U.S. Government Accountability Office

Artificial Intelligence: Uses and Risks for Small Business Contracting and Innovation Research

GAO-26-107828
Q&A
Report to Congressional Requesters
May 4, 2026
Accessible Version

Why This Matters

Artificial intelligence (AI) has significantly advanced in recent years, with new types, capabilities, and risks emerging at a rapid pace. Federal agencies' use of AI has increased accordingly, more than doubling from 2023 through 2024, according to the U.S. Chief Information Officers Council. In July 2025, we reported that selected agencies increased their use of generative AI—which can create novel text, images, audio, or video—by about nine-fold over the same period. Most agencies, including the Small Business Administration (SBA), are required to publicly report AI "use cases"—specific scenarios in which AI is designed, developed, procured, or used.

All federal agencies with procurement powers, except for SBA, are required to have an Office of Small and Disadvantaged Business Utilization (OSDBU) to advocate for small businesses in contracting. In addition, 11 federal agencies participate in the Small Business Innovation Research (SBIR) program, and six of those agencies also participate in the Small Business Technology Transfer (STTR) program, both of which provide assistance to small businesses for research and development and help to bring innovative technologies to market. SBA coordinates and collaborates with agency OSDBUs and oversees SBIR/STTR programs. Industry, academia, and government have shown interest in applying AI to agency activities in these areas, in part due to recent AI advancements.

We were asked to review issues related to federal agencies' use of AI in OSDBU and SBIR/STTR activities. This report discusses potential AI use by SBA, agency OSDBUs, and SBIR/STTR programs, and examines SBA's public reporting of its AI use and development.

Key Takeaways

- AI could help SBA, agency OSDBUs, and agency SBIR/STTR programs carry out key activities by reducing staff burden, saving time, improving fraud prevention, and enabling analysis of large volumes of information, according to an expert panel we convened.
- However, panelists and literature also noted risks, including the potential for inaccurate outputs, data privacy and security issues, and human overreliance on AI. Including human review in AI systems can mitigate some of these potential risks, according to panelists.
- Barriers to agency AI adoption include lack of staff with technical expertise and a cumbersome technology authorization process, according to panelists and literature.
- SBA has not consistently reported an inventory of its AI uses, though it is required to do so annually. We recommend that SBA establish policies to ensure compliance with this requirement.

What roles do agency OSDBUs and SBA play in small business contracting?

Agency OSDBUs support small businesses in procurement and contracting and carry out key activities, such as

- assisting agency staff with market research to identify small businesses for agency contracting opportunities;
- serving as a point of contact to provide assistance for small businesses contracting with their agency, including conducting outreach and answering questions or providing compliance resources; and
- working with agency acquisition staff to achieve agency and government-wide small business contracting goals.

SBA provides counseling, capital, and contracting expertise to small businesses.

Key activities include

- connecting small businesses with federal contracting opportunities;
- providing counseling and capital to small businesses; and
- coordinating with agency OSDBUs by setting small business contracting goals, calculating annual scorecards for small business contracting, reviewing agency acquisitions to recommend set-asides (contracts reserved for specific groups of businesses), and determining contractor compliance with subcontracting plans.

What role do federal agencies play in SBIR/STTR?

Federal agencies participating in the SBIR/STTR programs award funding to small businesses to support research and development and bring innovative technologies to market. Each of the 11 participating SBIR agencies, of which six participate in both SBIR and STTR, is responsible for managing its program in accordance with statutory requirements and SBA regulations and guidance.[1]

Key activities of agency SBIR/STTR offices include

- identifying agency requirements and drafting solicitations;
- reviewing proposal submissions, including identifying and assigning reviewers with the appropriate technical expertise;
- preventing fraud, waste, and abuse, and ensuring compliance with program requirements; and
- administering funding agreements and providing technical assistance.

SBA oversees and coordinates agency SBIR/STTR efforts by setting overarching policy, issuing guidance, collecting program data, reviewing agency progress, and reporting annually to Congress, among other responsibilities.

What are the potential uses and risks of AI for agency OSDBUs?

Potential uses of AI by agency OSDBUs include (1) conducting market research, (2) assisting with acquisition forecasting, (3) communicating with small businesses, and (4) developing internal training, according to expert panelists. Risks include potentially inaccurate or biased outputs, as well as overreliance on AI that could erode staff skills or expertise. Officials from all four agency OSDBUs we interviewed told us they do not currently use AI for any activities.

Conduct market research

OSDBU staff may assist program offices in facilitating the involvement of small businesses that might fulfill particular requirements in certain contracting opportunities. Officials from two OSDBUs and SBA told us they would like to explore using AI to assist with market research. In the past, SBA had a public

tool called GovCon Match that used machine learning (i.e., used training data and ongoing experience to improve task performance) to help match small businesses with agencies seeking particular goods or services.

Academic and industry experts on AI, federal use of AI, procurement, and SBIR/STTR whom we convened for a panel discussion said AI could help agencies identify a broad universe of potential contractors. (See app. I for a list of the 11 expert panelists and app. II for definitions of AI terminology used in this report.) One symposium paper noted that AI could mine sources such as company interactions (e.g., meetings, conferences, websites), product catalogs, industry reports, or databases to summarize options for a user, assess potential contractor capabilities, or summarize recent industry trends.[2]

Panelists also said agencies could leverage existing commercial AI tools to augment their knowledge of potential contractors. For example, one panelist suggested agencies use "deep research"—an AI agent that iteratively performs multiple searches, uses additional agents to assess information, and synthesizes results for users—and internal agency knowledge to improve market research.

Potential risks. Panelists, officials from one OSDBU, and SBA expressed concerns about data sources used for market research and stressed the importance of quality data. For example, potential contractors must register on SAM.gov to do business with the federal government. But this system is potentially biased because it does not include businesses that have not registered in the system, such as those without experience in government contracting.

Officials from one agency said AI might suggest a firm based on data such as prior contract performance, without determining whether other firms might be better suited or capable of performing the work. In contrast, OSDBU staff may have informal contacts with other potential firms not listed in SAM.gov or relationships with firms that better position them to recommend a firm or not.

