

LA FY2025 Request for Pre-Proposals for



NASA EPSCoR

Basic Research Opportunity

TIMETABLE:

Issue Date: **Thursday, August 8, 2024**

Notice of Intent (required): **Thursday, September 19, 2024**

Last day for Q&A about this solicitation: **Thursday, October 10, 2024**

Pre-Proposals due: Thursday, October 17, 2024

Anticipated Notification of Selection: **December 2024**

Anticipated Final Proposals Due to NASA: **January 2025**



LOUISIANA ESTABLISHED PROGRAM TO STIMULATE COMPETITIVE RESEARCH (EPSCoR)

Louisiana Board of Regents
1201 North Third Street, Suite 6-200
Baton Rouge, Louisiana 70802
(225) 342-4253

I. PROGRAM DESCRIPTION

I.A OVERVIEW

This Request for Pre-Proposals (RFP) is being issued in anticipation of the release of the FY2025 NASA EPSCoR Cooperative Agreement Notice (CAN) Basic Research Opportunity. The FY2025 CAN is expected to be similar to the previous solicitation, number NNH24ZHA001C, which is available on the Louisiana NASA EPSCoR website: <http://lanasaepscor.lsu.edu/research-implementation/> (you may have to copy and paste the link into your browser). It is highly recommended that you closely review last year's solicitation in advance of preparing your pre-proposal. As soon as the new solicitation is released by NASA, we will make it available via our websites and email distribution lists.

This Pre-Proposal solicitation seeks proposals from Louisiana researchers, which will be reviewed by an external panel. The panel will recommend the most meritorious pre-proposal and one runner-up in case the top proposal falls through for any reason. The top ranked proposal will be further developed in collaboration with the LaSPACE/EPSCoR Management team at LSU and then submitted to NASA by the LA Board of Regents with the Louisiana Space Grant / NASA EPSCoR Director, Colleen H. Fava, as Principal Investigator. The Pre-Proposal Principal Investigator will, in turn, be the Science Investigator (Science-I) on the LA BOR submission to NASA.

It is expected that NASA will issue the FY2025 CAN in October 2024 with NOIs due in December and proposals due in January. Therefore, this RFP has been issued with a timeline for proposal submissions that will allow as much time as possible for proposers to prepare applications, for the BOR's subsequent review process, for a timely and accurate submission of the NOI, and for final edits to the selected proposal submission before submitting to NASA.

For this proposal cycle, the Board of Regents funding will not be available prior to July 1, 2025. Due to the projected NASA solicitation cycle and based on the last two award timelines, we expect a **September 1, 2024** start date to be a reasonable request.

Proposers should be aware that NASA's issuance of the solicitation is not guaranteed. The BOR reserves the right to make adjustments to the timeline and other changes to the requirements contained in this RFP as needed to accommodate the instructions contained in the FY2025 CAN, if and when the solicitation is released by NASA.

Proposers should be mindful that their proposed timelines may need to be adjusted upon award.

NASA typically funds around half the 28 eligible jurisdiction proposals submitted each year. For the FY24 competition, 14 were selected for funding. For the FY23 competition, 15 were selected for funding. For the FY22 competition, 13 were selected for funding. For the FY21 competition, 16 were selected for funding. Awarded abstracts are posted to our website.

Louisiana has a strong success rate with these competitions, and it is reasonable to expect that we will be awarded. For this reason, it is imperative that the pre-proposal selected for submission be fully vetted and approved by the home institution so that the project can commence immediately upon award. See section I.D for further details.

I.B OBJECTIVES

NASA EPSCoR proposals are expected to establish research activities that will make significant contributions to NASA's strategic research and technology development priorities and contribute to the overall research infrastructure, science and technology capabilities of higher education, as well as the economic development of the jurisdiction receiving funding.

