Ensuring That Government Use of Technology Serves the Public

Benjamin Boudreaux

CT-A2835-1

Testimony presented before the U.S. House of Representatives Committee on Oversight and Accountability, Subcommittee on Cybersecurity, Information Technology, and Government Innovation, on June 22, 2023



For more information on this publication, visit www.rand.org/t/CTA2835-1.

Testimonies

RAND testimonies record testimony presented or submitted by RAND associates to federal, state, or local legislative committees; government-appointed commissions and panels; and private review and oversight bodies.

Published by the RAND Corporation, Santa Monica, Calif.
© 2023 RAND Corporation

RAND® is a registered trademark.

Limited Print and Electronic Distribution Rights

This publication and trademark(s) contained herein are protected by law. This representation of RAND intellectual property is provided for noncommercial use only. Unauthorized posting of this publication online is prohibited; linking directly to its webpage on rand.org is encouraged. Permission is required from RAND to reproduce, or reuse in another form, any of its research products for commercial purposes. For information on reprint and reuse permissions, please visit www.rand.org/pubs/permissions.

www.rand.org

Ensuring That Government Use of Technology Serves the Public

Testimony of Benjamin Boudreaux¹ The RAND Corporation²

Before the Committee on Oversight and Accountability
Subcommittee on Cybersecurity, Information Technology, and Government Innovation
United States House of Representatives

June 22, 2023

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

¹ The opinions and conclusions expressed in this testimony are the author's alone and should not be interpreted as representing those of the RAND Corporation or any of the sponsors of its research.

² The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest. RAND's mission is enabled through its core values of quality and objectivity and its commitment to integrity and ethical behavior. RAND subjects its research publications to a robust and exacting quality-assurance process; avoids financial and other conflicts of interest through staff training, project screening, and a policy of mandatory disclosure; and pursues transparency through the open publication of research findings and recommendations, disclosure of the source of funding of published research, and policies to ensure intellectual independence. This testimony is not a research publication, but witnesses affiliated with RAND routinely draw on relevant research conducted in the organization.

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

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.

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

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.