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REPORT
118–216

AI LEADERSHIP TO ENABLE ACCOUNTABLE DEPLOYMENT (AI LEAD) ACT

R E P O R T

OF THE

COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS UNITED STATES SENATE

TO ACCOMPANY

S. 2293

TO ESTABLISH THE CHIEF ARTIFICIAL INTELLIGENCE OFFICERS COUNCIL, CHIEF ARTIFICIAL INTELLIGENCE OFFICERS, AND ARTIFICIAL INTELLIGENCE GOVERNANCE BOARDS, AND FOR OTHER PURPOSES

SEPTEMBER 10, 2024.—Ordered to be printed

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Mr. PETERS, from the Committee on Homeland Security and Governmental Affairs, submitted the following

REPORT

[To accompany S. 2293]

[Including cost estimate of the Congressional Budget Office]

The Committee on Homeland Security and Governmental Affairs, to which was referred the bill (S. 2293) to establish the Chief Artificial Intelligence Officers Council, Chief Artificial Intelligence Officers, and Artificial Intelligence Governance Boards, and for other purposes, having considered the same, reports favorably thereon with an amendment, in the nature of a substitute, and recommends that the bill, as amended, do pass.

CONTENTS

I. PURPOSE AND SUMMARY

S. 2293, the *AI Leadership To Enable Accountable Deployment Act (AI LEAD Act)* bolsters coordination and leadership of artificial intelligence (AI) use across the federal government. The bill requires the head of each agency to be accountable for ensuring the responsible research, development, acquisition, and use of AI at the agency. The bill also creates a Chief AI Officer at each agency to carry out activities designated in the bill; an AI Coordination Board of senior officials at each agency to coordinate and integrate AI activities and policy across the agency; and an interagency Chief AI Officers Council to ensure coordination and information sharing on the implementation of AI across agencies. The bill calls for two reports by the Government Accountability Office (GAO), one on the effectiveness of implementing the structures and roles required in this bill, and another on the impact of biased data on federal implementation of AI. Five years after enactment, the Director of the Office of Management and Budget (OMB) is required, after considering developments in technology and AI governance, to issue a directive to agencies updating the structures and roles defined in this legislation. This bill sunsets 5 years and 90 days after enactment.

II. Background and Need for Legislation

Ensuring the safe and trustworthy use of AI is necessary for federal agencies responsible for serving and interacting with the public. However, legislation and executive orders intended to lay the groundwork for federal AI policies have seen spotty implementation.[1] One reason is that sufficient governing structures, coordination, and leadership are not yet in place across government.[2]

AI offers potential benefits to federal agencies' ability to operate efficiently and effectively.[3] But without AI expertise and leadership, federal agencies are vulnerable to the substantial risks of AI, including harm to citizens, operational weaknesses, and national security vulnerabilities.[4] For example, there is currently no federal guidance for use of facial recognition systems by the federal government, such as requirements around accuracy and data use by vendors. This leads to civil rights and civil liberties concerns, including racial discrimination and potential privacy violations.[5] Improved federal AI governance, coordination, and strategy will help ensure that AI technologies are used responsibly.[6]

As the National AI Advisory Committee recently determined in its "Year 1 Report," to drive thoughtful federal use of AI, AI leadership should exist both within agencies and in coordination across them. This report argues senior leadership and strategic planning

[1] Christie Lawrence et al., *Implementation Challenges to Three Pillars of America's AI Strategy* (Dec. 2022).

[2] National Artificial Intelligence Advisory Committee, *Year 1 Report* (May 2023) (www.ai.gov/wp-content/uploads/2023/05/NAIAC-Report-Year1.pdf); Federal Times, *Ideas for AI in Government are There. The People Aren't, Experts Say* (May 17, 2023) (www.federaltimes.com/it-networks/2023/05/17/ideas-for-ai-in-government-are-there-the-people-arent-experts-say/).

[3] David Engstrom et al., *Government by Algorithm: Artificial Intelligence in Federal Administrative Agencies* (Feb. 2020) (law.stanford.edu/education/only-at-sls/law-policy-lab/practicums-2018-2019/administering-by-algorithm-artificial-intelligence-in-the-regulatory-state/acus-report-for-administering-by-algorithm-artificial-intelligence-in-the-regulatory-state/).

