

What is EPSCoR?

NSF EPSCoR

The National Science Foundation Established Program to Stimulate Competitive Research (NSF EPSCoR) is a nationwide research and outreach program established by Congress in 1978. Through EPSCoR, the NSF provides additional support to states and territories that receive smaller amounts of NSF funding. 27 states and territories currently meet this criteria. Funding programs (see timeline below) include:

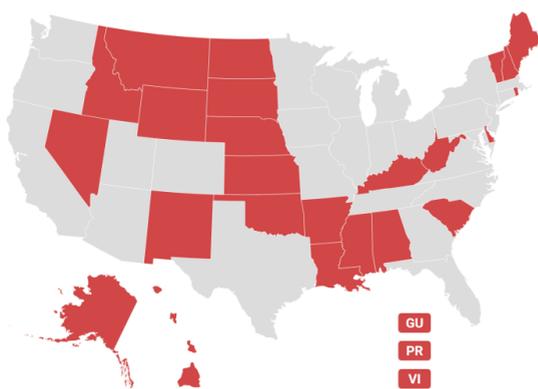
Track-1 awards support large-scale, complex research and outreach programs within a single EPSCoR jurisdiction.

Track-2 awards go to teams of researchers from multiple EPSCoR jurisdictions working on a single project.

Track-3 awards were given to projects by EPSCoR jurisdictions to broaden participation of underrepresented groups in STEM.

Track-4 awards fund researchers in EPSCoR jurisdictions to undertake collaborations with major research centers.

RII-C2 awards funded cyberconnectivity improvements in EPSCoR jurisdictions.



Current EPSCoR states and territories.

Track-1 Projects

Fire and Ice (2018–23) examines the causes and impacts of changes to two key Alaskan ecological systems. A Boreal Fires research team is identifying climate drivers relevant to fire weather, using hyperspectral sensing to better map and measure fuel condition and active fire behavior, and conducting social science research into fire management and impacts of fire to ecosystem services. A Coastal Margins research team is studying how climate change is altering material flux across the Gulf of Alaska coastal margin and influencing nearshore biological communities.



UAF M.S. student Ben Meyer collects samples of juvenile salmon in the Kenai River watershed.

Alaska ACE (2012–present) conducts biological, physical and social research into the capacity of Alaskan communities to adapt to environmental and social changes. The project is organized around regional test cases in Berners Bay, near Juneau; in the Kenai River watershed; and around the North Slope village of Nuiqsut. Research includes new sensors and mapping to monitor biophysical changes, coupled with social science approaches to measure community responses.

Impacts to Alaska

Funding: About \$50 million in major NSF EPSCoR funding has leveraged about \$160 million in funds from other sources.

Personnel: Alaska NSF EPSCoR has hired 31 UA faculty members; funded almost 50 postdocs, more than 300 graduate students and more than 250 undergraduates; and supported hundreds of UA researchers.

Infrastructure: Recent improvements include sensor networks in Berners Bay and the Kenai Peninsula; upgrades to UA connectivity and supercomputing; new online catalogs for research data; and the Vis Space visualization theater at UAF.

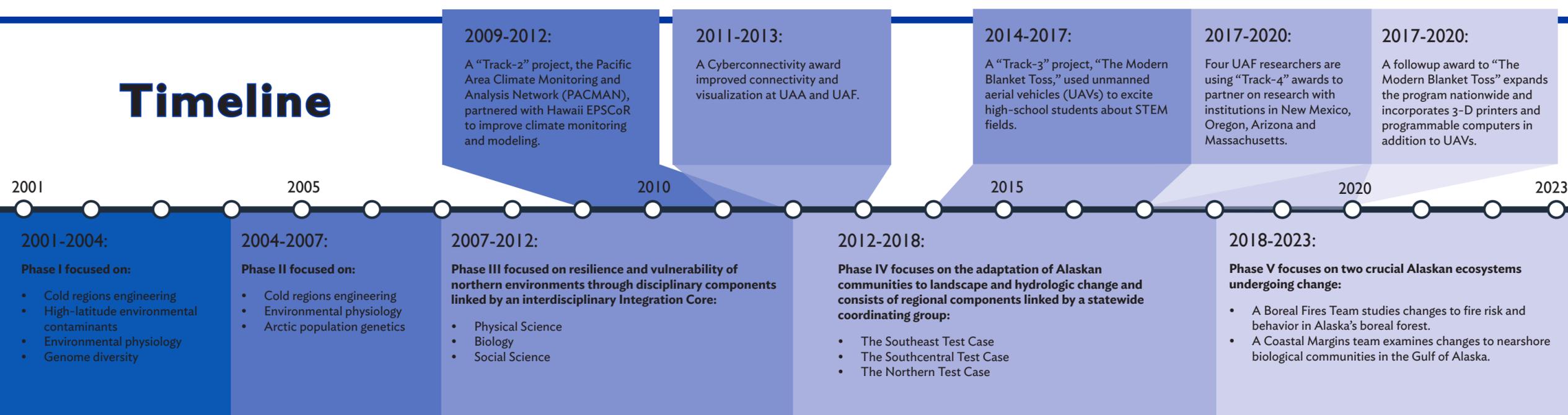
Institutional Culture: Alaska NSF EPSCoR has raised the profile of University of Alaska research, catalyzed support for increased UA social-ecological and interdisciplinary science and outreach, and bolstered research capacity across the UA system.

Results: Alaska NSF EPSCoR researchers have authored more than 600 academic publications.



ACE Northern Test Case lead Gary Kofinas introduces a workshop with members of the Kuukpik Corporation Board of Directors in the Vis Space in June 2017.

Timeline



www.alaska.edu/epscor



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