

Highlights for Responsible AI from the Biden Administration's FY2025 Budget Proposal

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Executive Summary

In March 2024, The Biden Administration released its Presidential Budget proposal for FY2025. The Institute for AI Policy and Strategy (IAPS) Policy and Standards team **highlights the following three AI-related items of President Biden's FY2025 budget** and analyzes them in terms of their potential impact on the responsible development of advanced AI:

1. **\$65M with the Department of Commerce** to promote leadership and responsible innovation in AI.
2. **\$223M with the Bureau of Industry and Security** to protect critical and emerging technology.
3. **\$455M with the Department of Energy** to strengthen AI, cybersecurity, and resilience of the energy sector.

The President's Budget for Fiscal Year 2025

President Biden submitted a [budget proposal](#) to Congress following his State of the Union Address. This budget acts as a statement of the administration's policy priorities and outlines a plan that Congress may consider but is not required to adopt.

The proposed budget includes a number of items meant to promote the responsible development of AI, including funding for the [National AI Research Resource pilot](#) and the [AI Talent Surge](#) to bring new talent into government services. Over \$3 billion is proposed to be allocated across agencies for AI development, testing, and integration, and \$300 million in mandatory funding to agencies for AI-related responsibilities. Many of these AI-related items included in the proposal would support the implementation of [EO 14110](#), "Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence."

In this issue brief, IAPS researchers analyze three major AI-related highlights from the Presidential Budget in terms of their potential impact on the responsible development of advanced AI.

#1: \$65M with the Department of Commerce to Promote Leadership and Responsible Innovation in AI

"Biden Budget: Promotes Leadership and Responsible Innovation in Artificial Intelligence (AI)

The Budget invests \$65 million with the Department of Commerce to safeguard, regulate, and promote AI, including protecting the American public against its societal risks. This funding would allow Commerce to successfully implement central components of the Administration's Executive Order 14110, "Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence." Specifically, the National Institute of Standards and Technology (NIST) would establish the U.S. AI Safety Institute to operationalize NIST's AI Risk Management Framework by creating guidelines, tools, benchmarks, and best practices for evaluating and mitigating dangerous capabilities and conducting evaluations including red-teaming to identify and mitigate AI risk. The institute would develop technical guidance that would be used by regulators considering rulemaking and enforcement on issues such as authenticating content created by humans, watermarking AI-generated content, identifying and mitigating against harmful algorithmic discrimination, ensuring transparency, and enabling adoption of privacy-preserving AI, and would serve as a driver of the future workforce for safe and trusted AI.

How Might it Impact Responsible Development of Advanced AI?

- **NIST has several important responsibilities under the EO 14110** to safeguard and regulate AI, including creating guidance and benchmarks for evaluating AI capabilities, producing red-teaming guidelines, and developing a plan for global engagement in promoting and developing technical AI standards.
 - Generative AI is a novel, rapidly developing technology that poses both enormous promise and risk to the economy and national security. Without a rigorous set of standards and measures, there will be no firm basis to understand the reliability and trustworthiness of these systems as they are increasingly integrated into critical systems.
 - Adequate resourcing here will help ensure that the U.S. government has the capacity to effectively regulate and promote AI and establish the U.S. as an international leader in the emerging global AI standards regime.
- **NIST’s AI Safety Institute, in particular, will create a center of excellence within government to address existing and emerging risks from AI systems**, including in areas such as reliability, safety, security, transparency, explainability, privacy, and fairness. **NIST’s ability to conduct impartial and objective research into taxonomizing and measuring AI risks rests on its talent and ability to establish testbeds.**
- **The U.S. is currently falling behind its allies when it comes to in-house expertise in AI evaluation and testing.**
 - The UK AI Safety Institute has hired a number of top-tier AI researchers, such as Geoffrey Irving, Chris Summerfield, and Yarin Gal, among many others. Hiring world-leading AI talent and developing the technical capacity to develop world-leading evaluations requires much more funding than the U.S. government has so far allocated to its AISI. UK AISI was initially funded at £100m (\$126m), more than ten times that allocated for its U.S. counterpart.

