



Navigating the New Arctic (NNA) NSF 19-511

NNA tackles convergent scientific challenges in the rapidly changing Arctic, that are needed to inform the economy, security and resilience of the Nation, the larger region and the globe.

Image from the NSF-funded Polar Geospatial Center



One of NSF's Ten Big Ideas

Arctic change will fundamentally alter climate, weather and ecosystems globally in ways that we do not yet understand but that will have profound impacts on the world's economy and security. Rapid loss of Arctic sea ice and other changes will also bring new access to the Arctic's natural resources such as fossil fuels, minerals, and new fisheries, and this new access is already attracting international attention from industry and nations seeking new resources.

2016 Arctic sea ice summer minimum

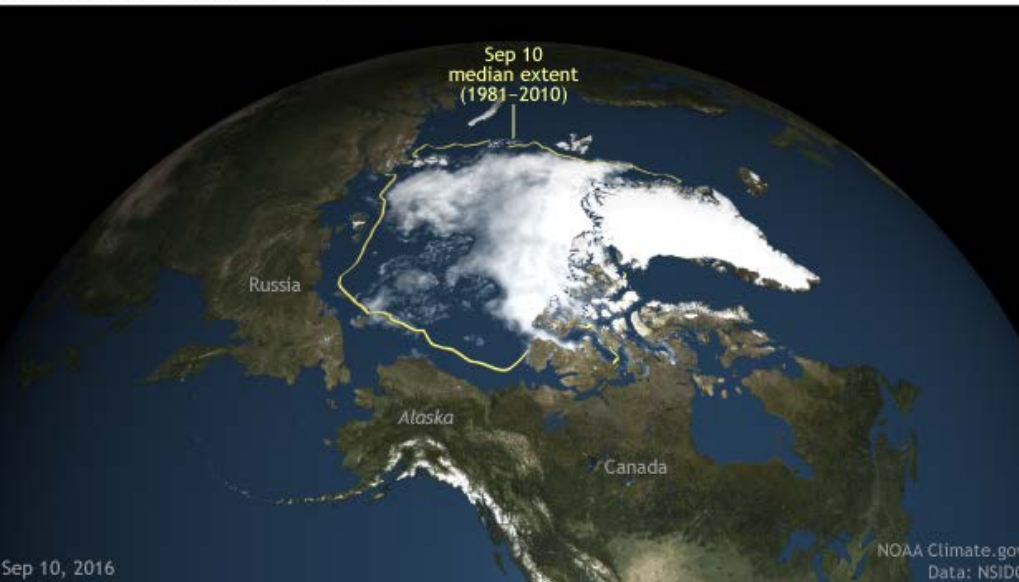
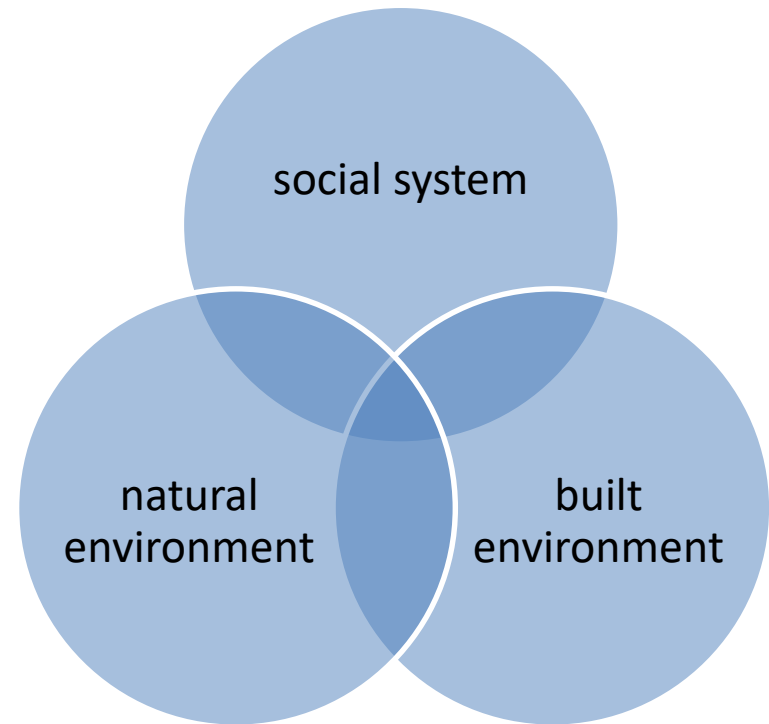


Photo by Pete Souza



- Improved understanding of Arctic change and its **local and global** effects that capitalize on innovative and optimized observation infrastructure, advances in understanding of fundamental processes, and new approaches to modeling **interactions among the natural environment, built environment, and social systems**.
- New, enhanced research communities that are **diverse, integrative, and well-positioned** to carry out productive research at the intersections of Arctic natural and built environments and social systems.
- Research outcomes that inform U.S. **national security and economic development needs** and **enable resilient, sustainable Arctic communities**.