AI tools also may produce inaccurate or irrelevant results if the underlying data are not complete or accurate. In SBA's Dynamic Small Business Search, which is commonly used in market research, small businesses are responsible for updating their own data, according to agency officials. If they do not, an AI tool might produce inaccurate or irrelevant results. Although human-conducted market research also can contain inaccuracies, AI-generated outputs carry additional risks of systematic error—repeating the same types of mistakes—and automation bias—the tendency for humans to overly rely on automated outputs.

One panelist emphasized the importance of traceable AI outputs, given the possibility of business mergers, acquisitions, and changing markets. If AI output is not traceable to its source, humans would be unable to verify if a vendor's status was still accurate, especially if significant time elapsed between vendor identification and award decision.

Provide input on or compile acquisition forecasts

Officials from two agencies said their OSDBUs compile or provide input to annual agency forecasts of planned acquisitions. One OSDBU receives information from program offices, which it compiles into one document. One panelist said OSDBUs could use AI tools to flag missing or incomplete information in forecast submissions from program offices, which could help identify gaps during the forecast compilation process.

Another panelist suggested OSDBUs could use a multistage large language model workflow to help compile the forecast. For instance, one model could extract key information from program offices' submissions and draft a

consolidated forecast. A second model then could compare that draft against source documents and assess content and conclusions.

The panelist cautioned that while this approach could reduce hallucinations (false but plausible information) and other errors, it would not eliminate the risk. As a result, agencies still would need to review AI outputs and test AI-assisted approaches against results produced using current methods. A study noted that a multi-model approach could be implemented using generative AI systems or with AI agents that could make decisions and perform tasks with or without human intervention.[3]

Potential risks. One study suggested that the risks of using AI in the public sector could include loss of staff knowledge or skills because of overreliance on AI.[4] Another study noted that the human-like behavior of large language models, such as interactions between models in a multi-model system, could lead to misplaced trust in the results by human reviewers.[5] Additionally, risks associated with agentic AI—such as misinterpreted goals or agents taking unethical actions to achieve a goal—increase as the number of agents grows.

Communicate with small businesses

Panelists told us agencies could implement the use of chatbots for their websites—based on agency sources like policies and guidance—to respond to simple or repetitive questions from small businesses. Agency officials told us this could allow staff to work on more complex tasks or questions. Panelists also suggested that an internal-facing agency chatbot could help staff find information and answers faster and more effectively. Staff could then use the chatbot to assist with drafting answers that they could verify before responding to businesses.

Potential risks. Panelists discussed the importance of direct interactions with small businesses and cautioned that some businesses might be dissatisfied or dissuaded from opportunities if their questions are answered by a chatbot. Panelists said more technically advanced systems may not be appropriate for answering direct questions. Panelists suggested that simpler software tools—such as customer relationship management platforms or rules-based expert systems with predefined inputs and outputs—might be more suitable.

Develop internal training

Agency OSDBUs provide small business training to agency acquisition staff on topics including small business programs and related procurement processes. Panelists told us that agency OSDBUs could use large language models to create internal training materials. The main benefit of using AI for this purpose is faster content production, such as creating first drafts or editing human-created materials, which could reduce staff time spent on these tasks.

Potential risks. One panelist noted observing AI models that produced incorrect citations and outdated information in training materials, underscoring the need to regularly update AI inputs. The panelist also raised security concerns related to information used to create training materials, particularly for defense or national security agencies. Staff would need to ensure compliance with classification and staff access requirements, or limit AI inputs to publicly available information.

What are the potential uses and risks of AI for agency SBIR/STTR programs?

Potential uses of AI by agency SBIR/STTR programs include (1) identifying and assigning proposal reviewers, (2) conducting proposal reviews, (3) preventing and monitoring fraud, and (4) refining feedback to businesses not selected for awards, according to expert panelists. Risks of using AI for these activities include a potential increased chance of legal challenges, biased outcomes if underlying data are insufficient or skewed, and breaches of applicants' proprietary information.

Identify and assign proposal reviewers

Agencies identify and assign staff to review and evaluate businesses' SBIR/STTR proposals submitted to their agency. Officials from one agency told us they use a commercial off-the-shelf AI tool to automatically match reviewers with proposals based on their recorded expertise. Other agencies conduct this process manually.

Panelists said agencies could leverage existing AI tools or adapt tools used by other agencies for this purpose. For example, the Department of Defense uses an AI-enabled tool to help identify staff with the appropriate skills or knowledge for specific projects. Such tools can pool multiple information sources (e.g., staff resumes, review histories, and public sources like LinkedIn) to widen knowledge about staff expertise and improve reviewer matching.

Potential risks. One panelist cited the potential for biased outcomes, such as repeatedly selecting the same reviewers. Another panelist said agencies could mitigate this risk by prompting the AI to exclude individuals who reviewed proposals within a specified time frame. A study on AI for matchmaking also notes the risk of erroneously categorizing a reviewer's expertise, which could result in inappropriate matches or the exclusion of qualified reviewers.[6]

Conduct proposal reviews

Reviewing SBIR/STTR proposals can be time-intensive, and agency staff may face heavy workloads. For instance, some agencies receive more than 2,000 proposals per year.

According to panelists, agencies could use AI to check proposals for compliance or conformity with requirements. One agency with which we spoke uses an AI tool to help perform due diligence, such as identifying undisclosed ineligible foreign connections or overlapping awards.[7] Panelists said that simple, conventional AI rules-based expert systems with predefined inputs and outputs could review for basic eligibility and length requirements. One panelist added that best practices include generating reports that identify specific violations or decisions for human review.

Another panelist suggested that agencies could use a more advanced AI system to enter evaluation criteria and rating systems into a tool that could then extract relevant information from proposals and generate a rationale for a particular rating. A human reviewer would then decide which rating was appropriate. According to panelists, such tools could help agency reviewers more efficiently digest key information. For instance, one panelist noted that AI could be used to help gather the necessary information in the correct form to speed up the human evaluators' review.

Potential risks. Reports have noted that AI tools could produce false positives or false negatives.[8] In the case of SBIR/STTR programs, noncompliant proposals might be treated as compliant or compliant proposals could be flagged as noncompliant. Generative AI also can produce hallucinations (false but plausible information). Expert panelists voiced similar concerns.

