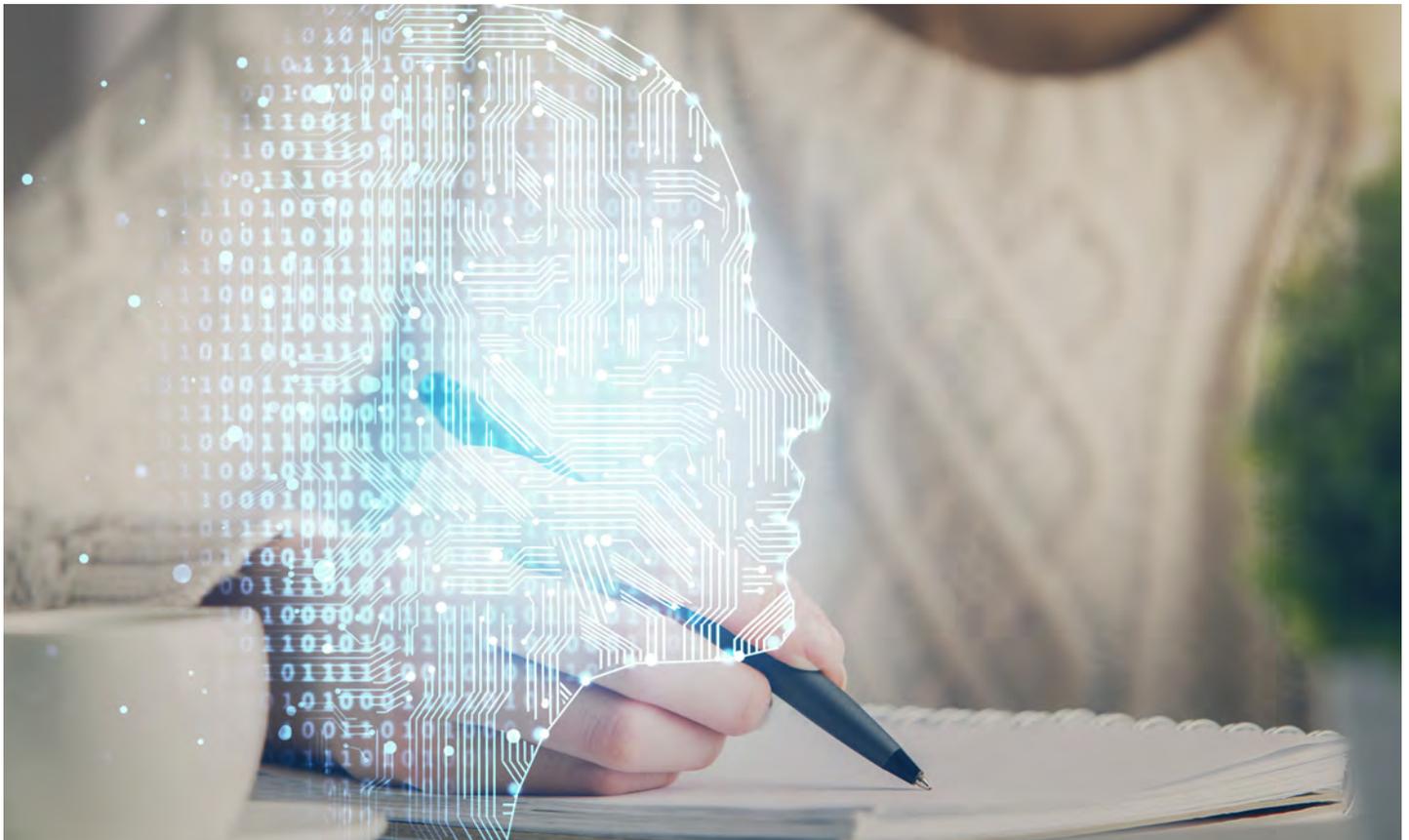
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An AI Chatbot's View

What municipal leaders should know about AI

Claude.AI, prompted and assisted by Marc Pfeiffer, Sr. Policy Fellow and Assistant Director, Bloustein Local Government Research Center, Rutgers University



Note: We've moved our Tech Update column to the features section this month to shine the light on a two-part series on artificial intelligence (AI) and its connections with the municipal government workspace. Part 1 is based on the human author's prompt to the generative AI application, Claude.ai, to write a "750 word plain language article explaining what a municipal government elected official should know about AI and generative AI." Claude wrote 747 words.

