

Bipartisan AI Grand Challenges Act of 2024

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BACKGROUND:

Prize competitions and challenges are proven tools to spur innovation, accelerate research and development, and achieve ambitious yet achievable goals using science and technology. They have a long history of successful use in both the public and private sectors, and are well-suited to help leverage the promise of artificial intelligence to solve complex problems.

BILL SUMMARY:

- **Establishment of Program:** Directs the National Science Foundation (NSF) to establish an AI Grand Challenges Program and administer prize competitions – with \$1 million minimum prizes – to incentivize researchers, entrepreneurs, and innovators to harness AI to solve specific and measurable challenges across a range of sectors, including health, energy, environment, national security, materials science, and cybersecurity – as well as address AI system-specific challenges like bias mitigation, content provenance, and explainability.
- **Challenge Selection:** Directs NSF to consult with OSTP, NIST, DARPA, the National AI Advisory Committee, and relevant federal agencies to identify and select the specific challenges in which participants will compete. NSF is required to develop problem statements, targets, success metrics, and validation protocols for each challenge to evaluate submissions.
- **Prize Amounts:** Directs NSF to award prizes of at least \$1 million for each competition. A dedicated competition for achieving breakthroughs in cancer detection and treatment carries a prize of at least \$10 million.
- **Funding:** In accordance with the Stevenson-Wydler Technology Innovation Act (*Pub. L. 96-480*), NSF may request and accept funds from other Federal agencies, for-profit entities, non-profit entities, and state and local governments to support the AI Grand Challenges Program. NSF may not consider any support provided by an agency or entity in determining the winners of competitions.
- **Accessibility:** Directs that the challenges be posted to Challenge.gov to ensure they are widely accessible to eligible participants.
- **Reports:** Directs NSF to submit a report to the Senate Committee on Commerce, Science, and Transportation, the House Committee on Science, Space, and Technology, and other relevant committees that describes the winning submission of a prize competition and its benefits to the United States. The bill further directs NSF to produce a biennial report that describes activities carried out under the bill, active competitions, the results of completed competitions, and efforts to provide information to the public to encourage participation.