However, the panelists noted that agencies could manage these risks in several ways. One approach is quality assurance testing to assess accuracy before and during use. Another is use of accuracy-increasing designs, such as retrieval augmented generation, which requires the AI system to base its answers on user-submitted information rather than on its training data alone. In addition, agencies could establish a formal appeals process that could involve tracing AI decisions back to their underlying rationale.

Panelists told us that conventional AI may not be sufficiently discerning if humans do not identify specific evaluation criteria. Improper AI-based evaluations could violate the Federal Acquisition Regulation, which sets the rules for U.S. government acquisition, or applicable federal grant regulations.[9] One panelist emphasized the need for oversight to guard against automation bias—the human tendency to favor or unreasonably rely on suggestions from automated systems. Another expert also noted that AI could help organize the analysis and review of a proposal but cannot replace human evaluative judgment.

Panelists also highlighted the risks of data privacy breaches, particularly of companies' proprietary data. A panelist with SBIR/STTR expertise told us applicants' primary concern is who could access the novel research or technology information in their proposals. The panelist said agencies using third-party AI models should consider how the information is protected and what safeguards are in place. Agencies also should disclose to applicants when AI-enabled systems are used to review materials, according to another panelist.

Prevent and monitor fraud

Agencies may be able to use AI to detect or prevent fraud in the SBIR/STTR programs. We previously reported on issues with how SBIR/STTR agencies address fraud. These include the lack of comprehensive assessments aligned with leading practices, such as ongoing fraud monitoring, as well as data quality issues in key systems, including SBIR.gov.[10] A panelist said AI could help detect fraud.

Literature on AI for fraud prevention notes that AI could be used to detect indicators of fraud during monitoring activities.[11] According to SBA, SBIR/STTR fraud can occur as misrepresentation of eligibility, falsified costs, or duplicate entities. Natural language processing could identify irregularities in submitted documents, and machine learning could identify patterns and anomalies in data. Studies also indicate that AI can process large amounts of information and automate or streamline fraud prevention, which could reduce the workload of agency staff.[12]

Potential risks. Accuracy remains a risk when using AI for detecting fraud. For example, AI tools may wrongly flag legitimate activity as fraud or fail to flag fraudulent activity due to data quality issues, such as if the AI model were trained on insufficient or skewed historical data.

Refine feedback to small businesses

Agencies we interviewed said AI could help provide more consistent feedback to small businesses denied SBIR/STTR awards. Similarly, agency officials and panelists told us that once an official drafts the feedback, an AI tool could edit the text to ensure it does not contain sensitive information or inaccurate comments.

Potential risks. According to our panelists, agencies need to consider confidentiality risks if they enter business proposals that contain proprietary data into an AI tool to generate feedback. Businesses may hesitate to submit proposals if they know their data will be processed through AI. Legal risks also

may arise. For example, vague or seemingly arbitrary AI-generated feedback could increase the likelihood of legal challenges under the Federal Acquisition Regulation, according to a panelist.[13] The panelists emphasized the need for clear human oversight before feedback is provided to businesses.

What are potential AI uses and risks for SBA in its OSDBU and SBIR/STTR efforts?

Potential uses of AI by SBA to support its OSDBU and SBIR/STTR efforts include (1) analyzing agency-submitted data, (2) drafting annual reports, and (3) overseeing contracts, according to experts. Risks include automation bias (overreliance on AI outputs) and data breaches.

Analyze agency-submitted data

SBA uses data received from agencies and government-wide systems to develop annual reports for Congress, including reports on SBIR/STTR, SBA's small business procurement scorecard on each agency, and government-wide contract bundling and consolidation. According to SBA officials, the agency-submitted data often have completeness or accuracy issues, requiring staff to spend significant time working with agencies to correct the data before drafting reports.

According to panelists, AI could be used to help clean and standardize these data, including information from systems like the Federal Procurement Data System-Next Generation. For example, panelists said an AI tool could help identify duplicate or incomplete data and flag outliers. One panelist said SBA could use agentic AI to automatically notify agencies about missing data, allowing them to provide corrections or explanations.

AI also could be used to support data analysis. For example, according to an industry report and a symposium report, conventional AI models can process and summarize financial or budgetary data, natural language processing models can process text-based data, and generative AI platforms can produce summaries or respond to analytical queries.[14] Using AI for data processing and analysis also could improve internal knowledge and data quality and reduce staff burden, according to panelists. Furthermore, panelists said SBA could use existing, commercially available AI tools for such analysis, allowing SBA to benefit from ongoing improvements to those tools.

Potential risks. A panelist noted that human validation is necessary to prevent errors or inaccurate outputs from automated analysis that could affect the accuracy of information reported to Congress and industry. A panelist also told us that data security risks could arise if agencies use AI tools with vulnerabilities, highlighting the need to carefully assess such tools. Agencies should also consider the risk of overreliance on third-party providers and have contingency plans for completing these tasks without end-to-end AI tools, according to a panelist.

Draft annual reports

SBA officials told us their process for drafting annual reports based on agency-submitted data is manual and that adopting AI could help decrease report-drafting time. Panelists told us that SBA could use generative AI to create report content tailored to the audience and goal of a report. In addition, one panelist said SBA could use retrieval augmented generation, which would allow internal reviewers to trace statements back to their underlying sources.

For its annual report on SBIR/STTR, SBA includes qualitative information on policy or program changes. A panelist suggested that AI could help collect and synthesize that information for inclusion in the report.

Potential risks. According to a panelist, using AI to draft report content carries the risk of producing inaccurate summaries, which could misinform decision-makers or the public. If the errors were frequent, the need for human review and correction could offset any efficiency gained from automation.

Oversee contracts

Contracting officers, including SBA staff, oversee vendors after contract award, such as to monitor performance, ensure compliance with contract terms, and resolve issues. Additionally, SBA Commercial Market Representatives may review contracts at agencies other than SBA to ensure small businesses receive opportunities. For instance, representatives perform compliance reviews to ensure prime contractors meet subcontracting plan requirements.

An expert we interviewed said AI could help support these tasks. For example, conventional AI could analyze contract data to flag vendors experiencing calendar delays or cost overruns. Multimodal large language models could interact with various types of vendor data such as documents or recordings, automating the intake and review of performance information or creating progress reports for agency officials. AI agents could act on the information, automatically communicating with contracting officers or vendors, escalating to other officials, creating documents required for contract modifications, or proposing corrective actions.