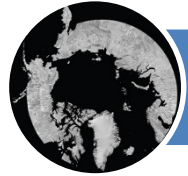
Major goals of NSF's NNA Big Idea



NNA Key Components



Innovate Arctic Observing



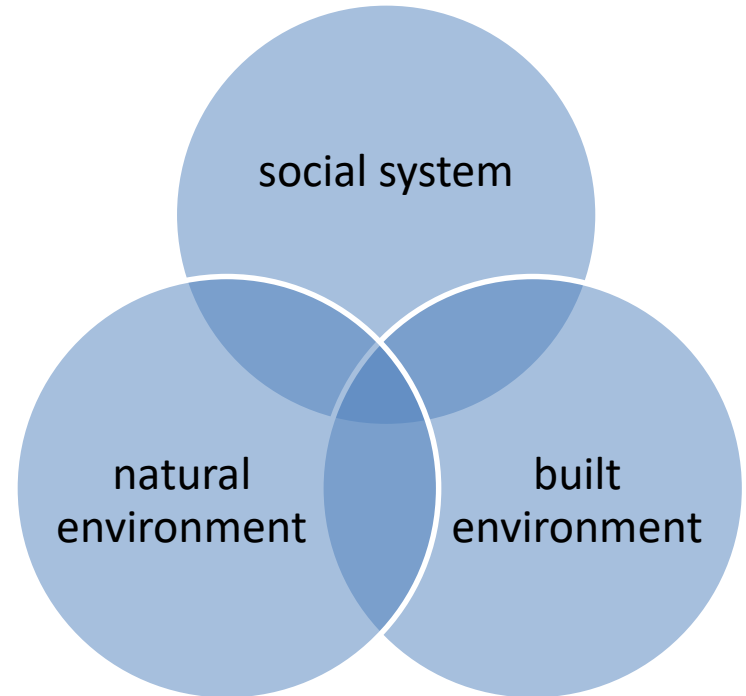
Advance Research and Modeling



Co-Produce Knowledge



Build and Enable Partnerships



This solicitation
will consider
proposals for two
sizes of projects:

Track 1: Research Grants with a budget of no more than \$3,000,000 and a maximum duration of 5 years.

Track 2: Planning Grants with a total budget of no more than \$250,000 and a maximum duration of 24 months.

NSF anticipates a portfolio of awards with a range of budgets and durations up to these maxima.

Full Proposal Deadline Date: February 14, 2019



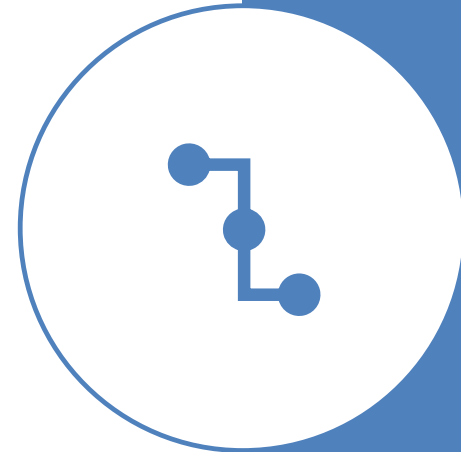
Track 1 – Research Grants

- Far-reaching, creative proposals for fundamental research that tackles ***convergent scientific and engineering challenges*** related to the rapidly changing Arctic.
- Proposals must address question(s) at the ***intersection between at least two*** of the following: the natural environment, the built environment, and social systems.
- Proposals also must have a ***strong connection to real-world needs*** of the changing Arctic or its global impact with clear evidence of appropriate expertise within the investigative team.

Track 2 – Planning Grants

Help crystallize the research questions for a future high-impact project that will address NNA's major goals and help to strengthen the following four elements:

- **Integrated research** across all three systems – the natural and built environments and social systems
- Stakeholder and community **engagement**
- Research **capacity-building**
- Development, implementation, and/or evaluation of **educational activities**





Thank You

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