

NSF 25-546

Solicitation Webinar

Foundations for Operating the National Artificial Intelligence Research
Resource: the NAIRR Operations Center (NAIRR-OC)

Program Contacts:

Alejandro Suarez nairr-oc@nsf.gov

Sharon Geva nairr-oc@nsf.gov

Letter of Intent Deadline:
December 15, 2025

Full Proposal Deadline:
February 4, 2026

**Office of Advanced Cyberinfrastructure
(OAC) September 23, 2025**



Webinar Goals

- Present the NAIRR vision and the progress of the NAIRR Pilot
- Orient potential proposers on the NAIRR-OC program
- Describe the current solicitation (NSF 25-546)
- Answer questions from attendees
 - **Send Webinar Questions to us via Q&A function in Zoom.**
- A recording of this webinar will be available on the event page website



National AI Research Resource (NAIRR) – An infrastructure to drive US AI innovation, discovery, and national competitiveness

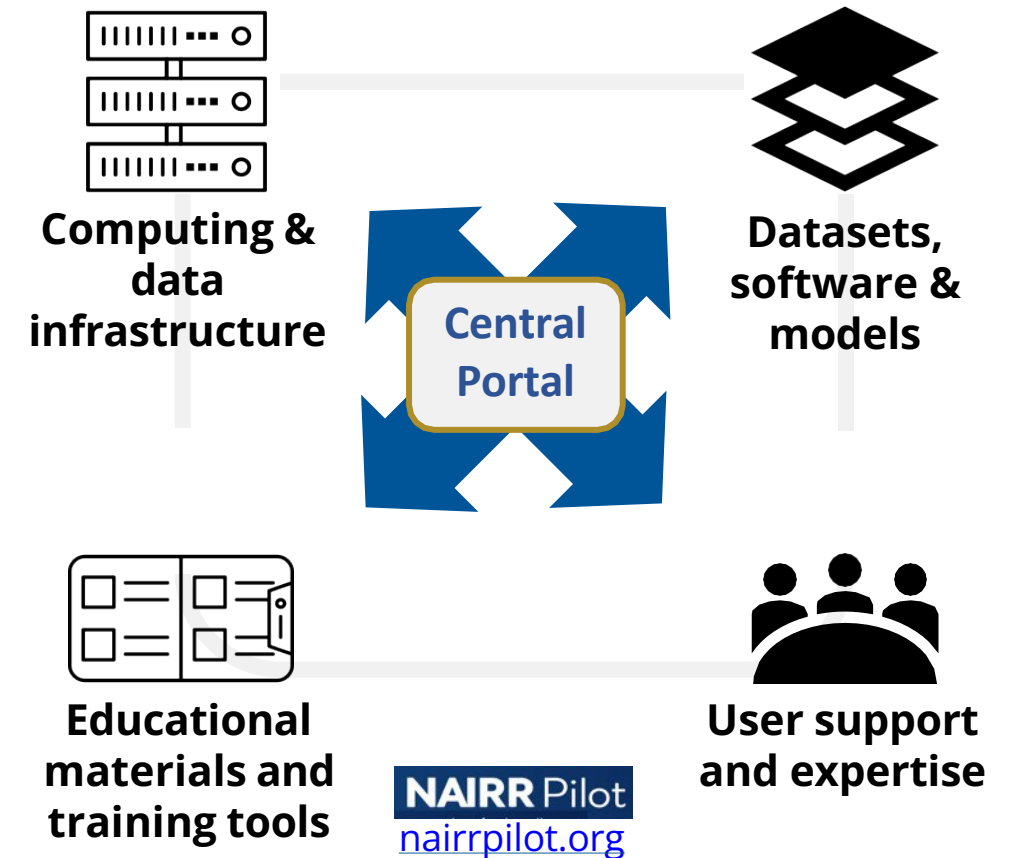
The challenge: To sustain US global AI leadership and unlock AI opportunity across society we need:

