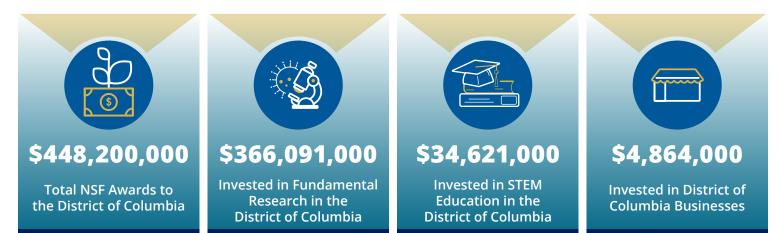


# DISTRICT OF COLUMBIA

# FY 2022 Fast Facts

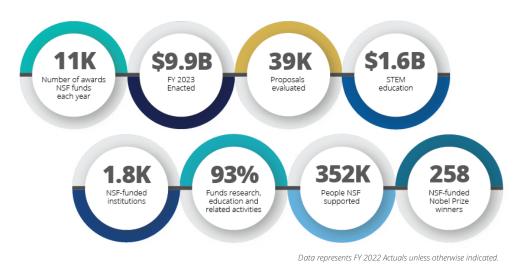


# **Top NSF-funded Academic Institutions for FY 2022**



# **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**

With support from NSF's Industry-University Cooperative Research Centers program, the Center for Science, Management, Applications, Regulation, and Training — Cyber SMART — at **Georgetown University** is one of the first IUCRCs to strategically combine computer science and related social and economic sciences, and behavioral and cognitive sciences programs to cyber research. This multidisciplinary approach enables better understanding by industry, educators, students and government of the impact of cyber, opening significant new and underutilized avenues of enquiry. The center's unique skill set significantly increases the depth and breadth of research available to organizations, the research and education opportunities available to academics and students in a range of disciplines and informs policy, standards and regulation. Cyber SMART's computer science expertise covers distributed ledger technology and standards, secure information systems, artificial intelligence, including neuroscience and neurotech, cybersecurity and secure communications, quantum computing, finance, economics, business management, digital identity, cyber law and regulation, policy, psychology and ethics. The center is uniquely positioned to produce research that comprehensively addresses the consequences of increased digitization. In broader impact, the center's work will benefit industry, individuals who use products and services, educators and scholars, regulators and society in general.

#### **STEM Education and Broadening Participation**

NSF's Historically Black Colleges and Universities Undergraduate Program, or HBCU-UP, has identified research in broadening participation in STEM as a priority and has committed to funding innovative models to enhance the understanding of barriers that hinder inclusivity in STEM. With support from HBCU-UP, **Howard University** and a consortium of schools are developing theoretical models that pertain to research on identity and motivation of African American students in STEM fields. The project is uniquely poised to transform current psychology theories on STEM learning while engaging participants from a minimum of 30 HBCUs, thereby giving voice to the diverse contexts that may enhance our understanding of STEM learning and STEM pedagogy.



# **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.

#### Infrastructure

The Center for Nanotechnology Research and Education at the **University of the District of Columbia** is part of the NSF CREST, Centers of Research Excellence in Science and Technology, program aimed at enhancing the research capabilities of minority-serving institutions through centers that effectively integrate research and education. The center focuses on emerging nanotechnology areas of computer technology, advanced manufacturing and thermal energy transport.

#### NCSES

According to the <u>National Center for Science and</u> <u>Engineering Statistics (NCSES)</u>, which is housed in NSF, the District of Columbia ranks 3rd in the nation for federal R&D obligations. Visit District of Columbia's science and engineering state profile to learn more!

41.47%	of the <b>District of Columbia's</b> higher
	education degrees are concentrated in S&E fields.

**11.25%** of the **District of Columbia's** <u>workforce</u> <u>are employed in S&E occupations.</u>

**6.93%** of the **District of Columbia'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 <u>congressionalteam@nsf.gov</u>.