July 18, 2025

The Honorable Martin Heinrich
United States Senate
Washington, District of Columbia 20510

The Honorable Mike Rounds
United States Senate
Washington, District of Columbia 20510

***RE: Response of ACT | The App Association to the American Science Acceleration Project (ASAP) Request for Information (RFI)***

Dear Senator Heinrich and Senator Rounds,

We appreciate your leadership in sponsoring the American Science Acceleration Project (ASAP) and for seeking public input on how to strengthen the U.S. innovation infrastructure. Small businesses are leading the way on artificial intelligence (AI). As some of the leading consumers, developers, and adapters of AI tools, ACT | The App Association members have a major stake in how policymakers view AI markets. The App Association represents an ecosystem valued at approximately $1.8 trillion domestically, supporting 6.1 million American jobs.[1] App Association members are innovators that create the software bringing your smart devices to life. They also make connected devices that are revolutionizing healthcare, agriculture, public safety, financial services, and virtually all other industries. We are concerned that state-level efforts to regulate AI technologies before the risks nor the benefits of their use are fully understood could unnecessarily preempt App Association members' ability to compete in AI markets and leverage the technologies. This includes overly aggressive competition and consumer protection policies that may preempt or restrict small businesses' ability to participate in AI markets. Premature antitrust interventions—grounded more in market speculation than empirical evidence—have already begun to chill capital formation and restrict partnership pathways critical to the growth of small firms.

As global competition in AI intensifies, particularly with China, Congress must remain mindful of the costs of inertia or overreach. The United States cannot afford to erect barriers that slow down deployment, disrupt access to capital, or limit access to critical infrastructure. ASAP represents an opportunity to reinforce America's leadership by building a forward-looking, risk-based innovation ecosystem grounded in evidence, interoperability, and public-private collaboration. We offer the following responses to selected questions in the RFI.

[1] https://actonline.org/wp-content/uploads/APP-Economy-Report-FINAL-1.pdf.

**1. How should the United States achieve the goal of accelerating the pace of scientific innovation? What roles should be played by Congress, the administration, industry, civil society, and academia?**

To accelerate the pace of scientific innovation, the United States must foster an environment where private-sector ingenuity, public-sector investment, and open collaboration reinforce one another. Congress, the Administration, and federal agencies must collaborate to ensure that innovation policy emphasizes regulatory clarity, robust infrastructure, and support for small and medium-sized businesses (SMBs). Congress should provide long-term appropriations for the National Science Foundation's National Artificial Intelligence Research Resource (NAIRR), launched in 2024, which provides researchers with access to datasets, models, cloud computing, and AI credits to drive groundbreaking advancements in AI applications across defense, healthcare, energy, and other sectors vital to U.S. competitiveness. However, the technology developer-donated credits that support NAIRR will expire at the end of the two-year pilot. While Congress has allocated some funding for the program's administration, NAIRR's continuation depends on congressional appropriations for researcher technology credits. The NAIRR Task Force, formed under the National AI Initiative Act of 2020, signed into law by President Trump, estimated that sustaining NAIRR requires $2.25 billion in federal appropriations over six years to ensure researchers have the resources needed to develop transformative AI solutions and address society's most pressing challenges. The task force recommended congressional appropriations of $750 million every two years, and we urge the Administration to incorporate this essential funding into future budget proposals to Congress.

Federal agencies must apply existing regulatory frameworks before advancing new ones, prioritizing a risk-based approach aligned with international standards such as the National Institute for Science and Technology (NIST) AI Risk Management Framework and ISO 42001. Policymakers must clarify the roles and responsibilities across the AI value chain to ensure that each stakeholder—from developer to deployer to end-user—has appropriate incentives and accountability for risk mitigation.

The private sector, particularly small businesses, should lead standards development and innovation efforts, with support from the government to reduce participation barriers. To this end, Congress must reintroduce and advance the *Promoting United States Leadership in Standards Act* (S. 3849, 118th), which would require NIST to create a pilot grant program for standards development organizations (SDOs) to host standards development meeting sin the United States. Encouraging these meetings to take place domestically is a critical measure to make them more accessible to American small businesses, which generally lack the budgets to send personnel overseas for days-long standards meetings. A policy of enhanced access to these processes will also ensure that civil society organizations can contribute perspectives on ethics, equity, and societal impact, while academic institutions focus on both fundamental research and developing an AI-literate workforce.

Importantly, innovation policy must avoid antitrust overreach. Ex-ante mandates like the EU's Digital Markets Act (DMA) have increased compliance burdens and delayed software rollouts, particularly for small developers. U.S. policy must avoid replicating these mistakes and ensure competition enforcement focuses on proven harms, not speculative concerns, in order to safeguard innovation incentives and capital formation.