- A skilled AI workforce; and
- To continue driving fundamental innovations

The opportunity: Build a competitive AI ecosystem by enabling all researchers and educators across the country to:

- Drive national and regional AI innovation across sectors to spark new solutions, products, businesses and jobs; and
- Train the AI workforce of the future

NAIRR Architecture



Pilot @ 18 months:

Built the key foundations needed for a scalable NAIRR



**Establish strong
govt-industry
partnership**

**In-kind contributions
of most advanced
resources**

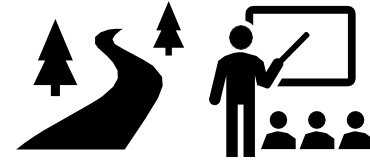
Result
s

14 agencies
28 industry and non-
profit partners



**Integrate & deliver
contributed
resources**

**Establish single
access point for US
researchers.**



**Expand education & AI
resource
training pathways**

**Launch NAIRR
Classroom,
extended reach,
build community**

Integrated support &
training programs w/
public & private
partners



**Lay foundations for
scalable NAIRR
operations**

**Assess gaps, build
out operations and
data infrastructure**

Winning the Race
**AMERICA'S
AI ACTION PLAN**
**Operating Center
solicitation**



Key Overarching Goals of the NAIRR

- Accelerate AI and AI-powered discovery and innovation.
- Expand the AI workforce and train the next generation of AI researchers and educators.
- Increase capacity, integration, and use of world-class public and private-sector AI resources.
- Advance AI interpretability, security, and trust.



Solicitation Scope

- Seeks to establish a community-based organization that will be responsible for the foundational visioning, coordination, operations, and development activities in support of an integrated national infrastructure for AI research and education.
- Advance the National Artificial Intelligence Research Resource (NAIRR) vision for a public-private partnership to accelerate AI innovation and national competitiveness.
- This solicitation seeks to fund **one** award at **up to \$35M over a period of up to five years.**
- The awardee must work closely with the NSF NAIRR Program Management Office (PMO)



Solicitation Scope

The successful Awardee will be responsible for:

- Organizational leadership
 - Leadership Team
 - Stakeholder Engagement
 - Communications
 - Operational Metrics
- Building NAIRR capabilities and community
 - NAIRR Portal
 - Integration of Data, Models, and Tools
 - Outreach, User Engagement, and Requirements Gathering
- Interfacing with Pilot Operations
 - With plans to incorporate such operations in future project years



Organizational Leadership

- Leadership Team Organizational Structure
- Stakeholder Engagement
- Communications
- Metrics



Leadership Team

- This solicitation **requires** that the Principal Investigator (PI) of the award serve as the NAIRR-OC Director.
- If awarded, the NAIRR-OC Director **must** devote the majority (>50%) of their time* to the position and oversee a leadership team that encompasses the broad set of skills necessary to manage the breadth of NAIRR-OC functions.

* Note guidance on the proposal's Budget and Budget Justification



Leadership Team cont.

- The proposal shall identify co-PIs and/or senior personnel who will work closely with the NAIRR-OC Director and **make up the NAIRR-OC leadership team.**
- The leadership team shall be affiliated with a single submitting organization to the maximum extent possible.
- If a skill set gap exists within the submitting institution, leadership from **one** additional institution may be added.



Leadership Team cont.

- Proposals that include substantial use of sub-awarded partners or affiliate appointments ***at the leadership level*** will be considered contrary to the stated goals of the NAIRR-OC.



Leadership Team cont.

- The PI and leadership team shall collectively demonstrate skills and experience consistent with leading a high-visibility national activity with technical operational components.



