

# STATE OF THE PRACTICE REPORT ON MPOS AND AI TOOLS

MARCH 2024

The logo for the Association of Metropolitan Planning Organizations (AMPO). It consists of the letters "AMPO" in a bold, blue, sans-serif font, centered within a white rectangular box.

**AMPO**

Prepared by the Association of  
Metropolitan Planning Organizations

# About our Survey

AMPO launched the survey on Oct. 20, 2023, and shared it with the MPO community via several emails. The survey ran through Oct. 30 and generated responses from 79 individuals representing 67 MPOs. (For this analysis, responses are counted per MPO.)

Of the responding MPOs, 22 were large (population of 1 million or more); 23 were medium-sized (population between 200,000 and 1 million); and 22 were small (under 200,000).

**Chart 1: Size of survey respondents vs. size of MPOs in U.S.**

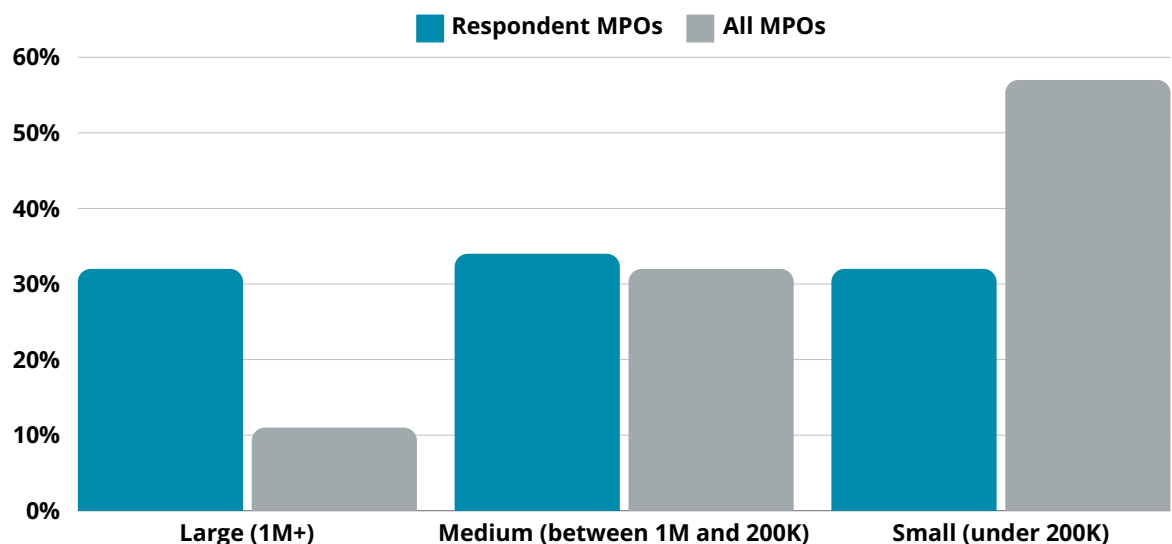


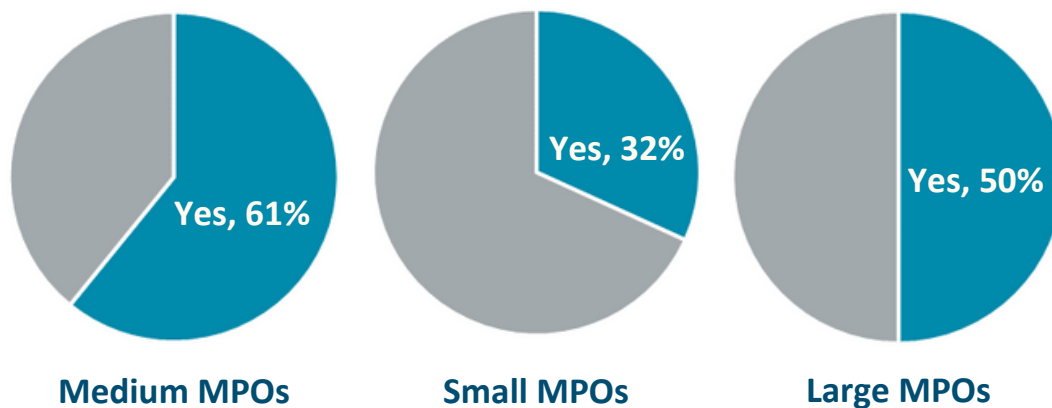
Chart 1 compares the size of MPOs that responded to the survey with the overall population of MPOs in the U.S. (in gray). Large MPOs are overrepresented in the survey results, and small MPOs are underrepresented.



