



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](https://www.nsf.gov/75years)

# OHIO

## ● FAST FACTS



**\$200,232,000**

Total NSF Awards to Ohio



**\$179,426,000**

Invested in Fundamental Research in Ohio



**\$20,806,000**

Invested in STEM Education in Ohio



**\$4,681,000**

Invested in Ohio Businesses

## ● TOP NSF-FUNDED ACADEMIC INSTITUTIONS

The Ohio State University  
**\$55,018,000**

University of Cincinnati  
**\$17,842,000**

Case Western Reserve University  
**\$6,391,000**

## ● 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](https://www.nsf.gov)



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

At **The Ohio State University**, the Generation-4 NSF Engineering Research Center for Transformation of American Rubber through Domestic Innovation for Supply Security (NSF TARDISS) leads fundamental research towards U.S. natural rubber biomanufacturing. Currently, the single commercial source of natural rubber is the tropical rubber tree, with production areas all outside of the United States. NSF TARDISS will use a systems engineering approach to integrate engineering with biology, biotechnology, agriculture and other disciplines, optimizing alternative plants to produce entirely new natural rubber materials at scale. The TARDISS team will collaborate with communities, farmers, processors and rubber manufacturers to enable biomanufacturing-based natural rubber production optimized to large parts of the U.S., with a focus on marginal agricultural lands. TARDISS will enable a circular biomanufacturing economy that respects natural systems, including pollinator services by the new domestic crops, water recycling and reuse, additional CO2 capture and an estimated 2 million jobs tied to U.S. soil. Engineering workforce development will provide training in this new U.S. area. The outcomes will be a sustainable domestic rubber industry and a new young workforce converging engineering and agriculture trained through a new American Rubber Academy.

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

An NSF Regional Innovation Engines Development Award, led by **Case Western Reserve University**, focuses on the research-driven discovery, development, translation and commercialization of sustainable manufacturing technologies in energy science, electrochemistry, green steel and chip production, carbon capture and storage/sequestration and utilization, as well as alternatives to petroleum-based plastics, packaging and biodegradable byproducts. The project fills a vital gap in the nation's ecosystem for problem-solving research, manufacturing output, robust supply chain management, livable wage jobs and socio-environmental stewardship. This award is preparing the region for an NSF Engine and vibrant ecosystem that catalyzes innovation, accelerates sustainable technologies' translation and develops a broader, more robust workforce.

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

Welding and materials joining is an essential technology used across numerous industries, including commercial building construction, infrastructure, agricultural equipment manufacturing, automotive manufacturing, oil and gas, shipbuilding, aerospace, energy and metal fabrication. However, enrollment in welding programs has declined, and the welding industry is rapidly evolving, driven by technological advancements from the increased use of robotic welding systems, which offer unparalleled precision efficiency, and consistency, and the integration of artificial intelligence in these systems. With the documented need for highly trained welders, the Weld-Ed Hub, located at the Nord Advanced Technology Center at **Lorain County Community College** and funded through the NSF Advanced Technological Education program, supports welding programs to ensure that industries have the skilled technical welders they need. Weld-Ed provides fundamental and emerging welding technology, industry and education research data, as well as best practice teaching methods, to welding instructors and industry professionals.

### 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, **Ohio** invested **\$16,734,000,000** 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](mailto: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](https://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](https://seedfund.nsf.gov).