

July 19, 2023

Chairman Frank Lucas
House Committee on Science, Space, and
Technology
2405 Rayburn House Office Building
Washington, D.C. 20515

Chair Maria Cantwell
Senate Committee on Commerce, Science,
and Transportation
511 Hart Senate Office Building
Washington, D.C. 20510

Ranking Member Zoe Lofgren
House Committee on Science, Space, and
Technology
1401 Longworth House Office Building
Washington, D.C. 20515

Ranking Member Ted Cruz
Senate Committee on Commerce, Science,
and Transportation
167 Russell Senate Office Building
Washington, D.C. 20510

Dear Chairs Lucas and Cantwell, and Ranking Members Lofgren and Cruz:

Congress established the National Artificial Intelligence Research Resource (NAIRR) Task Force as part of the National Artificial Intelligence Initiative Act of 2020. After 18 months of conducting extensive research at the behest of Congress, the Task Force -- comprised of experts, equally representing academia, government, and private organizations -- developed a roadmap for how the United States can build, deploy, govern, and sustain a national cyberinfrastructure for artificial intelligence (AI) research. The NAIRR would revolutionize the AI research landscape in the United States, fostering the ability to address societal-level challenges by empowering and broadening participation in foundational, use-inspired, and translational AI research and development, ultimately democratizing access to the AI field.¹ The Task Force's final report recommends that Congress authorize and implement the NAIRR immediately.

Our organizations urge policymakers to authorize the National AI Research Resource (NAIRR) this Congress.

The NAIRR is important to foster the development of the U.S. domestic AI research ecosystem and maintain U.S. leadership in AI on the global stage. Among other things, the NAIRR will increase the competitiveness of startups and empower smaller public universities and community colleges to provide hands-on training to students around AI and prepare them with the skills they — and the nation — need today and in decades to come. One of the greatest challenges in expanding the reach of U.S. R&D in AI is the cost of and access to computing resources and high-quality data. The NAIRR will address this by providing "AI researchers and students with significantly expanded access to computational resources, high-quality data, educational tools, and user support—fueling greater innovation and advancing AI that serves the public good."² Indeed, the cost of building foundational models and large multi-purpose AI models can be prohibitively expensive for smaller developers. For example, the computing power needed to train an ML model like OpenAI's

¹ "National Artificial Intelligence Research Resource Task Force Releases Final Report | OSTP," The White House, January 24, 2023, <https://www.whitehouse.gov/ostp/news-updates/2023/01/24/national-artificial-intelligence-research-resource-task-force-releases-final-report/>; National Artificial Intelligence Research Resource Task Force, "Strengthening and Democratizing the U.S. Artificial Intelligence Innovation Ecosystem."

² National Artificial Intelligence Research Resource Task Force, "Strengthening and Democratizing the U.S. Artificial Intelligence Innovation Ecosystem: An Implementation Plan for a National Artificial Intelligence Research Resource," January 2023, <https://www.ai.gov/wp-content/uploads/2023/01/NAIRR-TF-Final-Report-2023.pdf>.

GPT-3 can cost as much as \$4 million.³ The NAIRR will help democratize AI training and development across the United States to bring forth innovations we have not yet realized or conceptualized.

According to the IDC's Worldwide Artificial Intelligence Spending Guide, China is expected to more than double its annual investment in AI to \$27 billion by 2026.⁴ To remain a leader in the field, the United States must keep pace with AI R&D investment globally and leverage resources across our research centers.

The NAIRR will also provide a uniquely American approach to advancing responsible AI – one that promotes innovation in accordance with key democratic values. A national cyberinfrastructure such as a NAIRR allows for the unique opportunity to “design in” standards and best practices for developing responsible and trustworthy AI. The NAIRR Task Force plans to “set the standard for responsible AI research through the design and implementation of its governance processes” and “implement system safeguards in accordance with established guidelines.”

While Congress has many competing priorities, we encourage you to ensure that the NAIRR is authorized in the 118th Congress. AI is no longer a hypothetical future technology; it is already here. And the United States cannot afford to fall behind. Authorizing the NAIRR is the next step in ensuring the United States remains a leader in the AI era.

Sincerely,

TechNet
Federation of American Scientists
BSA | The Software Alliance
Center for American Entrepreneurship
Chamber of Progress
Computing Research Association
Developers Alliance
Engine
IEEE-USA
Information Technology Industry Council (ITI)
Marketplace Industry Association, Inc.
SeedAI
Software & Information Industry Association (SIIA)
U.S. Chamber of Commerce Technology Engagement Center

³ Vanian, Jonathan. "ChatGPT and Generative AI Are Booming, but the Costs Can Be Extraordinary." CNBC. March 13, 2023. <https://www.cnbc.com/2023/03/13/chatgpt-and-generative-ai-are-booming-but-at-a-very-expensive-price.html>.

⁴ "China Set to More than Double AI Spending by 2026," Data Center Knowledge | News and analysis for the data center industry, October 14, 2022, https://aibusiness.com/document.asp?doc_id=781025.