[4] Pew Research Center, *Themes: The Most Harmful or Menacing Changes in Digital Life That Are Likely by 2035* (June 21, 2023) (www.pewresearch.org/internet/2023/06/21/themes-the-most-harmful-or-menacing-changes-in-digital-life-that-are-likely-by-2035/); Brookings Institution, *Protecting Privacy in an AI-driven World* (Feb. 10, 2020) (www.brookings.edu/research/protecting-privacy-in-an-ai-driven-world/); Government Accountability Office, *Artificial Intelligence: An Accountability Framework for Federal Agencies and Other Entities* (GAO–21–519SP) (June 30, 2021); Government Accountability Office, *Facial Recognition Technology: Federal Law Enforcement Agencies Should Better Assess Privacy and Other Risks* (GAO–21–518) (June 29, 2021); *see also* Government Accountability Office, *Forensic Technology: Algorithms Strengthen Forensic Analysis, but Several Factors Can Affect Outcomes* (GAO–21–435SP) (July 6, 2021).

[5] *Facial Recognition Bias Frustrates Black Asylum Applicants to US, Advocates Say*, The Guardian (Feb. 8, 2023) (www.theguardian.com/us-news/2023/feb/08/us-immigration-cbp-one-app-facial-recognition-bias); Government Accountability Office, *Facial Recognition Technology: Federal Law Enforcement Agencies Should Better Assess Privacy and Other Risks* (GAO–21–518) (June 2021).

[6] National Artificial Intelligence Advisory Committee, *Year 1 Report* (May 2023) (www.ai.gov/wp-content/uploads/2023/05/NAIAC-Report-Year1.pdf).

on AI issues at each agency would help agencies meaningfully comply with pre-existing and forthcoming legal requirements. In addition, the report found that effective interagency coordination is a "critical piece" of ensuring the federal government stands aligned on its goals for and use of trustworthy AI.[7]

"All U.S. federal departments and agencies," the report concluded, "would benefit from a strategic plan that articulates their goals for AI design, development, procurement, and adoption; that signals approaches to implementing trustworthy AI principles; that creates priorities for promoting trustworthy AI innovation in the private sector; and that builds associated internal organizational and governance structures."[8]

A 2022 white paper from the Stanford Institute for Human-Centered Artificial Intelligence and the Stanford Regulation, Evaluation, and Governance Lab reinforces these findings, stating "higher-level leadership is required from agencies and the White House . . . to coordinate and drive forward AI innovation and trustworthy adoption. These agencies and White House offices must be properly resourced and empowered to provide this leadership. Failure to do the above fundamentally risks surrendering American leadership in AI innovation and responsible AI."[9]

This bill would establish such governing structures and leadership within and across agencies to guide the use of AI within government and mitigate risks. These structures would help ensure agency research, development, acquisition, governance, and use of AI is safe, trustworthy, and consistent with democratic values. At the same time, these new structures would help support agency efforts to use AI in innovative ways to bolster the government's efficiency and effectiveness.

III. Legislative History

Senator Gary Peters (D–MI) introduced S. 2293, the *AI Leadership To Enable Accountable Deployment Act*, on July 13, 2023. Senator John Cornyn (R–TX) joined as a cosponsor on July 19, 2023. The bill was referred to the Committee on Homeland Security and Governmental Affairs.

The Committee considered S. 2293 at a business meeting on July 26, 2023. At the business meeting, Senator Peters offered a substitute amendment, as well as a modification to the substitute amendment. The Peters substitute amendment, as modified, adds language that tasks the Chief AI Officers Council with advising the OMB Director on ensuring accountability for the responsible development and use of AI across the federal government. It also adds a requirement for GAO to examine potential federal job loss and any use of biased datasets within AI systems used by agencies. In addition, the modification specifies that if the Chief AI Officer is not already a full-time employee of the agency on the date of designation, the agency must provide the Comptroller General with a justification for their appointment. The Committee adopted the modification to the Peters substitute amendment, and the Peters substitute amendment as modified, by unanimous consent, with

[7] *Id.*
[8] *Id.*
[9] Christie Lawrence et al., *Implementation Challenges to Three Pillars of America's AI Strategy* (Dec. 2022).