Potential risks. Limited or biased training data could lead to biased outcomes in AI-supported contract monitoring and oversight. Large language models used for contract oversight are subject to hallucinations or reasoning errors. An expert we interviewed noted the risk of automation bias, in which agency contracting officials might rely too heavily on AI-generated decisions without sufficient scrutiny. Data security and privacy are also risks when sensitive or proprietary information is processed by AI systems.

What barriers might agencies face in adopting AI for these activities?

Barriers that agencies may face in adopting AI for OSDBUs and SBIR/STTR programs include limited technical staff, cumbersome authorization processes, resource constraints, and cybersecurity and data ownership requirements.

- **Lack of technical staff in agencies.** We previously reported gaps in the federal workforce's technology skills and expertise, including a severe shortage of staff with AI expertise.[15] SBA officials who coordinate with agency OSDBUs also highlighted this concern. The National Security Commission on Artificial Intelligence reported that the government's human talent gap is its most conspicuous AI deficit.[16] According to one study, lack of technical staff such as data engineers could hinder agencies' ability to design and maintain data systems needed for AI. The study also noted that limited technical expertise among leadership could result in poorly designed objectives or metrics or ineffective communication with technical staff.[17]
- **Cumbersome technology authorization process.** Officials from one agency told us the process for authorizing technology, including commercial AI tools, is very complex. Agencies must test and document security and compliance before deployment, which officials said makes it difficult to obtain new technology.

  Experts on our panel with government contracting experience also noted the authorization process as a barrier. One panelist noted the lack of standardized requirements for authorizing AI tools, which can lead different authorizing officials to request different information. The panelist said decentralized decision-making can slow things further. More centralized

decision-making could streamline the process and better align decisions with agencywide priorities.

- **Budget and resource constraints.** We reported in July 2025 that agencies face resource challenges that limit their ability to invest in AI.[18] In addition, we reported in April 2026 that some agencies find it challenging to understand AI costs, particularly given rapidly evolving AI capabilities and markets.[19] For example, officials from one agency said the federal government often underestimates overall costs by overlooking the infrastructure needed to support and maintain an AI capability over time.

  Officials from two agencies told us that inadequate budgets to adopt and maintain AI tools were a significant barrier. For example, one agency created an AI tool for market research but could not maintain it due to cost, officials said. SBA officials similarly cited cost and budget constraints as barriers to AI adoption for SBIR/STTR and OSDBU-related activities.

- **Cybersecurity and data ownership requirements**. SBA officials said agency OSDBUs adopting AI must navigate complex cybersecurity requirements. Officials from one agency described meeting these requirements as a challenge in adopting or modernizing software. For instance, agencies must use the Federal Risk and Authorization Management Program, which standardizes the security assessment, authorization, and continuous monitoring of cloud-based services, including those using AI. We reported in January 2024 that challenges with this program include the resources needed to guide vendors and delays caused by slow stakeholder responses or unprepared vendors.[20]

  Agencies also must comply with data ownership and intellectual property requirements. For example, proprietary information received from SBIR/STTR applicants would need to be safeguarded if used in third-party AI systems. Otherwise, agencies risk giving competitors or investors an inappropriate advantage that harms the owner of the data. Office of Management and Budget (OMB) guidance requires agencies contracting with AI businesses to include appropriate contractual terms addressing intellectual property rights and government data use.[21] Officials of one agency told us they were planning to roll out an AI assistant but were still determining how to secure sensitive information, such as intellectual property and budget data.

What additional considerations did panelists identify for agencies adopting AI?

Panelists said that before adopting AI, agencies should consider evaluating their current processes and determining where AI could provide the greatest benefit.

- **Evaluate current processes.** Panelists encouraged agencies to consider how current processes evolved over time and might be redesigned to better support AI adoption—for example, by rethinking how data are collected and stored and workflows organized. Panelists cautioned against patchwork or disjointed AI use and against using AI as a short-term fix that addresses symptoms, rather than the root causes of challenges or inefficiencies. Instead, panelists said agencies could achieve greater benefits by redesigning processes first and then adopting more integrated AI tools. One panelist said process assessments and modernization may improve efficiency by better targeting AI tools to key process steps—or, in some cases, eliminating or reducing the need for AI altogether. Panelists also said that simpler technologies, such as automation without AI, may sometimes be sufficient.

  Panelists supported the idea of benchmarking agency processes against industry practices to assess potential efficiency gains. Specifically, they noted that agencies could provide simulated data to outside entities to perform

comparable tasks. For instance, SBA could share simulated data from SBIR.gov and ask an outside entity to clean and analyze the data and draft annual report sections. If those entities completed the tasks faster or with higher quality, the results could inform process redesign or the adoption of industry tools, including AI.

- **Determine AI adoption priorities.** Panelists suggested assessing where AI might provide the greatest mission benefit. For example, agencies could estimate staff hours needed for different tasks and compare those costs with the costs of purchasing or developing AI tools. One panelist said tracking staff time, task complexity, and the level of quality and human validation required could help agencies prioritize activities when exploring AI adoption.

What is the status of AI use at SBA?

SBA used AI prior to 2025 but paused all AI use cases in March 2025 pending management review and updated AI policies.[22] SBA started seven pilot or pre-pilot AI use cases in June, September, and December 2025.