# Survey Results

The survey asked whether the MPO had experience using an AI tool. Overall, 48% of responding MPOs had used AI. Responses varied by the size of the MPO, with a larger share of medium-sized MPOs using AI tools, compared with large and small MPOs. Chart 2 shows the prevalence of experience with AI tools based on MPO size.

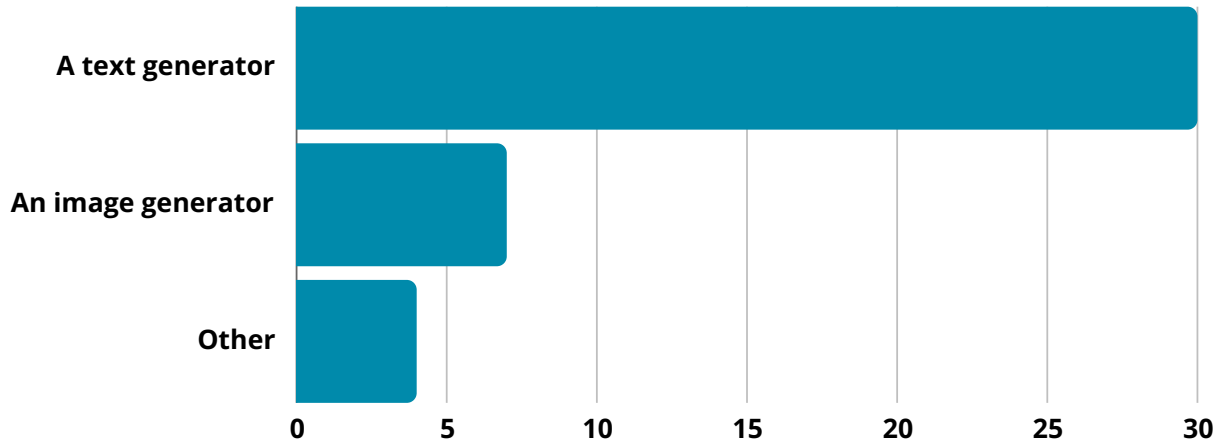
**Chart 2: MPOs by size and their experience with AI**



The most common type of AI tool used by responding MPOs is a text generator, such as ChatGPT, which was used by 30 of the MPOs. Eight of the MPOs reported using an image generator, such as Midjourney or Bing Image Generator. Four MPOs reported using another type of AI tool, including a graphics generator, a social media posting tool, a video-generating tool, and a custom tool provided by a vendor. Chart 3 shows those survey results.

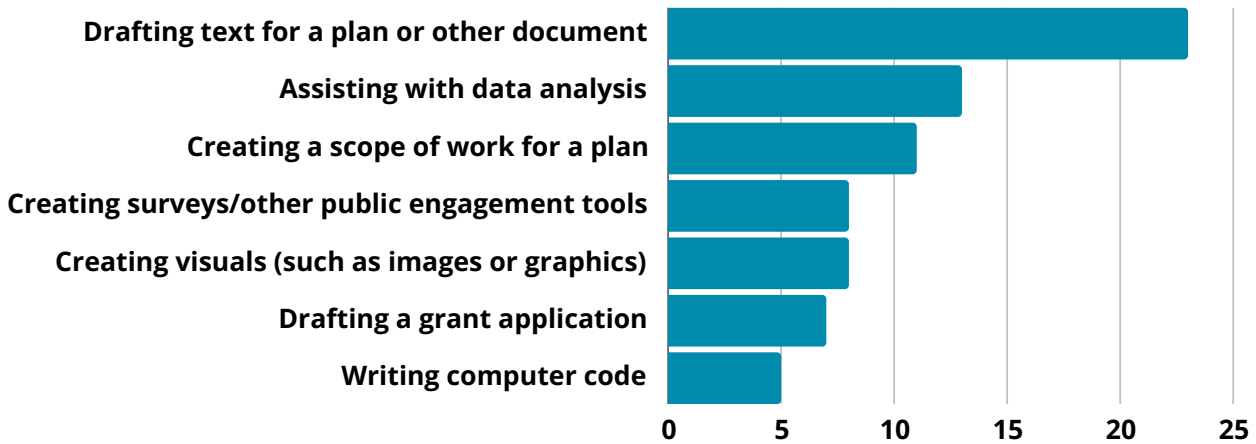


**Chart 3: Which AI tools have MPOs used?**



The most common use for AI tools was drafting text, which was reported by 22 MPOs. Other common uses include data analysis and creating a scope of work for a plan. Chart 4 shows all of the uses for which there were more than two responses.

