

# Funding Opportunities

## Relevant Programs for Funding Opportunities

- Engineering for Civil Infrastructure (ECI)
- Humans, Disasters, and the Built Environment (HDBE)
- Civil Infrastructure Systems (CIS)
- Leading Engineering for America's Prosperity, Health, and Infrastructure (LEAP HI)
- Prediction of and Resilience against Extreme Events (PREEVENTS)
- Other [e.g. Fluid Dynamics, SBIR, Smart and Connected Communities (S&CC); Critical Resilient Interdependent Infrastructure Systems and Processes (CRISP 2.0)]

## Funding Opportunities



### Engineering for Civil Infrastructure (ECI) - [LINK](#)

- This program supports fundamental research that will shape the future of our nation's constructed civil infrastructure, subjected to and interacting with the natural environment, to meet the needs of humans.
- The ECI program focuses on the physical infrastructure, such as the soil-foundation-structure-envelope-nonstructural building system; geo-structures; and underground facilities.
- PIs are encouraged to leverage NSF's investments in the national experimental facilities of the NHERI program.

#### Full Proposal Window for ECI

September 1, 2018 - September 17, 2018

January 10, 2019 - January 24, 2019

## Funding Opportunities



### Humans, Disasters, and the Built Environment (HD BE) - [LINK](#)

- This program supports fundamental, multidisciplinary research on the interactions between humans and the built environment within and among communities exposed to natural, technological and other types of hazards and disasters.
- The program's context is provided by ongoing and emerging changes in three interwoven elements of a community: its population, its built environment (critical infrastructures, physical and virtual spaces, and buildings and related structures) and the hazards and disasters to which it is exposed.

#### Full Proposal Window for HD BE

September 1, 2018 - September 17, 2018

January 10, 2019 - January 24, 2019

## Funding Opportunities

### Civil Infrastructure Systems (CIS) - [LINK](#)

- This program supports fundamental and innovative research in the design, operation and management of civil infrastructure that contributes to creating smart, sustainable and resilient communities at local, national and international scales.
- The focus is on civil infrastructure as a system in which interactions between spatially- and functionally- distributed components and intersystem connections exist. All critical civil infrastructure systems are of interest, including transportation, power, water, pipelines and others.

#### Full Proposal Window for CIS

September 1, 2018 - September 17, 2018

January 10, 2019 - January 24, 2019

## Funding Opportunities

### Leading Engineering for America's Prosperity, Health, and Infrastructure (LEAP HI) - [LINK](#)

- Address demanding, urgent, and consequential challenges for advancing America's prosperity, health and infrastructure.
- Confront engineering problems that are too complex to yield to the efforts of a single PI (problems that require sustained and coordinated effort from interdisciplinary research teams, with goals that are not achievable through a series of smaller, short-term projects).
- LEAP HI projects perform fundamental research that may lead to disruptive technologies and methods, lay the foundation for new and strengthened industries, enable notable improvements in quality of life, or reimagine and revitalize the built environment

#### Full Proposal Window for LEAP HI

LOI: July 16, 2018

September 1, 2018 - September 17, 2018

## Funding Opportunities

### Prediction of and Resilience against Extreme Events (PREEVENTS) - [LINK](#)

- This program supports projects that:
  - enhance understanding of the fundamental processes underlying natural hazards and extreme events on various spatial and temporal scales, as well as the variability inherent in such hazards and events
  - improve our capability to model and forecast such hazards and events

#### Full Proposal Window for PREEVENTS

LOI (Track 2): July 27, 2018

September 18, 2018 (Track 2)

## Funding Opportunities

### Fluid Dynamics - [LINK](#)

- Supports fundamental research toward gaining an understanding of the physics of various fluid dynamics phenomenon.
- Proposed research should contribute to basic scientific understanding via experiments, theoretical developments, and computational discovery.
- Encouraged are proposals that focus on high Reynolds number turbulence scaling and modeling.
- Major areas of interest: *Turbulence and Transition (high Re experiments; LES; direct numerical simulation; transition to turbulence; 3-D boundary layers; separated flows; multi-phase turbulent flows; flow control and drag reduction); Bio-inspired Fluid Mechanics (FSI); Wind and Ocean Energy Harvesting (fundamental fluid dynamics phenomena associated with renewal energy).*

#### Full Proposal Window

October 1, 2018 - October 22, 2018

## Funding Opportunities

### Environmental Sustainability - [LINK](#)

- Promote sustainable engineered systems that support human well-being and that are also compatible with sustaining natural (environmental) systems
- Four principal general research areas that are supported:
  - Industrial Ecology
  - Green Engineering (green buildings and infrastructure)
  - Ecological Engineering
  - Earth Systems Engineering

#### Full Proposal Window

October 1, 2018 - October 22, 2018

## Funding Opportunities

### Small Business Innovation Research Program Phase I (SBIR) - [LINK](#) Small Business Technology Transfer Program Phase I (STTR)

- Also known as America's Seed Fund.
- Provides small businesses with equity-free funding to conduct research and development (R&D) work.
- Seeks innovative proposals that show promise of commercial and societal impact.
- Recently funded project that will use WOW EF: [LINK](#)

#### Full Proposal Window for SBIR

June 14, 2018

## Funding Opportunities

### Smart and Connected Communities (S&CC) – [LINK](#)

March 07, 2018

### Critical Resilient Interdependent Infrastructure Systems and Processes (CRISP 2.0) - [LINK](#)

February 28, 2018

## Q&A Session