Ensuring That Government Use of Technology Serves the Public

Benjamin Boudreaux

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Testimony of Benjamin Boudreaux¹ The RAND Corporation²

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hairwoman Mace, Ranking Member Connolly, and members of the committee, good afternoon and thank you for the opportunity to testify today. I am a policy researcher at the RAND Corporation, a nonprofit and nonpartisan research organization that manages federally funded research and development centers for the Department of Homeland Security (DHS) and the Department of Defense. Before joining RAND, I served as a foreign affairs officer at the Department of State, and I earned a Ph.D. in philosophy with a concentration in political philosophy and ethics.

Today, I'll focus my comments on the importance of ensuring that government technology deployments serve the interests of the public.

The U.S. government frequently deploys emerging technologies that directly affect Americans. For example, DHS uses artificial intelligence (AI) and other technologies that can recognize human faces, track mobile-phone locations, and analyze social media activity. These

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technologies are purported to bring a variety of benefits to government missions—for instance, by increasing the speed and accuracy of decisionmaking, such as in the Global Entry trusted traveler program.

However, the potential of government use of emerging technologies to keep Americans safe is subject to several important considerations. This includes an accurate assessment of the benefits and risks and the public's trust that these rapidly advancing technologies are used responsibly.

Key stakeholders, such as members of Congress from both parties,³ technology companies,⁴ and AI researchers,⁵ have raised concerns about government use of emerging technologies. These concerns include risks that government applications violate privacy and civil liberties, exacerbate inequity, and lack appropriate transparency and other safeguards.

An essential element to help ensure that government use of technologies serves the public's interest is to better understand the public's perception of their use.

Public perception is important for several reasons, such as to establish trust in and the legitimacy of government, to facilitate necessary funding and legislative support from Congress, and to foster collaboration with technology companies and operational partners. It is also crucial that the U.S. government understand the perspectives of different demographic groups—especially those voices that are marginalized—to recognize the disparate impact across communities.

Greater understanding about how the public views potential benefits and risks of technologies can inform multiple stages of the technology acquisition and deployment life cycle.

Drawing on RAND research conducted for DHS,⁶ I suggest three recommendations for the government when it is considering deploying new technology:

- First, the government can take steps to ensure that long-standing core American values apply to new technology deployments. The U.S. government is committed to values such as privacy and civil liberties, equity and nondiscrimination, and oversight and accountability. Even if newly available technologies, including AI systems and advanced robotics, assist in government missions, the protection of core values is also essential for keeping Americans safe.
- Second, details of the technology and specific government application matter for responsible deployment. For instance, technologies used in sensitive public spaces, such as schools using AI to surveil students, might pose increased risks and thereby warrant greater care. Some emerging technologies, such as large language models, have

³ Frank Konkel, "Bipartisan Calls to Regulate Facial Recognition Tech Grow Louder," Nextgov, July 14, 2021.

⁴ Karen Hao, "The Two-Year Fight to Stop Amazon from Selling Face Recognition to the Police," *MIT Technology Review*, June 12, 2020; Jay Peters, "IBM Will No Longer Offer, Develop, or Research Facial Recognition Technology," *The Verge*, June 8, 2020.

⁵ Joy Buolamwini and Timnit Gebru, Gender Shades, homepage, MIT Media Lab and the Center for Civic Media at MIT, undated, http://gendershades.org; also see Cade Metz and Natasha Singer, "A.I. Experts Question Amazon's Facial-Recognition Technology," *New York Times*, April 3, 2019.

⁶ Benjamin Boudreaux, Douglas Yeung, and Rachel Steratore, *The Department of Homeland Security's Use of Emerging Technologies: Why Public Perception Matters*, Homeland Security Operational Analysis Center operated by the RAND Corporation, PE-A691-1, March 2022, https://www.rand.org/pubs/perspectives/PEA691-1.html.

capabilities beyond what the technology developers themselves anticipate.⁷ Yet, according to the Government Accountability Office, some technologies are being deployed across government without consistent approaches to even track which technologies agencies are using.⁸ Congress can help ensure that agencies take a coherent and risk-informed approach and that government end users are precise about their goals for a technology, the specific contexts of use, and relevant authorities.

• Third, new technology deployments are an opportunity for public engagement. The government should collaborate with stakeholders and communities to ensure that technology is used in ways the public supports. DHS has recently sponsored RAND research to identify methods to assess public perception, such as conducting nationally representative surveys of public attitudes. This type of public perception research, supplemented with additional surveys, focus groups, and community partnerships, should be routinely integrated into the technology acquisition and development pipeline. This will help the government anticipate potential issues, engage affected communities, and build the public's trust.

I thank the committee for the opportunity to testify, and I look forward to your questions.

⁷ Jason Wei, Yi Tay, Rishi Bommasani, Colin Raffel, Barret Zoph, Sebastian Borgeaud, Dani Yogatama, Maarten Bosma, Denny Zhou, et al., "Emergent Abilities of Large Language Models," *Transactions on Machine Learning Research*, August 2022; Stephen Ornes, "The Unpredictable Abilities Emerging from Large AI Models," *Quanta Magazine*, March 16, 2023, https://www.quantamagazine.org/the-unpredictable-abilities-emerging-from-large-ai-models-20230316/.

⁸ Government Accountability Office, *Facial Recognition Technology: Federal Law Enforcement Agencies Should Better Assess Privacy and Other Risks*, GAO-21-518, June 2021, https://www.gao.gov/assets/gao-21-518.pdf.