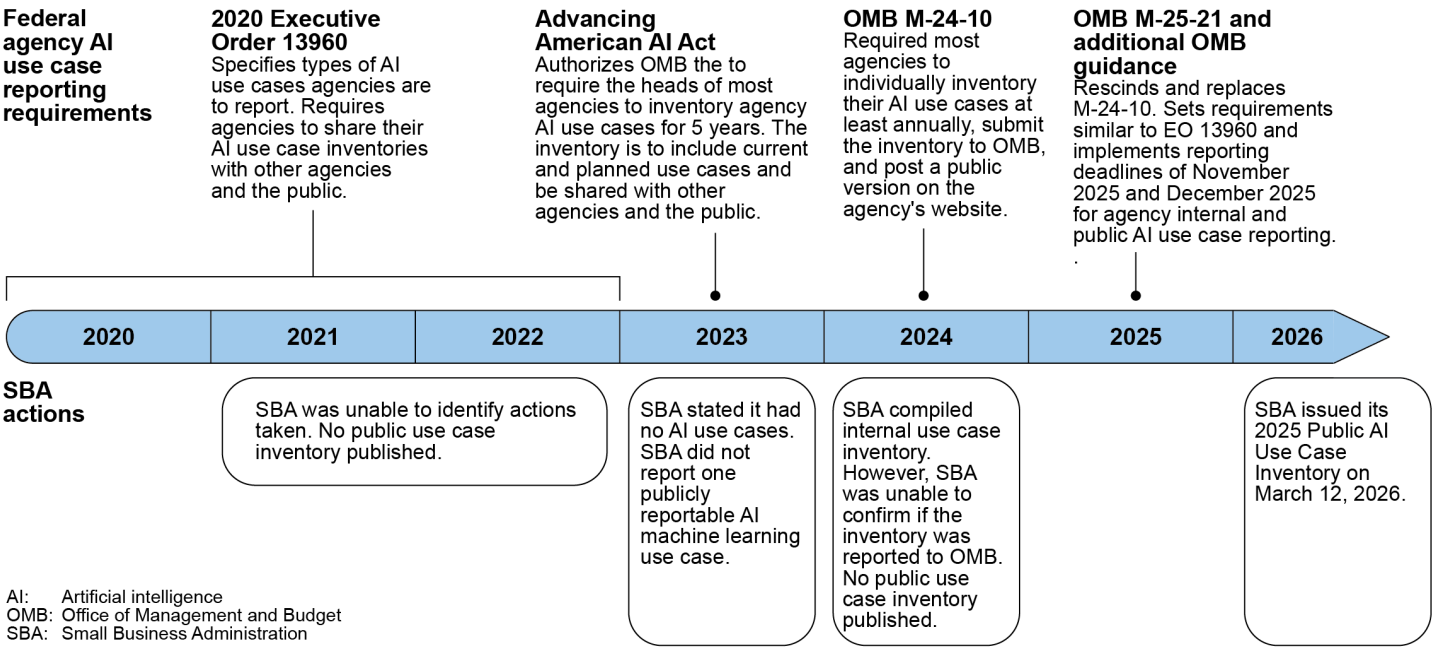
In 2021, SBA adopted a machine learning use case intended to prevent fraud in COVID-19 pandemic loan programs. This use case has since been discontinued.[23] Additionally, SBA provided us with a 2024 internal inventory of 21 AI use cases, in various stages of adoption. According to SBA officials, all use cases in the inventory were either decommissioned, never deployed, or paused as of March 2025. The purpose of the pause was to review use cases for compliance with recent executive orders and any change in priorities from SBA's new Chief Information Officer and Chief AI Officer.

As of early April 2026, SBA officials said they were updating their AI-related policies to ensure compliance with recent executive orders. SBA issued an Open Data Plan in June 2025, which officials said was a fundamental precursor to finalizing their AI policy. In April 2026, SBA officials told us the agency's Data Governance Board and AI Governance Council were piloting small projects designed to test the security, value, and performance of different AI capabilities. Examples include a pilot program designed to test AI's ability to report fraud using certain SBA program data sets and various pilot or pre-pilot use cases related to IT operations and cybersecurity initiated in June, September, and December 2025.

To what extent has SBA met federal requirements for public AI use case reporting?

SBA has not consistently met requirements for publicly reporting AI use cases. Specifically, SBA issued its first AI use case inventory in March 2026, but requirements to do so were in development since 2020. Executive Order 13960, issued in 2020, and the Advancing American AI Act, enacted in 2022, require agencies to publicly release AI use case inventories annually within a certain period of completing the inventory, to the extent practicable and in accordance with applicable law and policy.[24] OMB guidance states that agencies must report not only on their current use cases, but also on those cases being piloted or not yet fully deployed, as well as those decommissioned or discontinued within the past year. The Advancing American AI Act requires use case inventory reporting through 2027; however, OMB guidance does not place an end date on reporting requirements, as shown in figure 1.

Figure 1: Federal Agency AI Use Case Reporting Requirements and SBA Actions



AI: Artificial intelligence
OMB: Office of Management and Budget
SBA: Small Business Administration

Source: GAO analysis of executive orders, OMB guidance, and legislation. | GAO-26-107828

Since reporting requirements were put in place, SBA has cited different reasons for not publishing AI inventories:

- For 2021 through 2023, SBA believed it did not have publicly reportable AI use cases, according to SBA officials. However, SBA did not report at least one case that was publicly reportable and was in use—the machine learning use case discussed above. Officials attributed the omission to not canvassing for AI use outside the Office of the Chief Information Officer. They told us that SBA implemented a new process in 2024 with a central submission form to identify AI use cases agencywide.
- In 2024, SBA did not publicly publish a use case inventory as required, although it had an internal list of use cases and stated on its website that an inventory would be publicly released by December 2024. SBA officials could not explain why the inventory was not published, whether the agency submitted its inventory to OMB as required by 2024 OMB guidance, or whether any SBA policy controlled the process. SBA officials told us they could not answer questions regarding SBA AI use case inventory policy and reporting in 2024 because there was no documentation of key decisions or procedures during that time, and staff responsible for AI use case inventory collection and reporting were no longer at the agency. In February 2026, SBA officials told us they were still trying to determine how best to fill these roles and responsibilities.
- As of April 2026, SBA's pause on all AI use remained in effect. In September 2025, officials told us they intended to issue an AI use case inventory in accordance with OMB's 2025 reporting deadlines. SBA reported its 2025 AI use case inventory on March 12, 2026. This inventory contained seven use cases with 2025 operational dates. However, according to SBA officials these specific use cases are still in the early stages of development, do not yet involve end users, and are not close to full implementation. SBA officials said that as a result, their agency AI use case pause remained in effect.

Agency officials told us they do not have policies and procedures in place to ensure that reporting requirements are met. Federal internal control standards state that agency management should assign responsibility and delegate

authority for key roles and document its internal control system.[25] Effective documentation communicates who performs and reviews control activities, when and where they are to be performed, and for what reason. Such documentation mitigates the risk of limiting knowledge to a few personnel, and of losing institutional knowledge if those personnel leave.