The following are the specific objectives of NASA EPSCoR:

- Contribute to and promote the development of research capability in NASA EPSCoR jurisdictions in areas of strategic importance to NASA's mission;
- Improve the capabilities of the NASA EPSCoR jurisdictions to gain support from sources outside the NASA EPSCoR programs;
- Develop partnerships among NASA research assets, academic institutions, and industry;
- Contribute to the overall research infrastructure and economic development of the jurisdiction;
- Focus on research of important priority to NASA.

Applicants must include support for undergraduate students, graduate students, and/or postdoctoral fellows as active members of the research team. Early career faculty members are encouraged to apply. The use of NASA EPSCoR funds for support of undergraduate and/or graduate research assistants shall be detailed in the budget justification and described in the narrative and evaluation sections of the proposal.

Each funded NASA EPSCoR proposer shall work closely with a NASA researcher to focus on developing competitive research and technology for the solution of scientific and technical issues of importance to the NASA Mission Directorates and Centers as listed in the FY25 Research Priorities distributed by NASA EPSCoR HQ and posted to our website (<http://lanasaepscor.lsu.edu/research-implementation/>).

I.C ELIGIBILITY

Individuals holding a tenured, tenure-track, or research faculty position at any of Louisiana's public institutions of higher education, as well as accredited independent institutions of higher education that are members of the Louisiana Association of Independent Colleges and Universities, are eligible to submit pre-proposals under this solicitation. Individuals who are not employed by these institutions may serve as consultants; however, they may not be listed as investigators and must not be cited on the cover sheet of the pre-proposal. **Direct labor costs will be allowed exclusively for faculty, staff, students, and visiting researchers at Louisiana Institutions. Proposals which include funding for individuals employed outside of Louisiana will be rejected for non-compliance.** A faculty member may submit only one pre-proposal in response to this solicitation as Principal Investigator (PI) but may be a co-investigator on additional pre-proposals. Also see section I.E for other funding restrictions.

Science PIs/Institutional PIs who have been successful in the national competition (i.e. were selected by NASA) over the past 5 years (i.e. the FY2020, FY 2021, FY2022, FY2023 & FY2024 competitions) **may not** propose as leads to this RFP. PIs who were selected to proceed to the national competition but were unsuccessful **may** re-propose to this RFP. In addition, PIs who previously submitted a pre-proposal but were not selected to proceed to the national competition may also re-propose to this RFP. **However, in both cases the application must include a copy of, or summary of, the BoR pre-proposal or NASA submission reviewer's**

criticisms plus a discussion of how the re-submission has been re-structured to meet the reviewer's criticisms. This is over and above the page limits specified later.

While we do **not** want to discourage Co-Is on funded awards from putting forth future proposals as the lead Science Investigator, the goal of the NASA EPSCoR Research program is to improve research infrastructure around the state. Proposals that recycle team members to re-compete work on the same long-term project are discouraged and those that do not show significant new directions and recruit new researchers will review poorly.

I.D Certifications, Waivers, and Institution Letter of Commitment

When preparing a proposal that involves the use of human subjects, animals, hazardous materials, select agents, recombinant DNA, or any other issue requiring institution certification, waiver, or approval the proposers will need to address applicable compliance issues in advance. **All necessary internal approvals from the lead and collaborator institutions must be secured and documented in writing.** An appropriate letter template is provided in Appendix C. This template should be modified for the lead and each collaborator institution and submitted no later than 5 weeks following the pre-proposal due date. Even though extra time is allowed to submit the commitment document, the letter is considered to be part of the pre-proposal and will be included as an appendix in the subaward contract from the Board of Regents. Failure to provide this commitment in the approved time frame may result in disqualification and selection of a runner-up proposal at an alternate institution.

