AI Research Needs in the Service of Local Government Frameworks and Use Cases

A Call to the Research Community

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In the Lab: GenAI for Local Government Policy Guidance

A MetroLab Publication

MetroLab's "In the Lab" program is an endeavor in which we bring together our ecosystem, practitioners and academic experts alike, to develop policy guidance for local governments. Launched in August 2023, the GenAI for Local Governments Task Force convenes 130+ individuals to develop policy guidance that will include model ordinance language, processes and regulatory recommendations, and a resources library. The task force is currently composed of 45 unique local governments, 16 universities, 25 private sector companies, and 16 other stakeholder groups including four federal agencies, nonprofits, and coalition organizations.

As a result of this work, MetroLab is publishing three separate deliverables that together, represent a complete body of work. First, we are publishing a policy guide specific to community engagement. This guide includes ways to proactively engage communities to proactively shape GenAI policies such as community education, ways in which local governments can increase transparency, and more. Second, a call to the research community. At every turn, we asked what research is needed to further efforts on understanding the technology and its impact. We are providing an updated list of research questions as identified by the dozens of stakeholders involved with the task force. And finally, a white paper on cybersecurity and privacy. This whitepaper identifies the unique ways AI is impacting cybersecurity and privacy protections, for example, citing the increasing difficulty in enforcing consent and the right to be forgotten mechanisms.

Intended Uses. These publications intended to be several things:

a) A useful tool for practitioners, co-developed by practitioners (with the guidance and input of expertise from individuals from academia and other organizations with relevant expertise).
b) A living guide housed on the MetroLab Network website, and curated, updated, and refined there through a multi-functional online platform to help local governments as they keep pace with rapidly evolving AI policy guidance and regulatory best practices.
c) A reminder of several legal considerations that permeate data governance—while a few lawyers were involved in this project, it is incumbent upon us to tell you that this is not legal advice.

A Call to the Research Community

As MetroLab met its national GenAI for Local Governments task force, at every turn we asked our local government partners what research would be helpful to as use cases and policy frameworks develop. Over 13 months, we collected research questions. These questions are wide ranging, from high level to nuanced, from technical engineering to legal and social science.

As students and researchers study AI, we hope they can align projects and proposals to provide support to the needs of local governments and the questions below.

We invite anyone who is interested in pursuing these research needs to keep MetroLab aware of such endeavors. MetroLab will continue to serve as a pipeline to the local government community for both research demands and research dissemination. Email info@metrolabnetwork.org with any developments.

Research Questions Posed by MetroLab Local Government Partners
1. How can research be conducted, or methodology formed, to determine AI accuracy and degree of bias with empirical data?
2. What are lessons learned we can glean from the civic tech movement of ten years ago? How can that help inform policy and preparedness for AI?
3. Standard, thoughtful definitions are needed to ensure appropriate implementation.
4. Legal question: when a new AI functionality gets added to a digital product, is it to be treated as the same product? What contractual components are in flux, if any?
5. How can we measure AI's impact on the productivity of the economy?
6. How do we determine accuracy and rates of hallucinations?
7. Policy question: do we need to distinguish between AI and GenAI for different policies? How do we make the answer to this widely known and consistent across levels of government?
8. What can be learned from other types of models? For example, applying economic forecasting?
9. What is the safe use of GenAI for social service delivery and intake (increasing outreach while not exacerbating existing bias in the process)?
10. What are strategic implementation opportunities for AI in rural or low-tech communities?
11. Predictive suggestions for travel demand models in every region would be helpful.
12. What are the training needs of staff to incorporate AI in projects?
13. Identifying limitations.
14. Big tech vs small tech and open source LLMs and tools (how do we support medium to small size businesses)?

15. How do you build and maintain trust, and sustain this?
16. How do we measure effectiveness and harm from the beginning?
17. How do we break down information overload?
18. Learning if/how residents could abuse a 311 system to manipulate the AI and the way it works
19. Can AI hallucinate a problem area in a city via 311 data that doesn't actually exist? What are the implications for how the city works and the message that it sends?
20. With respect to cybersecurity, what are narratives around near-term risk, catastrophic risk, and ways in which local government use introduces vulnerabilities on its own.
21. Offensive/defensive cybersecurity concerns?
    o Identifying hotspots in misinformation activity? Is this something at the state-level?
    o How should we be thinking about allocation of risks/policies/topics across levels of government? Is this public education?
22. How do domain-specific rules apply to GenAI privacy concerns?
23. What are privacy/security values in local government that can help anchor and translate this into local government context
    o Owning decision-making and responsibility over life, liberty, and property and not ceding it to automated systems.