National Science Foundation

WYOMING

FY 2022 Fast Facts

$20,097,000
Total NSF Awards to Wyoming

$19,425,000
Invested in Fundamental Research in Wyoming

$672,000
Invested in STEM Education in Wyoming

$914,000
Invested in Wyoming Businesses

Top NSF-funded Academic Institutions for FY 2022

University of Wyoming
$18,832,941

Central Wyoming College
$349,804

NSF By The Numbers

The National Science Foundation (NSF) is a $9.5 billion independent federal agency created by Congress in 1950 to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense. NSF's vital role is to support basic research and researchers who create knowledge that transforms the future.

11K Number of awards NSF funds each year

$9.9B FY 2023 Enacted

39K Proposals evaluated

$1.6B STEM education

1.8K NSF-funded institutions

93% Funds research, education and related activities

352K People NSF supported

258 NSF-funded Nobel Prize winners

Data represents FY 2022 Actuals unless otherwise indicated.

Expanding the Frontiers of Science

Developing novel quantum technologies for future advanced computing has been an urgent need and a technology race worldwide. To maintain economic competitiveness, sustain national security and fuel transformative scientific advancement in a time of rapidly expanding interest and investment in quantum information science and engineering or QISE, relevant education and sustainable workforce development efforts are becoming increasingly critical, particularly in the country's rural regions. The five-year ExpandQISE Track 2 project is designed to develop research and education capacities in the emerging field of QISE at the **University of Wyoming** through close collaboration with Purdue University, where QISE research and education programs have been established. This project contains two essential components: conducting a cutting-edge research project of exploring exotic properties of 2Dquantum materials for next-generation quantum computers; and developing education programs at both undergraduate and graduate levels for future workforce in QISE. This collaborative effort is expected to break the existing barrier, increase participation and build the critical mass of research and education in QISE in Wyoming, thus maintaining its economic competitiveness and fueling transformative scientific advancement.

STEM Education and Broadening Participation

Geospatial Information Science, GIS, is a rapidly growing field of employment for which a significant workforce gap exists in Central Wyoming. There are not enough workforce-ready geospatial employees trained at the technician level to satisfy employment needs in the region. The goal of the Geospatial Technical Education: Bridging Classroom to GIS Technician Careers project is to increase the recruitment, retention and graduation rates of students in GIS at **Central Wyoming College**. The project places specific emphasis on increasing the participation of students from groups underrepresented in GIS with a focus on American Indian students. An overall increase in the number of students participating in the GIS program, combined with innovative scheduling and course formatting will increase student completion rates and help graduate more workforce-ready GIS technicians. The resulting GIS program includes opportunities for field-based research, internships and work experience that enhances student learning and provides economic support to help with program retention and completion. This project is funded by the Advanced Technological Education program, which focuses on the education of technicians for the advanced-technology fields that drive the nation's economy.

Regional Innovation Engines

The NSF Engines program envisions fostering flourishing regional innovation ecosystems across the country, providing a unique opportunity to spur economic growth in regions that have not fully participated in the technology boom of the past few decades. The NSF Engines program uniquely harnesses the nation's science and technology research and development enterprise and regional-level resources. NSF Engines can catalyze robust partnerships rooted in scientific and technological innovation to positively impact the economy within a geographic region, address societal challenges, and advance national competitiveness. Find potential NSF engines in your state.

EPSCoR

COMPETITIVE RESEARCH | Wyoming is one of 28 U.S. states or territories under NSF's Established Program to Stimulate CompetitiveResearch (EPSCoR). Over **$4,340,000** in awards have been made to Wyoming academic institutions through EPSCoR in FY 2022. For more information, visit Wyoming's EPSCoR state web page.

NCSES

According to the National Center for Science and Engineering Statistics (NCSES), which is housed in NSF, 24% of science, engineering and health doctorates conferred in Wyoming are made in engineering. Visit Wyoming's science and engineering state profile to learn more!

44.78%	of **Wyoming's** higher education degrees are concentrated in S&E fields.
3.36%	of **Wyoming's** workforce are employed in S&E occupations.
1.89%	of **Wyoming's** total employment is attributable to knowledge - and technology - intensive industries.

Learn More

CHIPS & SCIENCE – The CHIPS and Science Act's investments in the U.S. National Science Foundation will help the United States remain a global leader in innovation. Implementation of this legislation will be key to ensuring that ideas, talent and prosperity are unleashed across all corners of the nation. For more information, please visit NSF's CHIPS and Science website.

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.

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