Senators Peters, Hassan, Sinema, Rosen, Padilla, Ossoff, Blumenthal, Paul, Romney, Scott, Hawley, and Marshall present.

Senator Peters also offered an amendment to change the title of the bill, to refer to "Artificial Intelligence Coordination Boards" rather than "Artificial Intelligence Governance Boards." The Committee adopted the Peters amendment by voice vote, with Senators Peters, Hassan, Sinema, Rosen, Padilla, Ossoff, Blumenthal, Paul, Romney, Scott, Hawley, and Marshall present.

Senator Paul offered an amendment to the bill and a modification to the amendment, to sunset the bill after two years, prohibit additional funds for carrying out the legislation, and add certain training requirements. The Committee did not adopt the Paul amendment, as modified, by roll call vote of 5 yeas and 10 nays, with Senators Paul, Scott, Hawley, and Marshall voting in the affirmative, and Senators Peters, Hassan, Sinema, Rosen, Padilla, Ossoff, Blumenthal, and Romney voting in the negative. Senator Johnson voted yea by proxy and Senators Carper and Lankford voted nay by proxy.

The bill, as amended by the Peters substitute amendment as modified and the Peters title change amendment, was ordered reported favorably by roll call vote of 10 yeas to 2 nays, with Senators Peters, Hassan, Sinema, Rosen, Padilla, Ossoff, Blumenthal, Romney, Scott, and Hawley voting in the affirmative, and Senators Paul and Marshall voting in the negative. Senators Carper, Johnson, and Lankford voted yea by proxy, for the record only.

IV. Section-by-Section Analysis of the Bill, as Reported

Section 1. Short title

This section establishes the short title of the bill as the "AI Leadership To Enable Accountable Deployment Act" or the "AI LEAD Act."

Section 2. Definitions

This section defines the terms "agency," "artificial intelligence," "Chief Artificial Intelligence Officer", "Council," "Director," and "relevant congressional committees."

Section 3. Chief Artificial Intelligence Officers Council

Subsection (a) requires the OMB Director to establish a Chief Artificial Intelligence Officers Council within 90 days of enactment.

Subsection (b) lays out the duties of the Council, which include advising the OMB Director on government use of AI and ensuring interagency coordination and the efficient, consistent, and innovative implementation of AI guidance across agencies.

Subsection (c) defines the membership of the Council, which consists of agency Chief Artificial Intelligence Officers, an expert representative from an agency with government science and technology experience, and other members as deemed necessary by the OMB Director. The OMB Director will serve as Chair, and a Cochair will be nominated and voted on by the members.

Section 4. Agency Artificial Intelligence Officers

Subsection (a) designates the head of each agency as responsible for ensuring that agency research, development, acquisition, governance, and use of AI is trustworthy and consistent with democratic values.

Subsection (b) requires agencies to designate a role of Chief Artificial Intelligence Officer (CAIO) responsible for leading AI efforts within the agency, and tasks the OMB Director with issuing guidance about the position, which for agencies covered by section 901(b) of title 31 must be above the GS–15 level. This section also defines responsibilities of the CAIO, which include promoting and ensuring effective, efficient, and responsible use of AI and developing AI risk management plans for the agency. This section also specifies that, if the CAIO is not already a full-time employee of the agency on the date of designation, the agency must provide the Comptroller General with a justification for their appointment.

Subsection (c) tasks the head of each agency with informing the relevant congressional committees of the appointment of a CAIO.

Section 5. Agency Coordination on Artificial Intelligence

Subsection (a) requires the OMB Director to issue guidance for agencies within 120 days of enactment to establish an Artificial Intelligence Coordination Board to coordinate AI issues within respective agencies.

Subsection (b) lists what the guidance from the OMB Director must cover, including defining the structure, activities, and membership of agencies' Artificial Intelligence Coordination Boards.