As is appropriate for many AI outputs, the author subsequently edited the text to add context, accuracy, and style. The edits are highlighted in underlines and ~~struck-out text~~.

Artificial intelligence (AI) is transforming how local governments organizations operate and provide services. As a municipal leader, it's important to have a basic understanding of AI, including the newer generative AI models, to effectively leverage these technologies for your city.

AI Chat Bots

AI refers to computer systems that can perform tasks normally requiring human intelligence, such as visual perception, speech recognition, and decision-making. AI encompasses a variety of techniques that allow software algorithms (formulas) to learn from data in order to make predictions, recommendations or take actions.

AI systems “learn” through machine learning (ML). ML is a commonly used technique where algorithms are trained on large sets of sample example data. This data can include the content of the publicly available internet or an organization’s own stored data. The training teaches the AI program to recognize patterns, make connections, and make decisions. The training creates what are known as “neural networks”.

For instance, AI can analyze photos to identify signs of infrastructure damage or review documents to route them to the correct department. AI is also used in chatbots that understand natural language questions from residents.

Generative AI takes things a step further. Models like DALL-E and GPT-3 can generate brand new content like images, text, audio, and video based on short text prompts. This ability to autonomously create original, realistic content artifacts has enormous potential—and risks.

(End of chat)

Claude.ai is the chatbot that wrote this article in response to the question (aka, prompt). The more well-known ChatGPT is a competing chatbot system.

AI in Your Town

How can municipal officials harness AI safely and effectively? Here are key considerations:

1 Start small: Look for focused ways to improve specific processes vs. jumping into major AI deployments right away. Pilot projects in areas like service requests, inspections, and document processing can demonstrate benefits and build trust.

2 Focus on augmenting staff: Position AI as assisting rather than replacing staff. For instance, chatbots handle common questions to let staff focus on higher-value interactions. AI should empower employees to do their jobs better.

3 Assess risks: AI bias can lead to unfair or dangerous outcomes. Rigorously test for impacts on different populations and mitigate risks before deployment. Document processes to ensure transparency.

4 Control generative AI: While creative, generative models also carry significant risks around misinformation, security, intellectual property, etc. Set strict governance policies on how and when generative AI can be used.

5 Acquire cautiously: Be wary of vendor hype and don’t assume AI is the solution. Carefully validate capabilities and start with a limited pilot. Watch for exploitative or unethical business practices.

6 Plan for change management: Adopting AI changes processes and job roles can meet resistance. Involve staff early in evaluating AI. Invest in retraining and upskilling employees to work alongside AI.

7 Build smart data practices: Quality data is essential for effective AI. Audit existing data for biases and gaps. Improve data collection going forward to better reflect the full community.

8 Focus on public benefit: Apply AI to improve life for all residents fairly. Make decisions transparent. Protect privacy and security. AI offers great potential but ensure it aligns with public sector values.

9 Stay engaged: Monitor AI legislation and regulation which will likely expand. Participate in policy discussions to advocate for municipal needs and ethical AI standards.

The public sector will lag behind adopting AI in day-to-day use. But by understanding capabilities, limitations, and responsible use, municipal leaders can tap AI’s power to enhance services, efficiency and equity across their cities. 🇺🇸

Note: This AI chatbot theme is continued in the adjoining article, [How Can AI Chatbots Help City Governments?](#)

The idea for this article was itself prompted by the author’s recent Op-Ed in *NJ Spotlight*, “What state and local governments should do about generative AI,” found at go.rutgers.edu/Pfeiffer_Adopting_AI_in_NJ_Government.



How Can AI Chatbots Help City Governments?

Claude.AI, prompted and assisted by Marc Pfeiffer, Sr. Policy Fellow and Assistant Director, Bloustein Local Government Research Center, Rutgers University



Note: This is Part 2 of this month's Tech Update feature focus. This article prompted Claude.ai to "Write a 750 word article in non-technical plain language that summarizes how generative AI chatbots can be used in municipal government administration." Claude wrote 746 words.