Without policies and procedures for meeting the agency's reporting requirements, SBA may continue to miss reporting deadlines and risk noncompliance with OMB guidance implementing the Advancing American AI Act. Such policies and procedures include defining roles and responsibilities within the agency for publishing SBA's AI use case inventory, and documenting the implementation of policies, procedures, and key decisions. Not reporting AI use cases to OMB and the public also undermines statutory goals to share this information with other agencies, the public, and entities seeking to do business with the federal government. It also reduces transparency, information sharing, and congressional and public oversight of AI use cases.

Conclusions

Federal agencies increasingly have adopted AI, and stakeholders have expressed interest in applying it to small business contracting and innovation research. Advances in AI capabilities may offer opportunities to improve efficiency, fraud detection, and decision-making, but they also may introduce risks related to data privacy, accuracy, and bias. This combination of expanding use and associated risks underscores the importance of compliance with applicable reporting requirements, including requirements to report agency AI use. SBA has not consistently reported its AI use cases and has not always complied with reporting requirements. By establishing policies and procedures for reporting AI use cases—including defining roles and responsibilities and documenting their implementation—SBA would be better positioned to ensure it reports its applicable AI use inventory. Until SBA does so, transparency will remain limited, hindering information sharing and public and congressional oversight of agency AI use.

Recommendation for Executive Action

The Administrator of SBA should ensure that the Chief Information Officer establishes policies and procedures for meeting the agency's applicable reporting requirements for AI use case inventories, including defining roles and responsibilities, and for documenting the implementation of policies and procedures and key decisions. (Recommendation 1)

Agency Comments

We provided a draft of this report to SBA, the Department of Defense, the Department of Homeland Security, the Office of Personnel Management, and the National Science Foundation for review and comment. None of the agencies had any comments on the draft. SBA concurred with our recommendation.

How GAO Did This Study

To describe how AI use might assist agency OSDBUs, SBIR/STTR programs, and SBA in small business contracting and innovation grants, we reviewed relevant reports and documentation from the Congressional Research Service and the SBA Office of Inspector General, as well as our own related work, to identify key activities performed by SBA and agencies. We also interviewed officials of the Department of the Army, Department of Homeland Security, Office of Personnel Management, and National Science Foundation to obtain information on their current processes, challenges in carrying out key activities, and current or planned AI use in their OSDBUs and SBIR/STTR offices, as applicable. We selected these agencies because they had experience using AI relevant to small business contracting, SBIR/STTR, or general contracting.

We developed our definition of AI for this report and identified the broad types and capabilities of AI relevant to the key agency activities in our scope by reviewing literature and recent GAO reports, interviewing experts and agency officials, attending conferences on AI and federal use cases, and reviewing published agency AI use case inventories.

To identify peer-reviewed literature and reports, we searched databases such as ProQuest, EBSCO, Scopus, and SSRN using keywords related to artificial intelligence, procurement, government, and related terms, limiting results to the past 5 years. We also performed both prospective and retrospective citation searches based on the identified articles. We identified 316 studies through searches performed from February through May 2025, of which 52 were relevant to our objectives. Two senior analysts reviewed the literature for relevance to our topics. For literature directly cited in the report, two senior methodologists reviewed the literature to determine if it was sufficiently rigorous for our purposes.

We also convened a panel of experts with specializations in AI technology, federal use of AI, federal procurement, and the SBIR/STTR programs, or some combination of these areas. The panel included experts from academia and industry and former federal officials. We identified 49 experts through literature reviews, conferences, hearings, interviews, and internet searches. We selected 11 experts for the panel, chosen to reflect a mix of backgrounds, research areas, and publications.

We convened the panel on July 31 and August 4, 2025, to discuss potential benefits, risks, and barriers associated with using AI to support the key activities in our scope. Views expressed by panelists were their own and do not necessarily reflect those of GAO or the organizations with which they are affiliated. Appendix I lists the experts and their affiliations.

To evaluate SBA's AI policies, AI use, and compliance with federal AI use case requirements, we reviewed relevant policies and documentation and interviewed agency officials about processes for reporting inventories and whether SBA has publicly reported a use case inventory. We also examined an internal SBA AI use case inventory. We compared SBA's actions and documentation against requirements in the Advancing American AI Act and OMB's implementing guidance, enacted as part of the National Defense Authorization Act for Fiscal Year 2023, as well as applicable OMB memorandums from current and past administrations and relevant federal internal control standards.[26]

We conducted this performance audit from September 2024 to May 2026 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

List of Addressees

The Honorable Nydia M. Velázquez
Ranking Member
Committee on Small Business
House of Representatives

The Honorable Hillary J. Scholten
Ranking Member
Subcommittee on Innovation, Entrepreneurship, and Workforce Development
Committee on Small Business
House of Representatives

We are sending copies of this report to the House of Representatives Committee on Small Business, Administrator of the Small Business Administration, Secretary of Defense, Secretary of Homeland Security, Director of the Office of Personnel Management, and Acting Director of the National Science Foundation. In addition, the report is available at no charge on the GAO website at https://www.gao.gov.

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Appendix I: Expert Panelists

We convened a virtual panel of experts (listed below) to help inform our work for this report. The views expressed by the experts below are their own and do not necessarily reflect those of GAO or the organizations with which they are affiliated.