**Chart 4: Tasks for which MPOs have used an AI tool?**



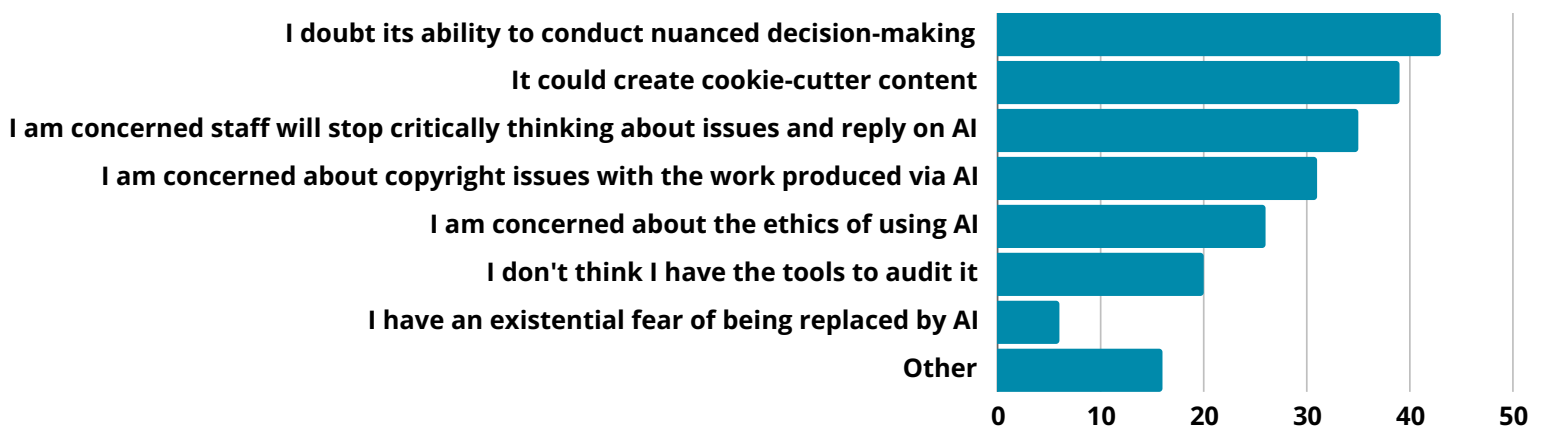


One or two MPOs reported using AI tools for the following tasks:

- Summarizing text
- Language translation
- Creating a social media strategy
- Generating creative project names
- Generating a contrarian or “devil's advocate” point of view
- Creating vector data from imagery
- Creating database queries

Finally, the survey asked about concerns MPOs may have with using AI tools. The most common response, shared by 43 MPOs, was doubt about an AI tool’s ability in nuanced decision-making. Another frequent response, shared by 39 MPOs, was the concern that AI tools would create “cookie-cutter” content. The other most common responses are shown in Chart 5.

**Chart 5: Concerns expressed by MPOs about using AI tools?**





Sixteen MPOs indicated that they had other concerns. Here's a sample of the responses they shared:

- “Staff education and understanding of appropriate use and shortcomings.”
- “I fear accidental data disclosure and unintentional bias being introduced into outputs and analysis.”
- “My fear is that the public, and maybe even decision-makers, will be unable to differentiate between original source material from our MPO with AI generated content. It may also create a level of cynicism in the public, making them question 'our' facts and analysis with AIs facts and analysis. It could force us to defend our position against AI.”
- “I feel because it is a shiny new technology, people may overestimate its abilities.”
- “I do not believe it is a fully developed application, yet. However, if it could replace the Travel Demand Model I would be all for it!”



