

1. Selection criteria for major research proposals:

The following guidelines will be included in future calls for pre-proposals. At the discretion of the committee, some exceptions or modifications may be considered during proposal review.

a) Essential criteria for a successful proposal

Only in exceptional cases would a proposal lacking these be recommended.

In approximate order of importance:

1. Alignment with NASA research priorities as demonstrated by
 - a. strength of support letter(s)
 - b. strength of plan to interact with NASA
 - c. proposal content
2. Potential for success, national competitiveness, and sustainability outside of NASA EPSCoR
 - a. intrinsic research merit
 - b. feasibility of proposed work and budget (is this a realistic proposal?)
 - c. does it address broader national needs and priorities (for funding beyond NASA)?
 - d. quality of existing research and capability of team
3. Clear contribution to advancing research infrastructure in state (as opposed only benefiting individual researchers)
 - a. new research teams and partnerships
 - b. new or improved collaboration between two or more universities
 - c. new facilities or expansion of existing facilities
 - d. new areas of research capacity
 - e. support for new or existing graduate programs or research centers
 - f. expanded collaboration with EROS, SURF, or other research facilities in state
 - g. new or expanded collaborations with industry (in-state and out-of-state), government agencies, or national labs (non-NASA)

b) Secondary criteria for a successful proposal

Recommended proposals will generally meet some or all of these criteria, but these are considered to be of secondary importance. Because of limited space in pre-proposals (5-page narrative), it is unlikely that every criterion will be covered in a pre-proposal.

In approximate order of importance:

4. Alignment with state research and development priorities (in addition to 3, above)
 - a. See "2020 Vision: The South Dakota Science and Innovation Strategy" [https://sdepscor.org/who-we-are/science-and-technology-plan-the-2020-vision/.](https://sdepscor.org/who-we-are/science-and-technology-plan-the-2020-vision/))
5. Potential for economic development or technology transfer (in addition to 3, above)
6. Diversity of institutions and personnel (especially tribal college collaboration)
7. Plan to develop partnerships beyond NASA (national universities, national labs, industry, state government, as well as potential international collaborations) (in addition to 3, above)

8. Plan for broader dissemination, education, and public outreach
- c) Additional considerations

The following additional criteria are strongly encouraged.
In no specific order of importance:

 9. If the proposed research is already established under another funding source, the proposal ***must*** clearly articulate the new research emphasis and added value expected from NASA EPSCoR support (how will this research focus on NASA priorities?)
 - a. a major goal of SD NASA EPSCoR is to promote new research capacity in the state; however, redirection of existing research capacity to support NASA priorities will be considered
 10. In general, proposals should represent efforts to establish new research collaborations with NASA, rather than to strengthen existing relationships
 - a. proposals for extension of previous NASA EPSCoR research or proposals with a research team that has received prior support ***will not*** be considered (see also PI and Co-I eligibility, below)
 11. The committee encourages proposals that include major roles for younger researchers; participation of established researchers in mentoring roles is considered highly appropriate

2. PI and Co-I eligibility criteria for major research proposals:

US citizenship is not required.

Note: Faculty may apply as a Principal Investigator for *either a Research Initiation Grant or a Major Research Grant pre-proposal but not for both grant types in a given year.* An individual faculty member may serve as PI on only one pre-proposal. Faculty may be Co-Investigators in more than one application or pre-proposal, subject to eligibility criteria outlined below.

The following guidelines are based on communication with the NASA EPSCoR Project Manager, Jeppie Compton. Additional qualifications may be considered by the Steering Committee. NASA definitions of investigator roles are listed at the end of this document.¹

- a) Current or past NASA EPSCoR Science PI
 - A researcher who is or has been a Science PI on a funded NASA EPSCoR major research grant is not eligible to be Science PI on a subsequent proposal with the same research focus.
 - A current or past Science PI is eligible to serve as a Co-I on subsequent proposals including concurrent proposals.
 - A past Science PI is eligible to serve as a Science PI on a subsequent proposal only if the prior research project is completed (three years) and if the new research is *completely different* than the prior grant (committee judgment required).
- b) Current or past NASA EPSCoR Co-I
 - A researcher who is a Co-I on a current (three years) NASA EPSCoR major research grant is not eligible to serve as Science PI on a new proposal while the prior award is in effect.

- A researcher who has been a Co-I on a completed (three years) NASA EPSCoR major research grant is eligible to serve as Science PI on a new proposal if the research is *completely different* than the prior grant (committee judgment required).
- A researcher who is a Co-I on a current NASA EPSCoR major research grant is eligible to serve as a Co-I on a new proposal (including concurrent awards) if the research is *completely different* than the prior grant (committee judgment required).

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Principal Investigator (PI) – For this EPSCoR research award, the Principal Investigator is the jurisdiction’s EPSCoR director. The Principal Investigator has an appropriate level of authority and is responsible for proper conduct of the research, including appropriate use of funds and administrative requirements such as the submission of the scientific progress reports to the Agency. The PI is the administrator for the proposal.

Science-I (Sc-I) – For this research award, one Co-I should be designated as the Science-I for those cases where the person leading the scientific direction of the proposed work is not the PI. The formally stated PI will still be held responsible for the overall direction of the effort and use of funds.

Co-Investigator (Co-I) – A Co-I is a member of the proposal’s investigation team who is a critical “partner” for the conduct of the investigation through the contribution of unique expertise and/or capabilities.

Co-I/Institutional-PI – A Co-I at an organization other than that of the PI institution who is making a major contribution to the proposal and serves as the point of contact at the Co-I’s institution, may also be designated as the Co-I/Institutional-PI. For this research award, the Science-I may also serve as a Co-I/Institutional-PI. In these cases, the individual should be identified as the Science-I in the proposal cover page.