**4. In order to measure the success of ASAP, we need to have objective metrics that measure the speed of scientific innovation. What metrics already exist and what ones need to be created? What information should the federal government have to understand the health and productivity of our innovation ecosystem, and what tools processes, or institutions should be used to do so?**

To measure innovation meaningfully, the federal government must go beyond traditional research inputs like funding levels or publication counts. Metrics should assess not just scientific outputs, but also the translation of ideas into real-world deployment, particularly by SMBs that are often first movers in critical and emerging technologies. Key indicators of ecosystem health include participation in international technical standards by U.S.-based SMBs and barriers to participation in standards and research and development (R&D) (e.g., cost of engagement, access to international meetings, and transparency of processes). To improve insight, the government should adopt innovation metrics that account for visibility and participation of SMBs in federal innovation programs, standards bodies, and grant competitions. Ultimately, a healthy innovation ecosystem is one where scientific ideas become scalable, trusted products. The tools we use to measure innovation must reflect that end-to-end pipeline, especially as it plays out in fast-moving, high-impact fields like AI.

**5. Grand challenge problems can help provide concrete direction for how to implement new innovations. What core innovations does America need that can help guide ASAP? If possible, please provide an objective quantifiable metric, such as decreasing the time it takes to get a new drug to market from 10 years to 1 year.**

Congress should take proactive measures to strengthen American AI infrastructure to ensure access and affordability. It should:

- Provide federal agencies with greater authority to site and permit interstate transmission lines deemed critical to national interests. This includes streamlining approvals and, if necessary, leveraging eminent domain.
- Prevent states from imposing regulations that disproportionately burden data centers that are critical for AI processing.
- Accelerate the development of domestic nuclear power, including small modular reactors (SMRs), through streamlined regulations, tax incentives, and loan guarantees. This will provide a stable, low-carbon power source for data centers.

We also urge policymakers to protect access to capital by avoiding antitrust frameworks that undermine merger and partnership opportunities for small firms. Acquisitions and vertical integrations are essential to scaling innovation and rewarding risk-taking.

**6. How can America build the world's most powerful scientific data ecosystem to accelerate American science?**

While the types of data items analyzed by AI and other technologies are not new, this analysis will provide greater potential utility of those data items to other individuals, entities, and machines. This raises privacy issues and questions surrounding consent to use data in a particular way (e.g., research, commercial product/service development). It also offers the potential for more powerful and granular access controls for consumers. Accordingly, the U.S. approach to AI generally should address the topics of privacy, consent, and modern technological capabilities as a part of the policy development process. Risk management policy frameworks must be scalable and ensure that an individual's data is properly protected, while also allowing the flow of information and responsible evolution of AI. This information is necessary to provide and promote high-quality AI applications. General consumer privacy laws have proliferated across 20 states and more are likely to follow in the coming years. While many of these frameworks, like those in Texas, Virginia, and Kentucky, follow a similar pattern, the overall patchwork of differing and conflicting privacy mandates harms the development of AI systems. Therefore, Congress must enact a single consumer privacy framework that preempts state laws of similar scope, as part of a national policy of advancing the scientific data ecosystem to accelerate American science. Finally, with proper protections in place, policy frameworks should avoid encumbering data access, including open access to appropriate machine-readable public data, development of a culture of securely sharing data with external partners, and explicit communication of allowable use with periodic review of informed consent.

The U.S. approach to AI generally should enable eased data access and use through creating a culture of cooperation, trust, and openness among policymakers, AI technology developers and users, and the public. The bias inherent in all data, as well as errors, will remain one of the more pressing issues with AI systems that utilize machine learning techniques in particular. The U.S. approach to AI should examine data provenance and bias issues present in the development and uses of AI solutions to ensure that bias in datasets does not result in harm to users or consumers of products or services involving AI, including through unlawful discrimination. The U.S. approach to AI generally should require the identification, disclosure, and mitigation of bias while encouraging access to databases and promoting inclusion and diversity as well as ensure that data bias does not cause harm to users or consumers.

**7. What does the U.S. need to do to ensure its researchers have access to enough computing resources to power new breakthroughs?**

As Congress and the Administration explore how to improve access to computing resources, it is important to consider the role that existing market actors already play in providing compute capacity and essential tools to American small businesses. Some of the

companies under increasing scrutiny offer small businesses and startups free and low-cost access to sophisticated AI development platforms. Large companies have the resources to fund long-term research, build foundational AI models, and provide the infrastructure smaller businesses need to innovate. This market-led investment is pro-competitive, as it makes resources accessible to smaller firms. Startups and small businesses gain access to powerful AI technologies without the need for large upfront investments. In turn, they use AI to develop competitive, innovative solutions that benefit both businesses and consumers. However, without such foundational investment, many of these innovations wouldn't be possible. U.S. competition policymakers must account for this dynamic and ensure their enforcement frameworks do not inadvertently penalize the very investments that enable a competitive and innovative AI ecosystem.

