U.S. National Science Foundation

NSF 75 YEARS OF INNOVATION

2025 marks the 75th anniversary of NSF. Throughout the year, the agency will host in-person and virtual activities to commemorate this significant milestone. For more information, visit: nsf.gov/75years

UTAH

FAST FACTS

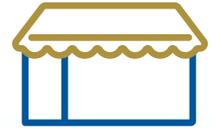**$86,009,000**
Total NSF Awards to Utah

$68,416,000
Invested in Fundamental Research in Utah

$17,594,000
Invested in STEM Education in Utah

$2,303,000
Invested in Utah Businesses

TOP NSF-FUNDED ACADEMIC INSTITUTIONS

University of Utah
$51,224,000

Utah State University
$17,678,000

Brigham Young University
$9,331,000

NSF BY THE NUMBERS

The U.S. National Science Foundation (NSF) is an independent federal agency created by Congress in 1950 to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense. To fulfill this vital role, NSF supports basic research and researchers who create knowledge that transforms the future.

DID YOU KNOW? NSF has funded the work of **268** Nobel Prize winners over 75 years.

$9.06B
FY 2024 Total Enacted

92%
Funds research, education and related activities

11K
Awards

1.9K
Institutions

358K
People

"Data represents FY 2024 Actuals unless otherwise indicated"

www.nsf.gov

State Fact Sheet 2025 GR

INNOVATION | *Generating new knowledge that provides a greater understanding of the world around us*

Modern manufacturing techniques aim to reduce the price and increase the quality of many of the products we use every day. However, buildings continue to be manufactured with high levels of skilled manual labor and standardization, leading to higher costs and a lack of optimization for material usage. Automation in building construction methods have thus far been limited by the difficulty of transporting large components and the desire to customize buildings. Leveraging funding from NSF, a project team at **Brigham Young University** is developing a new manufacturing approach that will enable fabrication of customized building systems. The project will apply the little-used sheet-lamination additive manufacturing (3D printing) process to fabricate origami-inspired deployable systems. This approach will enable low-cost, high-volume production of building components such as concrete forms in a compact shape for easy transport. These compact components and forms can be readily shipped and then deployed on-site.

EXPANDING FRONTIERS | *Generating institutional capacity, new technologies and societal impact*

Cloud technologies underpin many of the apps and computing services that we use every day, including social networking, online commerce, email, video conferencing and more. To conduct research that drives forward the fundamental architecture of the cloud, scientists need an environment in which they can experiment with its primary building blocks: compute power, storage and networks. NSF CloudLab, led by the **University of Utah**, is a facility consisting of nearly 2,000 servers which researchers can use to build their own clouds, observing and changing how they operate all the way to the bottom layers of software. These users conduct research in areas such as networking, security and databases, fundamental technologies upon which we build things such as smart cities, telehealth, online education and other socially important computer services. Because it is offered at no cost to academic users, it acts as a level playing field on which both large institutions that are well equipped or small institutions with limited resources can conduct work on equal footing.

EDUCATION AND WORKFORCE | *Supporting our STEM talent of today and tomorrow*

Despite growing interest in supporting the integration of computational thinking (CT) in elementary education, there is not an agreed-upon definition of CT that is developmentally appropriate for early childhood, nor is there a clear understanding of how young children's CT develops and which kinds of instructional approaches and practices truly support the development of CT. Early elementary educators need feasible, research-based, developmentally appropriate CT curricula. An NSF Discovery Research PreK-12 project team at **Utah State University** is contributing to this critical STEM educational need by working with a design team of 5 elementary teachers to develop a research-based integrated mathematics and CT curriculum. The project will directly impact over 300 first- and second-grade students and 9 teachers from Title I schools in a rural setting.

ON THE CUTTING EDGE

NSF is pushing the boundaries of what is possible in today's most important technology areas, including artificial intelligence, quantum information science, and biotechnology. The Foundation also maintains industry-leading, state-of-the-art facilities around the world.

NCSES

The National Center for Science and Engineering Statistics (NCSES) within the U.S. National Science Foundation is the nation's leading provider of statistical data on the U.S. science and engineering enterprise. As a principal federal statistical agency, NCSES conducts nationally representative surveys and publishes objective data and reports on topics related to research and development, the science and engineering workforce, and STEM education. For example, in FY 2024, **Utah** invested **$5,196,000,000** on research and development.

For more information on NSF's impact in your state, please contact NSF Office of Legislative and Public Affairs at congressionalteam@nsf.gov.

LEARN MORE

- **BROUGHT TO YOU BY NSF** – NSF has invested in discoveries, inventions, and innovations that have shaped the modern world, including the internet, 3D printing, American Sign Language, Magnetic Resonance Imaging (MRI), deep sea exploration, Doppler radar and more. For more information on NSF impacts, please visit: nsf.gov/impacts.

- **RESEARCH SECURITY** – NSF is committed to safeguarding the integrity and security of science and engineering while also keeping fundamental research open and collaborative. NSF seeks to address an age of new threats and challenges through close work with our partners in academia, law enforcement, intelligence and other federal agencies. By fostering transparency, disclosure and other practices that reflect the values of research integrity, NSF is helping to lead the way in ensuring taxpayer-funded research remains secure. To learn more, please visit NSF's Research Security website.

- **FOSTERING INNOVATION** – Every year, NSF funds around 400 companies across nearly all technology areas to create prototypes and commercialize technologies. Learn more at seedfund.nsf.gov.