As with Part 1, the author edited the text to add context, reliability, and style. The edits are shown in underlines and ~~struck-out text~~.

Most Mmunicipal governments handle a wide huge array of public services from infrastructure to parks, libraries, public safety transit, and more. Serving residents effectively requires clear communication, accessible information, and efficient operations. This is where generative AI-powered chatbots can make a real difference.

Chatbots are software programs that use [natural](#) language processing to have conversations with people. Also called conversational agents, they can answer questions, provide recommendations, and complete tasks. Leading companies like Google, Microsoft, and Amazon, [and many start-ups](#), now offer [and continue to develop](#) advanced chatbot services powered by large neural networks trained on massive datasets.

Local government opportunities

For local governments, chatbots create exciting opportunities to improve customer service, automate tasks and cut costs. Residents routinely need information on topics like garbage collection, parking permits, construction projects and event schedules. Chatbots can provide 24/7 automated self-service for these frequent citizen inquiries.

How would it work? City departments and agencies would build customized chatbots for their public services based on available platforms and [programming tools APIs](#). Using natural language processing, the chatbot understands questions [asked typed](#) by residents and responds with accurate answers in conversational language.

If the chatbot cannot confidently answer a question, it can say “I’m not sure” and smoothly transfer the user to a human agent. The system keeps learning over time as it ingests more training data. With machine learning algorithms, the chatbot continuously improves at responding to diverse resident requests in specific [areas domains](#).

Chatbots can deliver quick, consistent and high-quality customer service without the need for large call center staffing. Citizens get fast access to information online without having to wait on hold or navigate complex phone menus. Many simple inquiries can be handled fully by the automated chatbot, freeing humans [agents](#) to focus on more complex resident needs.



Chatbots At Work in Municipalities

Some chatbot use cases for municipalities:

- Provide parking permit information and process applications.
- Answer questions about waste collection schedules and services.
- Share public transit routes, schedules, and real-time updates.
- Check status of building permit applications and inspections.
- Lookup contact info for specific departments and staff.
- Provide details about city-sponsored events, classes, and programs.
- Check eligibility, enroll people in social assistance programs.
- Answer frequently asked questions on municipal websites

Working at work

Chatbots are highly scalable, so they can handle surges in demand without getting overwhelmed. During emergencies like natural disasters, chatbots can play a crucial role in keeping information flowing to the public when call volumes spike.

Many municipalities are already piloting chatbots today with good results. In Austin, Texas, a parking chatbot fielded over 100,000 citizen queries in the first year, providing accurate permit info. Las Vegas launched a chatbot that cut customer service call volume by 30%. And in Los Angeles, 80% of resident questions are now handled fully by automated bots.

As AI services continue to advance, smart cities will increasingly adopt chatbots. They allow local governments to improve efficiency, better engage with digitally savvy residents, and reallocate resources from repetitive tasks to more complex challenges. With responsible design, chatbots can make local public services far more accessible and responsive to community needs.

(End of chat)

Thanks Claude!

Human Author's Note – AI and the Technology Hype Cycle

We are now at the start of an AI hype cycle. This is when a new technology is triggered, developers and early adopters test, experiment, and evolve new applications that get a lot of public attention.

We are on the path where it will reach a peak of inflated expectation and endure failures, controversies, and understanding of risks. It will eventually bottom out in a trough of disillusionment.

At that point, costs come down, software stabilizes, and a starts up a “slope of enlightenment” that leads into a plateau of productivity when mainstream adoption takes off.

One catch with this: no one can predict how long it takes to go

through the hype cycle.

For the moment however, individual users and some places will take advantage of chatbots to help write letters, press releases, summarize policy information gleaned from the internet, and much more.

Municipal leaders should work with tech and operational experts to set policies and watch for opportunities to take advantage of these new tools.

And watch out for the hype!

Go ahead and ask your friendly chatbots questions you might otherwise ask a search engine or coworker. Have fun with it but use outputs carefully. Watch out for hallucinations! 🦄

@ For more on the hype cycle, see: www.gartner.com/en/research/methodologies/gartner-hype-cycle

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