

Governing Artificial Intelligence: Three Futures

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Testimony presented to the U.S. House Subcommittee on Cybersecurity, Information Technology, and Government Innovation on December 6, 2023

Chairwoman Mace, Ranking Member Connolly, and Members of the Subcommittee, thanks for this opportunity to testify today.

There are three possible futures of AI.

One is a future of AI abuse unchecked by government regulation. Nefarious actors use AI voice cloning to [scam citizens](#), bot-generated text impersonates people, and deep fakes erode trust. Another is where the government harms citizens because of improper vetting of AI.

But a third future is one where the government protects Americans from bad actors and leverages AI to make lives better—like the [VA's use of AI](#) to enable physicians to spend more time [caring for veteran patients](#), and less time taking notes.

To get there, we must make the right decisions today.

The AI Executive Order and OMB memo are important steps towards this third future. Their focus on AI safety, investment, talent, and leadership are critical for America to lead in AI innovation and governance.

But the executive branch cannot achieve this goal fully without Congress. By [our count](#), the EO has some [150 requirements](#) with urgent deadlines. Based on our [research](#) of prior AI-related

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EOs,² government needs sufficient resources, expertise, information, and flexibility to realize its AI vision.

I therefore recommend six actions.

First, Congress should support the EO's focus on top-level leadership from the White House AI Council and agency Chief AI Officers. Agencies will need resources and flexibility to not just put out fires, but craft long-term strategic plans.³

Second, Congress must support efforts to (1) attract, train, and retain AI talent in America and (2) provide pathways into public service. Each year, our universities are turning out a growing number of students with advanced degrees in AI, yet fewer than [1% of AI PhDs](#) pursue a career in public service.

We need creative public-private partnerships to fix this talent gap. When the return of millions of overseas veterans after World War II threatened to overwhelm the VA hospital system, the VA developed a [pipeline of medical students](#) and faculty to provide veteran care. At [Stanford RegLab](#) and [HAI](#), we collaborate with government agencies to prototype exactly this kind of partnership in AI. Increasing mechanisms to partner and collaborate with universities is critical.

Third, a mandated adverse event reporting system that requires parties to disclose AI harms would equip the government with information to ensure AI is safe for the American public. Chairwoman Mace, for instance, has called for this information.⁴ Some calls for regulation have been driven by more speculative forms of risk, such as how ChatGPT might facilitate bioweapons. Other harms are very real, such as [erroneous loan denials](#), biased [hiring](#) algorithms, or malfunctioning [self-driving cars](#).

Currently, our government lacks unbiased information. Adverse event reporting like what already exists for [cybersecurity](#) or [medical devices](#) would ensure the government can tell [fact](#)

² Lawrence, C., Cui, I., & Ho, D. (2023). The Bureaucratic Challenge to AI Governance: An Empirical Assessment of Implementation at U.S. Federal Agencies. *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society*, 606–652. See also Lawrence, Christie, Isaac Cui, and Daniel E. Ho. 2022. "Implementation Challenges to Three Pillars of America's AI Strategy." Stanford HAI-RegLab White Paper. https://dho.stanford.edu/wp-content/uploads/AI_Implementation.pdf.

³ See also recommendations made by the National AI Advisory Commission's Year 1 Report. <https://www.ai.gov/wp-content/uploads/2023/05/NAIAC-Report-Year1.pdf>.

⁴ For a more fully developed analysis of recent regulatory proposals, see Guha, N., Lawrence, C. M., Gailmard, L. A., Rodolfa, K. T., Surani, F., Bommasani, R., Raji, I. D., Cuellar, M.-F., Honigsberg, C., & Ho, D. E. (2024). AI Regulation Has Its Own Alignment Problem: The Technical and Institutional Feasibility of Disclosure, Registration, Licensing, and Auditing. *George Washington Law Review*.

[from fiction](#) about real and emerging AI harms. And it would enable targeted regulation that avoids stifling innovation.⁵

Fourth, the development of general purpose [foundation models](#) should not be restricted through a [licensing regime](#). Fears about the capabilities of these models have led some to argue that foundation models should only be developed and deployed by a few, well-equipped companies.

This is wrong. Licensing only a small number of companies would impede valuable safety research. The most important forms of accountability come from oversight by many. Done poorly, licensing would concentrate power, limit competition, and exacerbate the information gap between government and industry.

Fifth, Congress must appropriate funds to agencies and pass the bipartisan [CREATE AI Act](#) to fully authorize the [National AI Research Resource](#)⁶ and foster the investment, research, and development necessary for a wider range of Americans to participate in the AI revolution.⁷ The National Institute of Standards & Technology (NIST), is tasked with establishing the US AI Safety Institute to develop verifiable and enforceable safety standards. Agencies like NIST must be sufficiently resourced to carry out these critical missions.

Sixth, government innovation [should not be trapped in red tape](#). The OMB memo is exemplary in spelling out the opportunities and risks of AI. But process must be tailored to risk. For example, the memo's proposal that agencies allow everyone to opt out of AI for human review does not always make sense, given the sheer variety of programs and uses of AI. The U.S. Postal Service, for example, uses AI to read handwritten zip codes on envelopes. Opting out of this system would mean hiring thousands of employees just to read digits.

Humans also make mistakes. Denials of SNAP benefits, for instance, are inaccurate [44% of the time](#). The government cannot “human” its way out of these problems.⁸ The government must build and leverage AI systems that [complement](#) human strengths and values.

⁵ Piloting an national AI adverse event reporting system was also adopted as a formal recommendation by the National AI Advisory Committee.

⁶ National Artificial Intelligence Research Resource Task Force, “Strengthening and Democratizing the U.S. Artificial Intelligence Innovation Ecosystem: An Implementation Plan for a National Artificial Intelligence Research Resource,” Jan. 2023, <https://www.ai.gov/wp-content/uploads/2023/01/NAIRR-TF-Final-Report-2023.pdf>. Ho, Daniel, Jennifer King, Russell Wald, and Christopher Wan. 2021. “Building a National AI Research Resource: A Blueprint for the National Research Cloud.” Stanford HAI White Paper. https://hai.stanford.edu/sites/default/files/2022-01/HAI_NRCR_v17.pdf.

⁷ The EO authorizes a pilot of the NAIRR following the [federal task force recommendation](#), but the NAIRR requires significant resources to achieve its mission. The CREATE AI Act would authorize ~\$400M annually for six years. To put that in perspective, Amazon made a one-time investment in one company of \$4B.

⁸ Unemployment insurance, used by 46M Americans during the pandemic, is byzantine. One UI examiner described himself as [“the new guy.”](#) because he had *only* 17 years of experience.

In sum, the AI EO and OMB memo have taken a big first step. But this is only one step on a longer journey. Congress must now take its step.

Thank you and I welcome your questions.