



# The President's Council on Science & Technology (PCAST)

Letter on the Value and Importance of  
Federally Funded Research and Development

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# Federal R&D Funding is an Investment in the Nation



THE WHITE HOUSE  
WASHINGTON

*Our high quality of life and vibrant economic prosperity is built on federal R&D*



# A Robust Federal R&D Ecosystem Promotes Private Sector Innovation

U.S. private sector R&D investments are at record strength and fuel the economy but sustained growth will require complementary public R&D

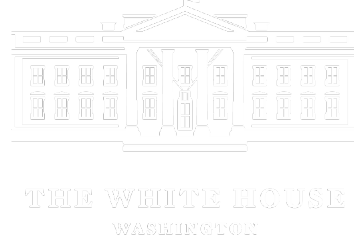
Companies draw on federally funded research to:

- Stimulate new ideas
- Develop new products and services
- Assess and manage risks
- Hire workers trained through federal R&D

Whole new companies and entirely new industries start from federally funded R&D



# Federal R&D Investment is also Critical for Public Missions and Public Responsibilities



- National security
- Health
- Clean energy and assessing and addressing the climate crisis
- Space exploration
- Expanding the frontiers of knowledge
- And more...



# The Biden-Harris Administration Championed Important Progress from FY21-23



Federal R&D funding increased from \$161B in FY21 to \$200B in FY23

New investments to address new needs:

- ARPA-H
- TIP Directorate at NSF

Expanded R&D for key national priorities:

- CHIPS R&D for semiconductors
- IRA R&D for clean energy



# Budget Caps Stalled Federally Funded R&D in FY2024

Total funded for federal R&D stalled at ~\$200B in FY24. Non-defense R&D eroded from \$101B in FY23 to an estimated \$91B in FY24\*

*Non-defense R&D declined by an estimated 10% in FY 24\**

Significant impacts across government:

- NSF
- NIST
- NASA
- NOAA

***Budget caps also constrained the President's budget request for FY25 to \$202B***

\*American Association for the Advancement of Science, [The Final FY 2024 Budget: A Summary of How R&D Fared](#), March 26 2024.



# An Encouraging Sign: Bipartisan Senators Call for Significant R&D Growth

- Bipartisan Senate AI Working Group (Sens. Schumer, Rounds, Heinrich, Young) calling for \$32 billion in annual non-defense AI R&D\*
- Includes broad federal R&D as necessary for U.S. AI leadership by calling for “funding the outstanding CHIPS and Science Act (P.L. 117-167) accounts not yet fully funded”
- PCAST has discussed AI’s role in all areas of research with POTUS and in its recent report

\*Bipartisan Senate AI Working Group (May 2024). [Driving U.S. Innovation in Artificial Intelligence: A Roadmap for Artificial Intelligence Policy in the United States Senate.](#)





# PCAST Urges Prioritization for Federal R&D Funding



**We recommend prioritizing R&D in negotiations with Congress on FY25 appropriations**

**We encourage identification of other legislative opportunities for investment in R&D**

*The importance of public R&D funding to the Nation must not be neglected in the press of urgent concerns*





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