Leadership Team Experience (not exhaustive)

- Demonstrated experience with management and coordination of high-level partnerships and collaborative initiatives involving the private and non-profit sectors;
- Demonstrated experience interacting with and convening scientific communities, -- including emerging communities, both in fundamental AI research and in disciplinary research benefiting from AI infrastructure;
- Technical expertise with AI research and the required cutting-edge technology, infrastructure, skills, and tools;
- Data infrastructure skills in support of AI workflows; and
- Cybersecurity and research security experience necessary to establish appropriate requirements for the NAIRR, its resources, and its userbase.



Leadership Team cont.

- Note the following Solicitation Specific Review Criteria relating to the leadership team:

To what extent does the proposed leadership team have the demonstrated strategic, operational and leadership experience to successfully establish and execute to the proposed vision and plan and accomplish the NAIRR-OC scope of responsibilities and activities described in the Program Description?

To what extent does the proposal describe the roles and responsibilities of the named individuals and will each of the leadership team members have adequate time to dedicate to the NAIRR-OC?



Stakeholder Engagement

- Stakeholder groups that will be engaged by the NAIRR-OC include, but are not limited to:
 - federally supported Resource Providers to the NAIRR;
 - private sector partners and associated Resource Providers; and
 - a User Forum representing the NAIRR userbase.
- See solicitation for more detail on engaging with resource providers and a User Forum.



Communications

- The NAIRR-OC shall serve as the "voice" of the NAIRR to the public, existing and prospective users, as well as other relevant stakeholders.
- See solicitation for expected communication activities.



Metrics and Outcomes for Operational Success

- The awardee shall develop and maintain a set of operational metrics and outcomes of the NAIRR-OC strategically tied to the four key goals of the NAIRR.
- See solicitation for some (non-exhaustive) examples of activity metrics and longer-term outcomes.
- NSF expects the development of operational success metrics and tracking of outcomes over time to be a significant activity for the NAIRR-OC.



Building Community and Capacity

- NAIRR Portal
- Integration of Data, Models, and Tools
- Outreach, User Engagement, and Requirements Gathering



The NAIRR Portal

- The NAIRR-OC is expected to develop and operate (via the submitting organization or via a contract/sub-award) a NAIRR Portal that will be the landing page and "one stop shop" for all communities interested in the NAIRR and NAIRR services.
- This Portal will replace the NAIRR *Pilot* portal with the new portal once developed.
- See solicitation for expected NAIRR Portal development activities.
- **Milestone:** smooth and well-communicated transition from Pilot portal to NAIRR Portal within first 12 months of award



Integration of Data, Models, and Tools

- The NAIRR-OC will be uniquely positioned to inform the vision for NAIRR data infrastructure, including understanding user requirements and usage modes; findability and accessibility of existing datasets and data repositories; related models, tools, and services; and more.
- See solicitation for initial areas of data and data infrastructure for which the NAIRR-OC will be responsible.



Outreach, User engagement, and Requirements gathering

- Continuous engagement with the researcher and educator communities shall be critical components of the NAIRR-OC's responsibilities.
- See solicitation for expected engagement activities.



Interfacing with NAIRR Pilot Operations

- The NAIRR-OC shall initially be responsible for interfacing with **existing separately supported** NAIRR Pilot operational teams.
- Currently, several NAIRR Pilot operations teams coordinate closely with the NAIRR PMO and with each other to fulfill NAIRR Pilot operational roles.



Current NAIRR Pilot Operations

- The *existing separately supported* NAIRR Pilot operational teams include:
- NAIRR *Pilot* Portal activities – providing the primary web presence of the NAIRR Pilot (<http://nairrpilot.org>)
- Communications and Outreach activities – reaching new and prospective users through webinars and newsletters
- Opportunities, allocations, user support, metrics collection, and other core NAIRR Pilot Activities – coordination services for integrating and allocating existing NAIRR resources