Alexis Bonnell
Board Member, Authorium; Senior Visiting Fellow for the Krach Institute for Tech Diplomacy, Purdue University; Head of Government Success & AI Adoption, OpenAI

Dr. Rumman Chowdhury
Responsible AI Fellow, Harvard University's Berkman Klein Center for Internet and Society; CEO, Humane Intelligence

Dr. Daniel J. Finkenstadt
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Dr. J. Ramon Gil-Garcia
Professor of Public Administration and Policy and Director of the Center for Technology in Government, University at Albany, State University of New York

David Evan Harris
Chancellor’s Public Scholar, University of California, Berkeley

Dr. Muhammad Salar Khan
Assistant Professor of Public Policy, Rochester Institute of Technology

Dr. Dolores Kuchina-Musina
CEO/Founder, REXOTA® Solutions, LLC

Laura A. Schoppe
President and Founder, Fuentek LLC

Dr. Peter Slattery
Researcher, MIT FutureTech, Massachusetts Institute of Technology

Gretchen Stewart
Principal Engineer, Chief Data Scientist, Public Sector Sales and Marketing Group, Intel Corporation

Dr. Matthew Young
Assistant Professor, Public Administration, Leiden University

Appendix II: AI Categories and Definitions

Artificial intelligence (AI) refers to the approximation of human intelligence in algorithms or systems that are programmed to learn and reason. AI capabilities are rapidly evolving, but neither the scientific community nor industry agree on a common definition for these technologies. Definitions vary, even within the federal government. For the purposes of this report, we used the categories and definitions below.

Categories of AI

GAO's *Artificial Intelligence Accountability Framework* (GAO-21-519SP) discusses categories of AI in terms of "waves" differentiated by their characteristics. In light of recent advances in the technology discussed in this report, we categorize AI capabilities as follows:

Conventional. Conventional AI uses predefined algorithms and rules to perform tasks. These systems excel at narrow activities, such as predicting weather, classifying images, or recommending products by learning patterns from training data. This category of AI can range from simple machine learning–based systems to more sophisticated ensemble models that use multiple conventional AI techniques when producing output.

Generative. Unlike conventional AI technologies that focus on classification and prediction, generative AI can create content such as text, images, audio, or video when prompted by a user. Generative AI systems learn patterns and relationships from massive amounts of data, enabling them to generate new content that may be similar, but not identical, to their underlying training data. They can be adapted to a wide range of tasks—for example, summarizing text, writing code, composing music, or creating images. Generative AI systems can range from simple chatbots to complex multistage systems in which different generative AIs pass information to each other for different purposes.

Agentic. Agentic AI builds on the capabilities of generative AI to not only create content, but also to make and adjust plans when a user does not clearly define the actions required to accomplish goals. Unlike generative AI, AI agents can interact with their environment to perform tasks for users. AI agents can autonomously assess an environment, plan or analyze a task, execute the task, and learn from the results. Agentic AI systems range from simpler agents that operate in predictable settings to more autonomous agents that can pursue complex longer-term goals in complicated settings or systems with multiple agents that work together.

Additional AI Terms

Machine learning. Often referred to as a subfield of AI, machine learning enables computer programs, including various AI systems, to automatically improve their performance on a task through training data and ongoing experience, without relying on explicit rules-based programming.

Deep research. Deep research is a term describing an AI agent that incorporates a form of reasoning to generate an answer to a user question or prompt. For instance, the agent iteratively checks results against one or more additional AI agents that evaluate the answer, then repeats the process, and incorporates additional searches and tools depending on the information's complexity. The agent synthesizes the results in a report to the user.

Large language model. Large language models use massive amounts of training data to learn patterns in written language. Generative AI uses large language models to emulate human writing or speech. Some large language models are multimodal, incorporating images, audio, or video in addition to text.

Chatbot. A chatbot is a program that interacts with users through free-form conversation using natural language processing. Chatbots range from simple systems that provide pre-programmed answers to more complex systems with generative or agentic qualities.

Expert system. Expert systems were early AI programs in which a computer was programmed based on expert knowledge or criteria and produced outputs consistent with its programming. Unlike modern machine learning–based AI, these systems did not learn or infer from data.

Retrieval augmented generation. Retrieval augmented generation enhances the accuracy and reliability of a generative AI model by retrieving contextual information from sources not included in the initial training data. It may be implemented as part of initial model training or during fine-tuning but is most commonly deployed with user prompts.

Natural language processing. Natural language processing involves the interpretation of natural human language by machines. It enables computers to recognize and understand human languages by incorporating rule-based and data-based machine learning systems, and can create text or speech.

Endnotes

[1]The Small Business Innovation Development Act of 1982 established the SBIR program. Pub. L. No. 97-219, 96 Stat. 217. This act amended section 9 of the Small Business Act, Pub. L. No. 85-536, 72 Stat. 384, 391-93 (1958) (codified as amended at 15 U.S.C. § 638). The Small Business Technology Transfer Act of 1992 established the STTR program. Pub. L. No. 102-564, §§ 201—202, 106 Stat. 4249, 4256-61. This act made additional amendments to section 9 of the Small Business Act. The Small Business Innovation and Economic Security Act, Pub. L. No. 119-83, 140 Stat. 755 (2026), reauthorized the SBIR/STTR programs through September 30, 2031. The act modifies the several aspects of the programs by creating new funding through a strategic breakthrough award, expanded national security and foreign risk requirements, expanded technical and business assistance funding and expanded training requirements for contracting officers and acquisition workforce. The 11 agencies that participate in SBIR are the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Homeland Security, and Transportation; the National Aeronautics and Space Administration; the Environmental Protection Agency; and the National Science Foundation. The six agencies that participate in both SBIR and STTR are the Departments of Agriculture, Defense, Energy, Health and Human Services, the National Aeronautics and Space Administration, and the National Science Foundation.

[2]Ryan Novak et al., *Accelerating the Future: Leveraging AI for Transformative Federal Acquisition,* proceedings of the 22nd annual Acquisition Research Symposium and Innovation Summit (Monterey, Calif.: May 5, 2025). The findings are based on a 1-day symposium with representatives

from industry, academia, and government supplemented by a series of interviews with AI and acquisition experts.

[3]Yilun Du, Shuang Li, Antonio Torralba, Joshua B. Tenenbaum, and Igor Mordatch, "Improving Factuality and Reasoning in Language Models Through Multiagent Debate," *Proceedings of the 41st International Conference on Machine Learning,* vol. 235 (2024).

[4]Novak et al., *Accelerating the Future*.

[5]Khanh-Tung Tran, Dung Dao, Minh-Duong Nguyen, Quoc-Viet Pham, Barry O'Sullivan, and Hoang D. Nguyen, "Multi-Agent Collaboration Mechanisms: A Survey of LLMs," arXiv:2501.06322 (2025). This study includes a qualitative summary of prior research on trust in AI and a theoretical extrapolation to large language model-based multi-agent systems.

