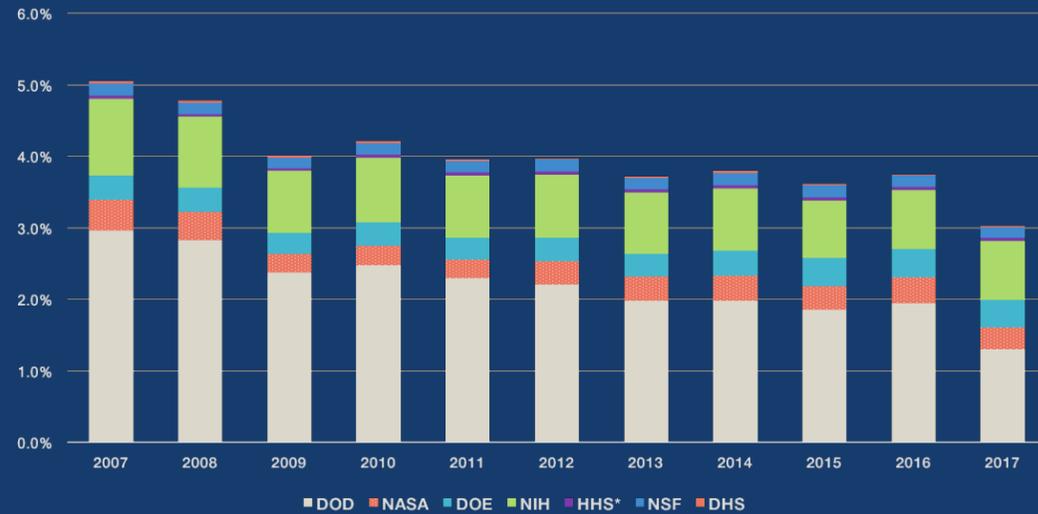




**THE BUSINESS CASE FOR
FEDERAL RESEARCH FUNDING**

FIGURE 1

Research Funding as a Percent of Total Federal Outlays, 2007-2017
(inflation adjusted dollars)



Business leaders from all over the country are joining together to deliver one simple message: federally-funded research grows our economy.

Business for Federal Research Funding (BFRF) is a broad-based coalition of over 75 Chambers of Commerce from across the country, all advocating for sustained investments in research funding in the federal budget. Together, our coalition is bringing a heightened focus to the critical impact that federal research funding has on our nation's economic growth and competitiveness.

Our national coalition is pushing for sustained research funding growth across several areas of the federal budget, including the National Institutes of Health; the National Science Foundation; NASA; and the Departments of Agriculture, Defense, Energy, and Homeland Security.

Maximizing research investments is key to advancing our economy and our global competitiveness. The federal government plays a major role in funding research efforts that lead to significant breakthroughs in innovation.

The innovations that result from basic research investment lead to scientific breakthroughs and new technologies and are at the root of countless companies, products, and jobs.

* Figure 1 compares the R&D budget authority of select agencies to the total federal outlay in real dollars. Actual R&D expenditures differ from budget authority. The NIH budget is excluded from the HHS budget for this analysis.

Source: American Association for the Advancement of Science, "Historical Trends in Federal R&D," April 2018.

THE NUMBERS

↓ 22%

decline in federal R&D funding between 2007 and 2017 (inflation adjusted dollars)

Every \$1 of NIH funding creates \$2.64 in economic activity

In 2017, NIH extramural funding supported over 400K jobs

WHY WE NEED FEDERAL FUNDING

Cyberattacks cost the U.S. up to \$109 billion



1.7 million new cancer diagnoses expected in 2018



5 million Americans living with Alzheimer's disease

FEDERAL FUNDING SPURS JOBS AND ECONOMIC GROWTH

In 2017, National Institutes of Health (NIH) spending extramurally in the 50 states and D.C. directly and indirectly supported 402,816 jobs nationally. However, that number is smaller than past years when funding levels were greater. For example, in 2010 NIH funding supported an estimated 487,900 jobs nationwide.

Funding not only creates jobs, it stimulates billions in economic activity. In 2017, NIH grants alone supported \$68.8 billion in economic activity - more than twice the \$26.1 billion it distributed in grants. Twenty states experienced economic activity of \$1 billion or more.¹

THE PAYOFFS FROM FEDERAL FUNDING

Although federal funding for research and development declined 22 percent in inflation-adjusted dollars between 2007 and 2017 (Figure 1), that trend shifted in 2018. Congress took a step in the right direction in the 2018 omnibus spending bill, which increased funding for research by over \$12 billion.²

In fact, the annual investment in federal research funding pales in comparison to annual spending on the same issues researchers are working to address:

- Cancer costs the U.S. over \$200 billion annually³
- Cybercrime cost the U.S. between \$57 and \$109 billion in 2016⁴
- Alzheimer's disease and other dementias cost the U.S. \$259 billion in 2017⁵
- Progress on these challenges is achievable. In fact, over the past few years, federal funding has contributed to medical breakthroughs such as:
 - A bionic pancreas that can regulate blood sugar levels in diabetics
 - Gene therapy that reverses a rare form of inherited vision loss
 - Development of the first artificial kidney⁶

COMPETITION ABROAD

Once a world leader, the U.S. now lags behind other countries in research spending. According to the OECD, total U.S. R&D spending in 2016 represented 2.7 percent of GDP, less than Finland, Germany, Japan, South Korea, and Sweden.⁷

In the coming year, we urge Congress to continue increasing its investments to tackle some of the country's most difficult health challenges and scientific needs, and help maintain the U.S. as a world leader in science, medicine and innovation.

¹ United for Medical Research, "NIH's Role in Sustaining the U.S. Economy 2018 Update," February 2018.
² American Association for the Advancement of Science, "Historical Trends in Federal R&D," April 2018.
³ The Science Coalition, "Sparkling Economic Growth 2.0" October 2013.
⁴ Executive Office of the President of the United States, "The Cost of Malicious Cyber Activity to the U.S. Economy," February 2018.
⁵ United for Medical Research, "Amazing Things," March 2018.
⁶ Ibid.
⁷ Organization for Economic Co-operation and Development, "Main Science and Technology Indicators," March 2018.

BUSINESS FOR FEDERAL
RESEARCH FUNDING