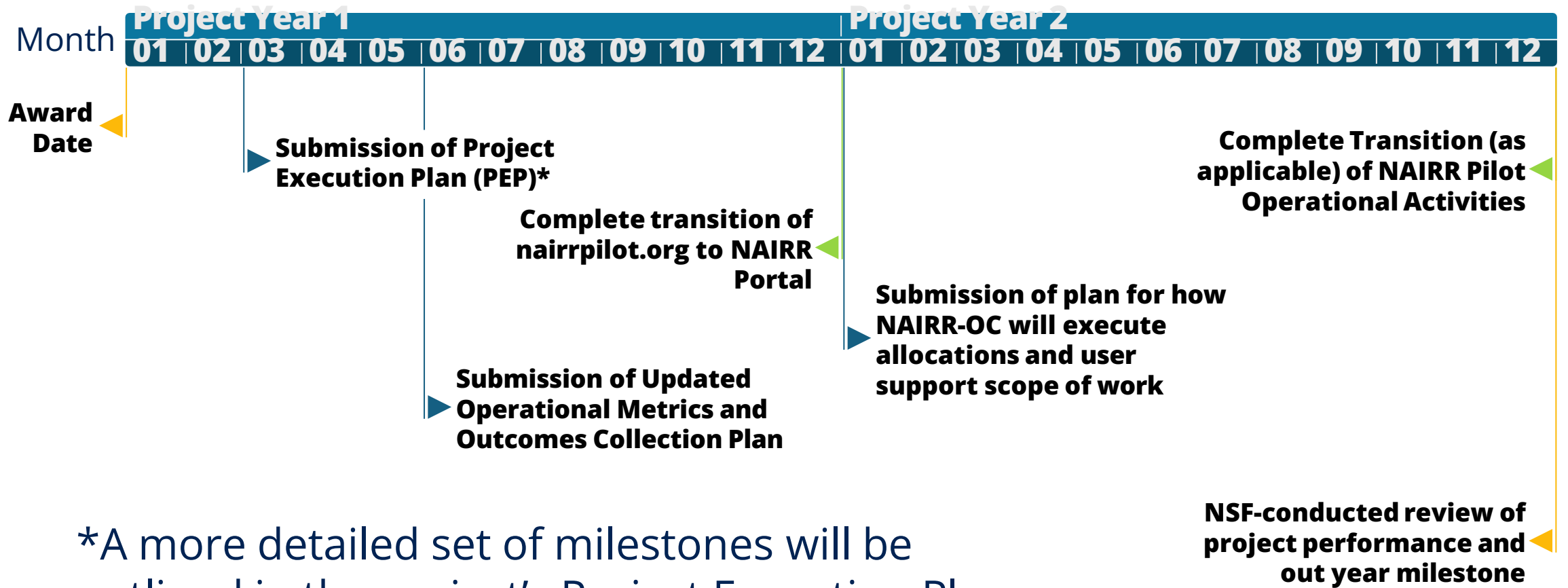


Interfacing with NAIRR Pilot Operations cont.

- Within the first 12 months of the award period, the NAIRR-OC awardee shall submit a plan for how it proposes to execute the scope of work handled by remaining operational teams.
- Any transition of remaining Pilot services will happen throughout at least the 6 months after NAIRR PMO approval to allow for a well-communicated and orderly transition.



Expected Milestones



*A more detailed set of milestones will be outlined in the project's Project Execution Plan



NAIRR-OC does *not* support...

- The NAIRR-OC will NOT be funded to carry out research projects itself
- The NAIRR-OC will NOT be funded to award monetary grants to research teams for research or to acquire infrastructure
- The NAIRR-OC will NOT be funded to acquire or operate the physical hardware or other cyberinfrastructure resources supporting the project work of researchers and educators
 - The NAIRR-OC may operate ancillary supporting hardware or services in support of **serving** said resources to relevant communities.



Institutional Eligibility

- Institutions of Higher Education
- Non-profit non-academic organizations
- For-profit organizations (limitations apply*)
- Other Federal Agencies and Federally Funded Research and Development Centers (limitations apply*)

*** Please consult PAPPG, specifically Chapter I.E.2**

- Proposers who think their project may meet one of the exceptions listed [in the PAPPG] must contact a cognizant NSF Program Officer before preparing a proposal for submission.



