National Science Foundation

ALASKA

FY 2022 Fast Facts

$52,216,000
Total NSF Awards to Alaska

$50,021,000
Invested in Fundamental Research in Alaska

$2,195,000
Invested in STEM Education in Alaska

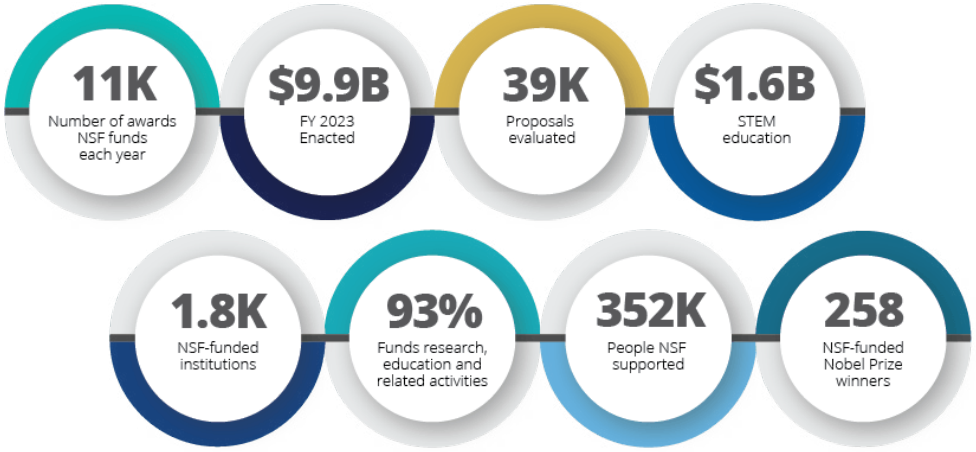
$969,000
Invested in Alaska Businesses

Top NSF-funded Academic Institutions for FY 2022

University of Alaska Fairbanks	University of Alaska Anchorage	Alaska Pacific University
$40,784,473	$4,032,818	$916,096

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.



Data represents FY 2022 Actuals unless otherwise indicated.

Expanding the Frontiers of Science

In recent years, Alaska has witnessed high-intensity wildfires that often grow to tens or hundreds of thousand acres within days, both in remote, sparsely populated rural areas and close to population centers. Wildfires are projected to increase due to climate change and present new and emerging risks to Alaskan energy infrastructure and communities needing electricity for daily life and health services. The NSF-funded FIREWALL project, led by researchers at the **University of Alaska Anchorage**, advances knowledge of how elements of the natural environment, energy infrastructure and social systems interact before, during and following wildfires, and how to enable a collaborative framework for decision-making and communication among stakeholders to reduce wildfire risks faced by communities and electric utilities. The FIREWALL project team develops a risk-informed decision-making platform that is evaluated in a range of short-term and long-term use cases for the electric utilities, forestry managers and emergency responders under different fire regimes and is tested in several wildfire-prone geographical zones in Alaska. The project bridges the gap between social and environmental challenges using community-in-the-loop engineering solutions for wildfire resilience and provides Arctic residents with numerous educational opportunities.

STEM Education and Broadening Participation

Through NSF's Scholarships in Science, Technology, Engineering and Mathematics program, the **University of Alaska Southeast** is addressing the national need for skilled scientists and mathematicians by increasing the recruitment, retention and graduation of academically talented, low-income rural and Alaska Native students. Through this NSF-funded project, the university provides scholarships to undergraduates pursuing bachelor's degrees in biology, marine biology, fisheries, environmental science and mathematics. First-year scholars receive up to four years of scholarship support and transfer scholars receive up to two years of support. The program also plans to improve scholars' use of student support services to increase their likelihood of STEM degree completion and career success.

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 | Alaska is one of 28 U.S. states or territories under NSF's Established Program to Stimulate Competitive Research (EPSCoR). Over **$4,500,000** in awards have been made to Alaska academic institutions through EPSCoR in FY 2022. For more information, visit Alaska's EPSCoR state web page.

NCSES

According to the National Center for Science and Engineering Statistics (NCSES), which is housed in NSF, 42% of science, engineering and health doctorates conferred in Alaska are made in life sciences. Visit Alaska's science and engineering state profile to learn more!

30.86%	of **Alaska's** higher education degrees are concentrated in S&E fields.
4.7%	of **Alaska's** workforce are employed in S&E occupations.
1.54%	of **Alaska'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.