[6]Ivan Stelmakh, John Wieting, Sarina Xi, Graham Neubig, and Nihar Shah, "A Gold Standard Dataset for the Reviewer Assignment Problem," *Transactions on Machine Learning Research* (April 2025).

[7]We previously reported on statutory requirements that define the foreign risks for which agencies must perform due diligence. The areas under which these requirements fall include cybersecurity, patents, employee affiliations, and foreign ownership. See GAO, *Small Business Research Programs: Additional Actions Needed to Incorporate Best Practices for Addressing Foreign Risks*, GAO-26-107972 (Washington, D.C.: Jan. 28, 2026).

[8]For example, see Jamie Barryhill, Kevin Kok Heang, Rob Clogher, and Keegan McBride, "Hello, World: Artificial Intelligence and Its Use in the Public Sector," OECD Working Paper on Public Governance no. 36 (2019), which describes examples of real-world cases where AI tools have been found to have high rates of false positives and false negatives.

[9]See FAR 15.304–15.305; 2 C.F.R. §§ 200.205–200.206.

[10]GAO, *Small Business Research Programs: Opportunities Exist for SBA and Agencies to Reduce Vulnerabilities to Fraud, Waste, and Abuse*, GAO-24-105470 (Washington, D.C.: Sept. 9, 2024). The report included six recommendations to SBA to support its fraud risk management, including one to validate information in SBIR/STTR databases. SBA generally agreed with the recommendations but had not implemented them as of December 2025.

[11]Nur Al Faisal, Janifer Nahar, Niger Sultana, and Abdul Awal Mintoo, "Fraud Detection in Banking: Leveraging AI to Identify and Prevent Fraudulent Activities in Real-Time," *Journal of Machine Learning, Data Engineering, and Data Science*, vol. 1, no. 1, (Nov. 2024).

[12]For example, see Prabin Adhikari, Prashamsa Hamal, and Francis Baidoo Jr., "Artificial Intelligence in Fraud Detection: Revolutionizing Financial Security," *International Journal of Science and Research Archive,* vol. 13, no. 1 (2024): 1457–1472.

[13]Offerors may ask an agency for a debriefing within 3 days of being notified of a contracting decision, and federal regulations require the agency to provide certain information explaining its decision. See FAR 15.506(d). If an agency provides an insufficient written debriefing or if the debriefing reveals other defects in the procurement process, it could be grounds for a bid protest.

[14]Christopher Barlow et al., *Enhancing Acquisition Outcomes Through Leveraging of Artificial Intelligence* (MITRE Corporation, May 2, 2024), is a qualitative policy analysis informed by expert interviews and an examination of current practices and emerging trends. See also Novak, *Accelerating the Future*.

[15]GAO, *Fraud and Improper Payments: Data Quality and a Skilled Workforce Are Essential for Unlocking the Benefits of Artificial Intelligence*, GAO-25-108412 (Washington, D.C.: Apr. 9, 2025).

[16]National Security Commission on Artificial Intelligence, *Final Report* (Mar. 1, 2021). The commission was established by the 2019 National Defense Authorization Act and consisted of a bipartisan group of 15 technologists, national security professionals, business executives, and academic leaders nominated by Congress and the executive branch.

[17]James Ryseff, Brandon De Bruhl, and Sydne Newberry, *The Root Causes of Failure for Artificial Intelligence Projects and How They Can Succeed* (RAND, Aug. 13, 2024). This study was based

on interviews with 65 data scientists and engineers with experience in AI in industry or academia. In an interview with GAO, the lead author said the findings would apply to the public sector as well.

[18]GAO, *Artificial Intelligence: Generative AI Use and Management at Federal Agencies*, GAO-25-107653 (Washington, D.C.: July 29, 2025).

[19]GAO, Artificial Intelligence Acquisitions: Agencies Should Collect and Apply Lessons Learned to Improve Future Procurements, GAO-26-107859 (Washington, D.C.: Apr. 13, 2026).

[20]GAO, *Cloud Security: Federal Authorization Program Usage Increasing, but Challenges Need to Be Fully Addressed,* GAO-24-106591 (Washington, D.C.: Jan. 18, 2024). The report included a recommendation to the Office of Management and Budget to finalize and implement new program guidance to include addressing the challenges identified in our report. The Office of Management and Budget implemented this recommendation in July 2024.

[21]Office of Management and Budget, *Driving Efficient Acquisition of Artificial Intelligence in Government,* M-25-22 (Washington, D.C.: April 2025).

[22]OMB's guidance defines an AI use case as the specific scenario in which AI is designed, developed, procured, or used to advance the execution of agencies' missions and program and service delivery, enhance decision-making, or provide the public with a particular benefit. Office of Management and Budget, Guidance on 2025 Agency Artificial Intelligence Reporting (June 27, 2025).

[23]We previously reported on this use case, which was a machine learning tool designed to use historical data to assess fraud risk in loan forgiveness applications for the Paycheck Protection Program and to automatically clear applications flagged as low risk. GAO, *COVID-19 Relief: Improved Controls Needed for Referring Likely Fraud in SBA's Pandemic Loan Programs*, GAO-25-107267 (Washington, D.C.: Mar. 24, 2025).

[24]Executive Order 13960: Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government, 85 Fed. Reg. 78939, 78941 (Dec. 3, 2020); Advancing American AI Act, Pub. L. No. 117-263, div. G, title LXXII, subtitle B, §§ 7224(a), 7224(d)(1)(B), 7225, 136 Stat. 2395, 3669–72 (2022) (codified at 40 U.S.C. § 11301 note). The Advancing American AI Act requires OMB to require agencies not later than 60 days after the date of enactment and continuously thereafter for a period of 5 years to release AI use case inventories. See Pub. L. No. 117-263, § 7225(a), 136 Stat. 2395, 3671–72.

[25]GAO, *Standards for Internal Control in the Federal Government*, GAO-14-704G, (Washington, D.C.: Sept. 10, 2014).

[26]Office of Management and Budget, *Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence*, M-24-10 (Washington, D.C.: Mar. 28, 2024); *Accelerating Federal Use of AI Through Innovation, Governance, and Public Trust*, M-25-21 (Washington, D.C.: Apr. 3, 2025); and GAO-14-704G.