## GUIDELINES ON AI FOR MPOS

### Common elements of AI policies

- **Principles:** These are used as a framework to ensure the policy aligns with the agency
- **Known risks:** Identifying known risks will help you better mitigate them through guidance
- **Do's & don'ts:** Providing clear direction of use cases is helpful for staff to illustrate how AI should be used
- **Examples:** Including examples from other agencies and citations helps create a larger picture of AI use

#### *A few common principles*

- Innovation and Efficiency
- Equity, Inclusion, and Respect
- Transparency and Accountability
- Privacy and Security
- Agency Alignment
- Validity and Reliability
- Minimization of Bias and Harm

#### *Examples of known risks*

- Data Breaches
- Bias
- Inaccurate Information
- Intellectual Property Infringement

## GUIDELINES ON AI FOR MPOS (CONTINUED)

### Common *do's and don'ts*

#### Do's

- Check for bias in outputs
- Be specific with written prompts
- Tailor outputs to meet agency quality standards and tone
- Cite when AI is used in work product, when appropriate

#### Don'ts

- Don't provide confidential or proprietary information
- Don't assume information provided is accurate
- Don't copy and paste content directly from the tool

### Common *uses of AI*

- Brainstorming
- Producing and refining drafts
- Generating software code/programming
- Summarizing documents/audio files
- Generating images, audio, and video for illustrative purposes

### Peer example: ARC<sup>1</sup>

ARC specifies that this guidance is not intended to limit the use of generative AI, but rather to provide guardrails so staff can explore the technology without “excessive fear of inadvertently doing harm.”

### Peer example: City of Boston<sup>2</sup>

Boston emphasizes that staff are responsible for the outcomes of the tools they use, underlining it does not excuse staff from judgement or responsibility. They also note that these guidelines are temporary and should be replaced with policies and standards.

### Peer example: State of Ohio<sup>3</sup>

Ohio not only approves the use of AI but provides a detailed framework for ensuring the protection of data, integrity, and quality of the information produced. One of the most extensive policies, they also provide templates, FAQs, and a governance framework.

<sup>1</sup> <https://cdn.atlantaregional.org/wp-content/uploads/preliminary-guidance-on-the-use-of-generative-ai-for-arc-employees-version-10-oct-10-2023.pdf>

<sup>2</sup> <https://www.boston.gov/sites/default/files/file/2023/05/Guidelines-for-Using-Generative-AI-2023.pdf>

<sup>3</sup> <https://das.ohio.gov/technology-and-strategy/policies/it-17>



# Appendix: Survey Questions

## **Introductory text:**

The use of Artificial Intelligence (AI) tools such as [ChatGPT](#) and [various image generators](#) is a big topic of conversation in the planning profession. Do you have experience using an AI tool in your work? Do you have questions or concerns about the use of AI in planning? Please respond to the survey to help inform AMPO's understanding so that we can help the MPO community make the best use of AI tools and avoid any pitfalls.

Question 1: Contact information

Name:

Organization

State:

Email address:

Question 2: What is your MPO size?

- Small (population of 50k-199K)
- Medium (population of 200k-1 million)
- Large (population of 1 million+)

Question 3: Is your MPO an AMPO member?

- Yes
- No

Question 4: Do you have experience using an Artificial Intelligence (AI) tool at your agency?

- Yes
- No

Question 5: (Only for respondents who said Yes to Question 4): For which of the following tasks have you used an AI tool?

- Creating a scope of work for a plan
- Creating surveys or other public engagement tools
- Drafting text for a plan or other document
- Creating visuals (such as images or graphics)
- Assisting with data analysis
- Drafting a grant application
- Assisting with performance monitoring and/or asset inventories
- Other



## Appendix: Survey (continued)

Question 6 (Only for respondents who said Yes to Question 4): Which AI tools have you used?

- A text generator, such as ChatGPT
- An image generator, such as Midjourney or Bing Image Creator
- Other

Question 7 (Only for respondents who said Yes to Question 4): In thinking of your experiences with AI tools, please describe your satisfaction level. What pros and cons have you encountered? (Open-ended response)

Question 8: What concerns do you have with using AI tools in planning?

- It could create cookie-cutter content
- I doubt its ability to conduct nuanced decision-making
- I don't think I have the tools to audit it
- I am concerned about the ethics of using AI
- I am concerned staff will stop critically thinking about issues and rely on AI
- I am concerned about copyright issues with the work produced via AI
- I have an existential fear of being replaced by AI
- Other

Question 9: Are there examples of the use of AI tools in planning that you've heard of and want to learn more about? If so, please share how you learned about it, for example, a link to an article, webinar, etc. (Open-ended response)

Question 10: Are you aware of any policies or guidelines that apply to your agency or to other government agencies regarding use of AI tools? If so, please share what you know about those guidelines, including links if possible. (Open-ended response)