Subsection (c) directs the head of each agency to establish a strategy for trustworthy agency adoption of AI. The strategy must consider the roles, opportunities, responsibilities, challenges, and risks associated with the agency's use of AI.

Section 6. GAO reports

Subsection (a) requires the Comptroller General to submit a report within two years of enactment to the relevant congressional committees about the effectiveness of the agency Artificial Intelligence Coordination Boards and the Chief Artificial Intelligence Officers, including recommendations for improving both, and an assessment of any potential job loss due to AI implementation.

Subsection (b) requires the Comptroller General to submit a second report within two years of enactment to the relevant congressional committees about the impact of biased datasets on federal use and implementation of AI systems.

Section 7. Post-enactment guidance from the Director

This section requires the OMB Director to consider developments in technology and AI governance and, five years after enactment, to issue a directive to agencies, including an action plan and timeline for implementation, to update the structures and roles defined in this legislation.

Section 8. Sunset

This section provides that the act will sunset 5 years and 90 days after enactment.

V. Evaluation of Regulatory Impact

Pursuant to the requirements of paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee has considered the regulatory impact of this bill and determined that the bill will have no regulatory impact within the meaning of the rules. The Committee agrees with the Congressional Budget Office's statement that the bill contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

VI. Congressional Budget Office Cost Estimate

S. 2293, AI Leadership To Enable Accountable Deployment Act
As ordered reported by the Senate Committee on Homeland Security and Governmental Affairs on July 26, 2023

By Fiscal Year, Millions of Dollars	2023	2023-2028	2023-2033
Direct Spending (Outlays)	0	0	0
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	0	0
Spending Subject to Appropriation (Outlays)	0	11	not estimated

Increases *net direct spending* in any of the four consecutive 10-year periods beginning in 2034?	No	Statutory pay-as-you-go procedures apply?	No
		Mandate Effects	
Increases *on-budget deficits* in any of the four consecutive 10-year periods beginning in 2034?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No

S. 2293 would establish a Chief Artificial Intelligence (AI) Officers Council to coordinate the research, procurement, and deployment of AI systems across federal agencies. Under the bill, the director of the Office of Management and Budget would chair the council and representatives from each of the 24 federal agencies covered under the Chief Financial Officers Act would serve as the council's primary members. The bill also would require each member agency of the Chief AI Officers Council to develop a strategy for AI systems to ensure that AI systems are safely deployed. The bill also would require the Government Accountability Office to study and report on the effectiveness of Chief AI Officers and federal AI safeguards.

Using information about other government-wide councils, CBO anticipates that the Chief AI Officers Council would need five full-time employees to develop guidance documents and monitor federal AI systems for reports of inaccurate or biased decisions. CBO estimates that the staff, travel, and information technology costs to operate the Chief AI Officers Council would total $10 million over the 2023–2028 period. Using information about the cost of similar reporting requirements, CBO estimates that it would cost $1 million to prepare the required strategies and implementation reports. Any spending would be subject to the availability of appropriated funds.

The costs of the legislation, detailed in Table 1, fall within budget function 800 (general government).

TABLE 1.—ESTIMATED INCREASES IN SPENDING SUBJECT TO APPROPRIATION UNDER S. 2293

	By fiscal year, millions of dollars—						
	2023	2024	2025	2026	2027	2028	2023–2028
AI Council Operating Costs:							
Estimated Authorization	0	2	2	2	2	2	10
Estimated Outlays	0	2	2	2	2	2	0
Reporting Requirements:							
Estimated Authorization	0	*	1	*	0	0	1
Estimated Outlays	0	*	1	*	0	0	1
Total Changes:							
Estimated Authorization	0	2	3	2	2	2	11
Estimated Outlays	0	2	3	2	2	2	11

* = between zero and $500,000.

The CBO staff contact for this estimate is Aldo Prosperi. The estimate was reviewed by Christina Hawley Anthony, Deputy Director of Budget Analysis.

PHILLIP L. SWAGEL,
Director, Congressional Budget Office.

VII. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

This legislation would make no change in existing law, within the meaning of clauses (a) and (b) of subparagraph 12 of rule XXVI of the Standing Rules of the Senate, because this legislation would not repeal or amend any provision of current law.