Institutional Submission Limit

- An organization may only serve as the submitting organization for one proposal to this competition.

The NAIRR-OC program defines an organization as having a Unique Entity Identifier (UEI) for the purposes of submission limits.



PI Eligibility and Submission Limit

- No restrictions of limits on who may serve as PI
- An individual may participate as PI, co-PI, or other Senior Personnel on at most one proposal for this competition. Note that any individual whose biographical sketch is provided as part of the proposal will be considered as Senior Personnel in the proposed activity, with or without financial support from the project.



Budgetary Limits

- Up to \$35,000,000 over a period of up to 5 years
- NOTE the following Solicitation Specific Review Criterion:

Is the proposed budget well-articulated, aligned with, and clearly mapped to the proposed vision, strategy, plan, organizational structure, management roles and responsibilities, and proposed strategic, governance, organizational, operational, and technical activities?



Proposal Preparation Instructions: Letter of Intent (LOI)

- LOIs are **Required** for the NAIRR-OC Solicitation
- LOI Deadline: **December 15, 2025**
- NOTE: A full proposal for which an LOI was not submitted will be returned without review.
- LOIs will be used to inform planning for merit review. They will not be used as pre-approval mechanisms for the submission of full proposals, and no feedback will be provided to the submitters.



Proposal Preparation Instructions: Letter of Intent (LOI)

The LOI must contain the following information:

- Project Title: The title must begin with "NAIRR-OC: ".
- Project Summary : Provide a brief overview of the project, its organizational structure, and why the proposing team is uniquely positioned to lead the NAIRR-OC.
- OTHER COMMENTS section must list the name(s) and affiliation(s) of all senior personnel, including those of the Principal Investigator (PI) and co-PIs. Be aware of the expectations provided in Section II.A.i. Leadership Team Organizational Structure and the definition of the NAIRR-OC leadership team provided in Section I. Introduction.
- PARTICIPATING ORGANIZATIONS section must list the names(s) of any other (non-lead) participating institutions or organizations, including all sub-awardees. Please note the expectations provided in Section II.A.i. Leadership Team Organizational Structure.



Proposal Preparation Instructions: Full Proposal

- Full Proposal Deadline: **February 4, 2026**
- A full proposal for which an LOI was not submitted will be returned without review.



Proposal Preparation Instructions: Full Proposal

- Submission of a collaborative proposal from multiple organizations (see PAPPG policy on Collaborative Proposals) is not allowed and such submissions will be returned without review.
- Submissions may **only** be submitted as a single proposal where an award to a single institution is being requested.
- Reminder: strong central leadership and management via the submitting institution is expected.



Proposal Preparation Instructions: Full Proposal

- Project Summary is limited to 1 page
- Project Description is limited to 20 pages
(DEVIATION FROM STANDARD)
- See solicitation for detailed guidance on section and subsection headings.



Proposal Preparation Instructions: Full Proposal

Note regarding Budget and Budget Justification:

*The PI who is also the Director of the NAIRR-OC is required to devote a **majority** of their time to successful management of the project. See solicitation guidance regarding budget guidance for personnel.*



NSF Review Criteria

- NSF 25-246 includes the two National Science Board approved merit review criteria for all NSF proposals:
- **Intellectual Merit:** The Intellectual Merit criterion encompasses the potential to advance knowledge; and
- **Broader Impacts:** The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.



NSF Review Criteria

Following elements are considered for both criteria:

1. What is the potential for the proposed activity to
 - a) Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
 - b) Benefit society or advance desired societal outcomes (Broader Impacts)?
1. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
2. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team, or organization to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?



