

# SOUTH DAKOTA

# FY 2022 Fast Facts

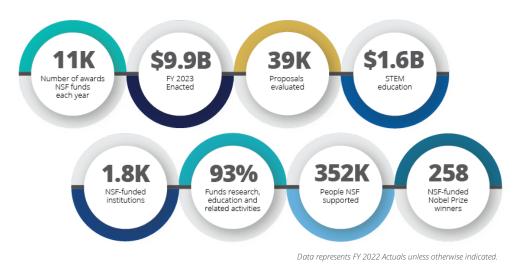


# **Top NSF-funded Academic Institutions for FY 2022**



# **NSF By The Numbers**

The National Science Foundation (NSF) is a <u>\$9.5 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.





#### **Expanding the Frontiers of Science**

The South Dakota Research & Education Data Interchange project, or SD-REDI, funded through NSF's Office of Advanced Cyberinfrastructure and EPSCoR program, creates a statewide friction-free network for high-speed access to advanced computing and data storage resources from all public higher education institutions in South Dakota. The project seeks to connect a broad set of constituent schools to a secure, high-performance science DMZ regional network across South Dakota. Led by a cross-institutional team of technology and research leaders at the **University of South Dakota**, **South Dakota State University**, and **Dakota State University**, SD-REDI creates a structure of opportunity to accelerate the adoption and utilization of advanced cyberinfrastructure and elevate STEM research and education productivity throughout the state. The project will cultivate a workforce literate in cyberinfrastructure and advanced digital resources for science, technology, engineering and mathematics and support streamlined end-to-end distance learning experiences for STEM education. The project also supports an emerging model in which South Dakota State University and the University of South Dakota serve as formal cyberinfrastructure providers for researchers and other constituents throughout South Dakota's public higher education system.

## **STEM Education and Broadening Participation**

A goal of NSF's Tribal Colleges and Universities Program, or TCUP, is to increase the STEM instructional and research capacities of specific institutions of higher education that serve the nation's Indigenous students. Expanding the STEM curricular offerings at these institutions expands the opportunities for students to pursue rewarding careers in STEM fields, provides for research studies in areas that may be culturally significant, and encourages a community and generational appreciation for science and mathematics education. This TCUP project at **Sisseton Wahpeton College** aligns directly with that goal, and moreover may serve as a model and impetus for similar institutions of higher education to develop degree programs in the behavioral sciences. This project provides an accredited STEM Bachelor of Science degree option in the behavioral sciences at SWC for students who may then transfer to a local university for graduate studies or be prepared for employment at local, particularly tribal, service organizations. The project builds on a well-established associate degree in behavioral sciences, which has been a popular degree choice for SWC students. Strengthening mathematics and language arts supports student success in many programs of study, not only those in STEM. This project also increases the number of the nation's tribal colleges that offer accredited BS degrees.

## **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** | South Dakota is one of 28 U.S. states or territories under <u>NSF's Established</u> <u>Program to Stimulate Competitive Research (EPSCOR)</u>. Over **\$14,260,000** in awards have been made to South Dakota academic institutions through EPSCOR in FY 2022. For more information, <u>visit South Dakota's</u> <u>EPSCOR state web page.</u>

## NCSES

According to the <u>National Center for Science and</u> <u>Engineering Statistics (NCSES)</u>, which is housed in NSF, 43% of science, engineering and health doctorates conferred in South Dakota are made in life sciences. Visit South Dakota's science and engineering state profile to learn more!

32.75%	of <b>South Dakota's</b> <u>higher education</u> <u>degrees are concentrated in S&amp;E fields.</u>
3.8%	of <b>South Dakota's</b> workforce are employed in S&E occupations.
5.42%	of <b>South Dakota's</b> <u>total employment</u> <u>is attributable to knowledge - and</u> <u>technology - 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 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 <u>congressionalteam@nsf.gov</u>.

