U.S. National Science Foundation

NORTH DAKOTA

FY 2023 Fast Facts

$27,134,000
Total NSF Awards to North Dakota

$22,534,000
Invested in Fundamental Research in North Dakota

$4,600,000
Invested in STEM Education in North Dakota

Top NSF-funded Academic Institutions for FY 2023

North Dakota State University	University of North Dakota	United Tribes Technical College
$17,503,000	**$6,343,000**	**$1,617,000**

NSF By The Numbers

The U. S. National Science Foundation (NSF) is an $9.06 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.

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

$9.06B
FY 2024 Total Enacted

93%
Funds research, education and related activities

11K
Awards

1.9K
Institutions

353K
People

**Data represents FY 2023 Actuals unless otherwise indicated*

Expanding the Frontiers of Science

Tribal communities often consist of rural, spread-out populations with distributed, smaller-scale power, heat and fuel energy systems that are less reliable and may be less resilient to effects related to climate change. To address this issue, and to strengthen the research infrastructure of the North Dakota and Kansas Established Program to Stimulate Competitive Research (EPSCoR) jurisdictions, the **University of North Dakota** is leading an NSF Research Infrastructure Improvement Track-2 Focused EPSCoR collaboration award to research technologies and methods to provide sustainable, reliable and efficient engineering infrastructures and solutions for tribal energy sovereignty. The collaboration is exploring an inter-related suite of technologies to provide potential solutions for tribal communities, including photovoltaic-thermal systems for both heat and power and the production of renewable fuels and power from waste materials (for example, plastics) and non-food agricultural resources. The collaboration is also developing educational activities to train tribal members to develop tribal nation workforces and expand their technical capacity.

STEM Education and Broadening Participation

Through funding from The NSF Tribal Colleges and Universities Program (TCUP), **United Tribes Technical College (UTTC)** is transforming its science, technology, engineering and mathematics programs through a comprehensive project focusing on enhanced recruitment, retention and completion of students in fisheries and wildlife biology. The goals of this ,project are to: (1) increase interest in and readiness for postsecondary STEM studies at UTTC; (2) establish a fisheries and wildlife Bachelor of Science degree emphasizing instructional transformation, research integration, cultural congruency and workforce pathways; and (3) increase STEM faculty development and community engagement. By building upon tested STEM education models and creating new methods for integrating research and culture throughout degree programs, the project will have significant impact institutionally and will provide models for broad dissemination. The program fosters an inclusive and culturally congruent environment that supports critical transition points from high school to college and into the workforce.

Regional Innovation Engines

NSF Regional Innovation Engines (NSF Engines) represent one of the single largest broad investments in place-based research and development in the nation's history, uniquely placing science and technology leadership as the central driver for regional economic competitiveness. The **NSF Engine: North Dakota Advanced Agriculture Technology Engine**, led by **North Dakota State University**, aims to create resilient and secure food systems in North Dakota by combining advanced genomics, climate modeling, nanoscale sensors and computer networks to monitor and improve the growth of crops via strong networks of stakeholders across the state—including bringing tribal, rural and farming communities into the process of co-creating a blueprint for the future of agriculture and workforce development. Additionally, an NSF Engines Development Award led by the **University of North Dakota** is supporting a comprehensive ecosystem to advance autonomous systems in North Dakota, South Dakota, Montana and Idaho. The project partners develop and field autonomous systems in critical sectors, including transportation, agriculture, mining, energy, defense and health care.

EPSCoR

COMPETITIVE RESEARCH | North Dakota is one of 28 U.S. states or territories under the NSF Established Program to Stimulate Competitive Research (EPSCoR). **$9,399,591** in awards have been made to North Dakota academic institutions through EPSCoR in FY 2023. For more information, visit North Dakota's EPSCoR state web page.

NCSES

According to the NSF National Center for Science and Engineering Statistics (NCSES), which is housed in NSF, 38% of science, engineering and health doctorates conferred in North Dakota are made in life sciences. Visit North Dakota's science and engineering state profile to learn more!

27.47% of **North Dakota's** higher education degrees are concentrated in S&E fields.

3.17% of **North Dakota's** workforce is employed in S&E occupations.

3.85% of **North Dakota'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 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 congressionalteam@nsf.gov.