A LETTER FROM OUR CO-CHAIRS

The findings and recommendations in the State of Science in America report provide an undeniable clarion call and starting point for policymakers to develop and fund a national science and technology strategy that generates the greatest possible return on investment, addresses the existential threats of our time, and secures a brighter future for all Americans.

Federal investment in science and technology has long ensured our national security, improved our health and well-being, and grown our economy and the good jobs that come with it. From early breakthroughs in space exploration to the development of the microchip, from the mapping of the human genome to recent breakthroughs in fusion energy, these and many more accomplishments in dozens of sectors are all rooted in one thing: federal support for science and technology.

Despite this stellar record, science and technology investment has dropped down the list of national priorities over the past several decades. And while the U.S. remains highly innovative and competitive, we lack a long-term plan going forward. The decline in federal funding as a percentage of the gross domestic product (GDP), paired with the absence of a national strategy to maximize every dollar spent, has left us ill-prepared for the future. Today, government funding for research and development sits at just <u>0.7% of our GDP¹</u> compared to our historical peak of 1.9% in 1964, and contrasts sharply with increases by our competitors, notably China, which seeks to overtake us in level of investment by the end of the decade.

While legislation such as the bipartisan <u>CHIPS and Science</u> <u>Act</u>², signed into law in 2022, illustrates how we can meet these challenges and compete on a global scale, it also highlights that standalone bills — no matter how urgent, important, and promising — don't address the full scope of what's needed. Although the measure made inroads in mending our dependence on other nations for semiconductor manufacturing, funding for many key science policies, such as spending



GOVERNMENT FUNDING

FOR RESEARCH AND DEVELOPMENT SITS AT JUST

0.7% OF OUR GDP¹ COMPARED TO 1.9% IN 1964 increases for research agencies, was only authorized — not appropriated. The result? Billions of dollars desperately needed to fund the next generation of transformative innovations and discoveries aren't available when we need them the most.

As co-chairs of the Science & Technology Action Committee³ (STAC), a nonpartisan alliance of nonprofit, academic, foundation, and business leaders, we believe continued robust investment in science and technology is absolutely essential. Informed by interviews and expert insights from our full committee, as well as a national survey we commissioned of nearly 2,000 Americans working in five sectors, this report illustrates the consequences of not having a comprehensive national science and technology strategy to guide federal funding and coordination among the 20-plus agencies with scientific missions.

What we found in our survey is revealing: strong support for greater government investment and the creation of science and technology hubs throughout the country, agreement that federal leadership — both in funding and in setting strategic priorities — is essential, and widespread acknowledgement of the critical role science and technology play in our society. We also uncovered clear areas of concern, including that many are worried about the impact artificial intelligence (AI) will have on society, that the United States is falling behind international competitors, and that our biggest opportunity to maintain leadership may lie in improving science, technology, engineering, and math (STEM) education at the K-12 level.

Tucked among the data is a striking finding: 70% of respondents believe today's children will be worse off in the future. Importantly, the 15% who believe they will be better off largely expect advances in science and technology will be the key reason why, underscoring the urgency and importance of these investments. It's one of the many reasons why STAC has called for at least doubling federal funding for science and technology over the next five years.

The State of Science in America report provides a clear direction that our nation desperately needs, one that responds to the concerns of both experts and workers, who by large margins believe America's future depends on our capacity to maintain our global leadership in science and technology.





BILL NOVELLI Professor Emeritus and founder of Business for Impact at Georgetown University and former CEO of AARP



CEO, American Association for the Advancement of Science (AAAS) and Executive Publisher of the Science Family of Journals



MARY WOOLLEY President & CEO, Research!America



KEITH YAMAMOTO Vice Chancellor for Science Policy and Strategy at UCSF and President of the American Association for the Advancement of Science (AAAS)

We wish to express our thanks to the <u>many organizations and individuals</u> who provide funding for the Science & Technology Action Committee. Your contributions and support are very much appreciated.