Solicitation Specific Review Criteria

- To what extent does the proposal present strong and achievable goals and strategy for establishing and operating the foundational elements of a NAIRR-OC?
- To what extent does the proposed leadership team have the demonstrated strategic, operational and leadership experience to successfully establish and execute to the proposed vision and plan and accomplish the NAIRR-OC scope of responsibilities and activities described in the Program Description?
- To what extent does the proposal describe the roles and responsibilities of the named individuals and will each of the leadership team members have adequate time to dedicate to the NAIRR-OC?
- To what extent does the organization and detailed plan for establishing and operating the NAIRR-OC address each of the organizational leadership, building NAIRR capabilities and community, and interfacing with Pilot operations activities?
- Is the proposed budget well-articulated, aligned with, and clearly mapped to the proposed vision, strategy, plan, organizational structure, management roles and responsibilities, and proposed strategic, governance, organizational, operational, and technical activities?
- Is the list of milestones, including timeline, well-described and appropriate?



Special Award Conditions

- The award will be administered via a Cooperative Agreement.
- Provides for substantial involvement between NSF and the recipient.
- See NSF PAPPG Introduction Part D: **Definitions and NSF-Recipient Relationships** for more information.



Special Award Conditions

- Award will include additional terms and conditions including (but not limited to):
 - Delivery of The Project Execution Plan 3 months after award
 - Recipient Responsibilities under the project
 - NSF Responsibilities
 - Additional Reporting Requirements
 - Key Personnel
 - Other Conditions, including 24-month review of project performance

NSF has responsibility for providing general oversight and monitoring of the award to help ensure effective performance and administration, as well as facilitating any coordination among the recipient as necessary to further the objectives of the program.



Renewal Clause

In addition to the 5-year performance period for the award made by this competition, there is a possibility for a renewal award for an additional 5 years subject to NAIRR priorities, continued awardee performance, merit review of an invited renewal proposal, and availability of funds.



Summary

- Letter of Intent Deadline: December 15, 2025
- Full Proposal Deadline: February 4, 2026
- Carefully study Program Description, Proposal Preparation Instructions, and Solicitation Specific Review Criteria
- Be aware of guidance regarding your leadership team
- Be aware of the expectation to interface with Pilot teams
- Awardee must work closely with the NAIRR Program Management Office under a Cooperative Agreement



Some initial questions

- I have multiple appointments, how does that affect eligibility and the limit on 2 institutions affiliated with the leadership team?
 - We understand researchers have long standing joint appointments. Please reach out to the cognizant program officers with specific questions



Some initial questions

- I have a narrowly scoped activity (e.g. the NAIRR Portal) that would best be accomplished by a sub-award or contract to an organization different from the submitting organization. Will this subaward count against “affiliated with a single submitting organization to the maximum extent possible” leadership team limitation?
 - No, a narrowly scoped activity sub-awarded to an organization outside of the submitter is allowable if that organization is not included in the leadership team.



Some initial questions

- I'm interested in partnering with another institution on a proposal. Can you point me to other potential bidders?
 - NSF is not planning any formal match making. If there is sufficient interest NSF may hold a follow-on NAIRR Operating Center office hour with speed networking in the near future to and let interested community members connect.
 - Please email the cognizant program officers if you are interested.



Some initial questions?

- Is the NAIRR Operating Center replacing the NSF ACCESS program?
 - No



Some initial questions

- The solicitation expects to make one 5-year award, however the description of expected activities largely covers only the first 2 years of the project. How detailed should our proposal's plans for years 3-5 of the project be?
- We expect that the plans for the first two years of the project will be planned and budgeted for with more detail than the further outyears. An awardee will have several opportunities to refine their plans and budget (within the \$35M ceiling) at several milestones, including the PEP, Pilot Operations transition plan, and 24-month review.



Thank You

Question & Answer Session

Recording will be
available on the webinar
event page:



Program Contacts:

Alejandro Suarez
Sharon Geva

nairr-oc@nsf.gov
nairr-oc@nsf.gov

