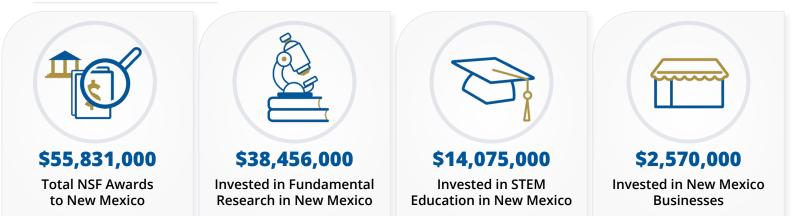


# NEW MEXICO

#### FY 2023 Fast Facts



## • Top NSF-funded Academic Institutions for FY 2023

University of New Mexico \$29,423,000 New Mexico State University \$9,129,000

Navajo Technical University \$4,407,000

### • NSF By The Numbers

The U. S. National Science Foundation (NSF) is an <u>\$9.06 billion</u> 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.

DID YOU KNOW? NSF has funded the work of **261** Nobel Prize winners over 75 years.





# **Expanding the Frontiers of Science**

Recent advancements in material synthesis and nanotechnology have led to the discovery of new materials with superior properties that arise from quantum confinement and electronic interactions, opening the way to the field of quantum materials and attractive prospects to establish new platforms for future high-performance electronics. A new project—funded through the NSF Expanding Capacity in Quantum Information Science and Engineering program and led by the **New Mexico Institute of Mining and Technology** in collaboration with Georgetown University—is exploring light-matter interactions in quantum materials under irradiation with high-intensity optical fields, in conditions where light can change the material properties and create new quantum states on demand. This project combines transformative research with the development of a new education program in quantum materials and technologies at New Mexico Colleges and universities. The research activity, curriculum development and collaboration between institutions provide education and training in quantum materials to Hispanic and other underrepresented minority students at different levels.

## **STEM Education and Broadening Participation**

Through funding from The NSF Tribal Colleges and Universities Program, **Navajo Technical University** is transforming university STEM programs and the landscape of tribal college and university (TCU) postgraduate opportunities through its new Master of Science degree in engineering. In addition to preparing engineers for the technical workforce, this project will provide students with a pathway to complete graduate education and may open more career options in science, technology, engineering and mathematics. A slight boost in the numbers of Native faculty in TCUs and other Native-serving institutions will catalyze significant growth in the interest and success of Native students in engineering disciplines. The Master of Science in engineering program will offer concentrations in electrical and industrial engineering, accompanied by the development of a pedagogical model for graduate education incorporating experiential problem-based learning and Native ways of knowing.



# **Regional Innovation Engines**

NSF Regional Innovation Engines (NSF Engines) Development Awards help organizations create connections and develop their local innovation ecosystem within two years to prepare a strong proposal for becoming a future NSF Engine. **Navajo Technical University** and Arizona State University are collaborating on an award focused on addressing a key void in technology-based economic development: a failure to involve tribal communities in technology transfer and advanced manufacturing. The pilot program is developing distributed manufacturing micro-factories and technology centers in the Navajo Nation, enabling these remote rural tribal communities to participate in emerging supply chain operations in the Southwest's growing space industry.

### EPSCoR

**COMPETITIVE RESEARCH** | New Mexico is one of 28 U.S. states or territories under the <u>NSF Established Program to</u> <u>Stimulate Competitive Research (EPSCoR)</u>. **\$6,597,335** in awards have been made to New Mexico academic institutions through EPSCoR in FY 2023. For more information, visit New Mexico's EPSCoR state web page.

## NCSES

According to the <u>NSF National Center for Science and</u> <u>Engineering Statistics (NCSES)</u>, which is housed in NSF, New Mexico ranks 12th in the nation for federal R&D obligations. <u>Visit New Mexico's science and engineering state profile to</u> <u>learn more!</u>

- **33.86%** of New Mexico's higher education degrees are concentrated in S&E fields.
  - **4.96**\*\* of **New Mexico's** <u>workforce is employed in</u> <u>S&E occupations.</u>
  - **5.57**<sup>w</sup> of **New Mexico's** <u>total employment is</u> <u>attributable to knowledge - and technology -</u> <u>intensive industries.</u>

#### 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 the NSF 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 the NSF Research Security website.

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