#2: \$223M with the Bureau of Industry and Security to Protect Critical and Emerging Technology

“Biden Budget: Protect Critical and Emerging Technology

The Budget provides \$223 million to the Bureau of Industry and Security (BIS). These resources would help BIS expand export enforcement domestically and overseas, bolster the Bureau’s capacity to identify critical and emerging technologies eligible for export control and evaluate the effectiveness of export controls, and increase regional expertise to enhance cooperation on export controls with allies and partners. In addition, the Budget provides \$5 million for the International Trade Administration to effectively implement new requirements under Executive Order 14105, “Addressing United States Investments in Certain National Security Technologies and Products in Countries of Concern.

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How Might it Impact Responsible Development of Advanced AI?

- **BIS plays an important role in safeguarding American national competitiveness.**
 - By preventing advanced AI chips from being exported to China, **BIS limits China’s ability to acquire and develop sensitive technologies** with military applications through China’s policy of civil-military fusion.
 - **BIS will likely play an especially important role in limiting China’s ability to develop technologies based on dual-use foundation models at the technological frontier**, which could facilitate Chinese military modernization, surveillance, and the design and execution of advanced weapons such as autonomous combat systems, WMDs, and cybersecurity tools.¹

¹Grunewald and Fist, “Comments on the Advanced Computing/Supercomputing IFR: Export Control Strategy & Enforcement for AI Chips,” Center for a New American Security, February 2024, <https://www.cnas.org/publications/commentary/comments-on-the-advanced-computing-supercomputing-ifr-export-control-strategy-enforcement-for-ai-chips>.

- **To ensure BIS can effectively enforce these rules, it must be adequately resourced.**
 - Sophisticated and determined actors such as the PRC are capable of bypassing U.S. export controls by relying on intermediaries to smuggle advanced AI chips into China; a CNAS study projects that the number of chips smuggled into China could increase to tens of thousands of AI chips per year, considering BIS’s current funding poses a limit to its ability to sufficiently enforce export controls.²
 - **BIS would benefit from funding that addresses these enforcement challenges**, such as the development of an AI chip registry that allows the tracking of advanced AI chips³ and technology modernization that supports BIS’s analysis of government and open-source records to improve its productivity.⁴

#3: \$455M with the Department of Energy to Strengthen Artificial Intelligence, Cybersecurity, and Resilience of the Energy Sector

“Biden Budget: Strengthens Artificial Intelligence (AI), Cybersecurity, and Resilience of the Energy Sector

The Budget provides \$455 million to extend the frontiers of AI for science and technology and increase AI’s safety, security, and resilience. These investments enhance the Department’s computing capabilities and support the development of AI testbeds to build foundation models for energy security, national security, and climate resilience as well as tools to evaluate AI capabilities to generate outputs that may represent nuclear, nonproliferation, biological, chemical, critical-infrastructure, and energy security threats or hazards. The funding also invests in continued support for training new researchers from a diverse array of backgrounds capable of meeting the rising demand for AI talent.

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² Fist and Grunewald, “Preventing AI Chip Smuggling to China,” Center for a New American Security, October 2023, <https://www.cnas.org/publications/reports/preventing-ai-chip-smuggling-to-china>.

³ Ibid.

⁴ Allen, Benson, and Reinsch, “Improved Export Controls Enforcement Technology Needed for U.S. National Security,” Center for Strategic & International Studies, November 2022, <https://www.csis.org/analysis/improved-export-controls-enforcement-technology-needed-us-national-security>.

How Might it Impact Responsible Development of Advanced AI?

- **The Department of Energy (DOE) is well-positioned to lead the U.S. government’s innovation and regulatory programs to ensure the development of safe, secure, and trustworthy AI**, including by delivering and supporting functions mandated under EO 14110. DOE hosts the world’s largest supercomputers in the National Laboratories, including early-stage AI testbeds, such as the Argonne Leadership Computing Facility’s (ALCF) AI testbed. DOE’s resources are, hence, an enabler that support other government AI agencies, such as NSF and NIST, in executing their missions on national AI R&D and standards-setting programs.
- **DOE is also uniquely positioned to develop evaluation tools and testbeds that other agencies are unable to.**
 - DOE is tasked with addressing potential CBRN risks from advanced AI systems under EO 14110 Sec. 4.4 (“Reducing Risks at the Intersection of AI and CBRN Threats”), given DOE’s existing expertise on nuclear and radiological hazards, as well as its experience with handling highly classified information.
 - New evaluation tools at DOE could help safeguard the national security of the United States.