We urge policymakers to closely examine the value these companies are currently providing to the AI ecosystem, particularly for small businesses and developers, and to consider how proposals to radically restructure cloud and compute markets could inadvertently harm those very users. In our view, competition policy should be grounded in demonstrated harms and avoid sweeping remedies based on speculative fears. Cloud infrastructure and AI development tools should remain open, affordable, and accessible. However, achieving that goal requires a clear understanding of the benefits already being delivered by existing actors and careful calibration of any proposed interventions to preserve those benefits.

**9. How can we radically increase the scale, speed, and impact of scientific collaboration across disciplines, institutions, and sectors?**

To meaningfully expand collaboration across the scientific ecosystem, Congress must foster a shared understanding of roles, responsibilities, and accountability in AI development and deployment, and advance the voluntary, open standards that enable interoperability and trust across sectors. Technology developers, deployers, end users, and other stakeholders all benefit when there is a common understanding of how risk and responsibility are distributed across the AI value chain. To support that goal, Congress should explicitly promote the appropriate assignment of responsibility for risk mitigation, ensuring that actors with the knowledge and ability to reduce risk are properly incented to do so.

We strongly urge alignment with the App Association's AI Roles and Interdependencies Framework,[2] which maps common roles in the AI value chain and recommends practical safety, transparency, and explainability actions for each actor — calibrated to their knowledge, their role, and their ability to mitigate known harms. These responsibilities are

[2] The App Association's AI Roles & Interdependency Framework is included as **Appendix A**, and is also available at https://actonline.org/wp-content/uploads/ACT-AI-Roles-Interdependencies-Framework-final-text-May-2024-UK-English.pdf.

mapped to the NIST AI Risk Management Framework's functions (govern, map, measure, manage) to ensure interoperability with public-sector guidance.

At the same time, collaboration at scale requires shared tools, languages, and infrastructure. The Strategic Plan should support the development and use of voluntary consensus standards related to AI safety, trustworthiness, and interoperability. This should include a clear commitment to updating the Plan to reflect open standards, consistent with OMB Circular A-119 ("Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities").[3] By clarifying roles and promoting open standards, the United States can radically increase the scale and pace of collaborative AI innovation — ensuring all actors in the ecosystem can align their contributions, share risk appropriately, and scale responsibly.

**10. In order to cut the time from discovery to deployment by a factor of 10, what changes are needed in the process of scientific innovation, such as in the regulatory ecosystem, scientific funding models, education and workforce pipelines, and the resources that constitute the scientific supply chain?**

Cutting the time from discovery to deployment requires not just accelerating individual components of the innovation pipeline, but redesigning the system to reward speed, safety, and scalability across the entire lifecycle of scientific development. Congress must focus on scaling pathways for real-world deployment, particularly for SMBs, by ensuring that regulatory frameworks are clear, risk-based, and interoperable; that infrastructure and supply chains are reliable and pro-innovation; and that scientific funding and education pipelines reflect modern, cross-sectoral, AI-enabled workflows.

Congress must prioritize:

- Reforms that enable iterative development and real-world testing, particularly for AI and emerging technologies. This includes expanding regulatory sandboxes, promoting safe harbor regimes, and ensuring agencies recognize the need for agile, context-specific oversight frameworks that do not disproportionately burden small firms.
- Public-private infrastructure partnerships to ensure early-stage developers have access to compute, capital, and trusted data resources. As discussed above, sustained funding for initiatives like NAIRR are essential, but equally important is preserving the pro-competitive role of large market actors who currently extend compute and tooling access to small firms.
- Modernized grant and procurement models that reward operational readiness and deployment, not just research novelty. Federal programs should better accommodate non-academic innovators, including SMBs that often lack the time or

[3] https://www.nist.gov/system/files/revised_circular_a-119_as_of_01-22-2016.pdf.

resources to navigate legacy federal funding mechanisms but are well-positioned to commercialize high-impact discoveries.

Additionally, robust protection for intellectual property and a balanced standard-essential patent (SEP) licensing ecosystem are vital to accelerating time-to-market. As AI capabilities become increasingly embedded in standards-reliant technologies, abusive SEP licensing practices threaten to delay commercialization and inflate costs for downstream implementers, particularly small businesses. The United States must protect innovators by defending fair, reasonable, and non-discriminatory (FRAND) licensing terms and preventing SEP abuse that distorts innovation incentives. At the same time, policymakers must avoid overbroad disclosure mandates that would jeopardize proprietary data or algorithms and chill research investment.

Finally, Congress should ensure that innovation and competition policy work in tandem. The path from lab to market is often catalyzed by acquisition, integration, or partnership, especially for small developers. Antitrust overreach that deters responsible consolidation or imposes rigid structural rules could inadvertently lengthen the timeline for getting new solutions into the hands of users.

To meaningfully compress innovation timelines, we must build a system that embraces responsible speed, not red tape, and one that empowers American innovators of all sizes to move from discovery to deployment without artificial delay. The App Association welcomes further collaboration to support ASAP and appreciates the opportunity to contribute.

Thank you for your consideration.

Respectfully submitted,

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