I.E NASA Open Science Data Management Plan (OSDMP) Requirement

The guidance for this section has been strengthened to reflect the provisions set forth in the [NASA Plan for Increasing Access to the Results of Scientific Research](#). Please reference the NASA SMD [Science Information Policy](#) for examples on how to implement these provisions in your proposal. In particular, all proposals shall include an Open Science and Data Management Plan (OSDMP) that addresses three major objectives:

- 1) As-accepted manuscript versions of publications that derive from NASA funding must be publicly available at the time of publication;
- 2) Data and software developed using NASA funding in support of a peer-reviewed publication shall be made publicly available at the time of publication; and
- 3) Scientifically useful data and software developed during the award that was not already published must be made publicly available by the end of the award.

Note that a project may not need a detailed OSDMP, but a detailed explanation as to why no scientifically useful data will be generated needs to be discussed. Possible reasons include 1) the proposed work is inexorably linked to the handling of already available data (e.g. from remote sensing platforms) so the OSDMP is part of the page-limited Science, Technical, & Management section of the proposal; 2) instrument development and technology development programs generally do not generate "scientifically useful data;" or 3) data is subject to ITAR (International Traffic in Arms Regulations) restrictions. In any event where the project produces "no data" or only data specifically exempted, the OSDMP must state that no data preservation or data sharing is needed and explain why.

When an OSDMP is required the plan shall contain the following elements, as appropriate to the project:

- A description of data types, volume, formats, and (where relevant) standards;
- A description of the schedule for data archiving and sharing;

- A description of the intended repositories for archived data, including mechanisms for public access and distribution;
- A discussion of how the plan enables long-term preservation of data; and
- A discussion of roles and responsibilities of team members in accomplishing the DMP.

The OSDMP is limited to 4000 characters including spaces (which equates roughly to 500 words / ~2 pages double spaced) and is included as a separate component in the proposal following the Cover Page and prior to the Table of Contents. See section II.C Pre-proposal Elements. Note that if funds are required for data management activities, these shall be included in the budget and budget justification sections of the proposal.

The following links provide additional information about the NASA strategy for increasing access to NASA funded project results, more detailed discussion on how to create an OSDMP, and some illustrative OSDMP templates for particular NASA SMD divisions. Note that not all of the material in all of the references below will apply to your specific project but are listed here to provide examples of the kind of information NASA will want to see in your OSDMP.

NASA Plan for Increasing Access to the Results of Scientific Research:

<https://www.nasa.gov/wp-content/uploads/2021/12/nasa-ocs-public-access-plan-may-2023.pdf>

NASA SMD Science Information Policy:

<https://science.nasa.gov/researchers/science-data/science-information-policy>

How to Create and Maintain a Data Management Plan for Proposals – Earth Science Division:

<https://www.earthdata.nasa.gov/engage/dmp-earth-science>

Data Management Guidance for Earth Science Division Researchers:

<https://www.earthdata.nasa.gov/engage/data-management-guidance>

Earth Science specific OSDMP template – MS Word document:

<https://www.earthdata.nasa.gov/s3fs-public/2023-02/Earth%20Science%20Division%20OSDMP%20Template.docx?VersionId=fBxuNKFmklk3VCk4rhWKpKGgVyZwrhJE>

Heliophysics Division OSDMP template – MS Word document:

https://science.nasa.gov/files/atoms/files/HPD_DMP_Template_022820.docx

Planetary Science Division OSDMP template --- MS Word document:

<https://science.nasa.gov/files/atoms/files/PSD%20Open%20Science%20%20and%20Data%20Management%20Plan%20TEMPLATE.docx>

I.F FINANCIAL CONSIDERATIONS

Based on the funding levels stipulated in the previous NOFO, each proposal may request NASA funding of \$750,000 for a three-year project. The BOR will provide cost sharing at a 1:1 ratio to support the research project. Of the \$750,000 in NASA funds, \$40,000 per year (\$120,000 total) will be reserved for management of the project; therefore, for each proposed research project, the Science PI may request a maximum of \$630,000 in NASA funds and \$750,000 in BOR Support Funds (i.e., a maximum annual request of \$210,000 for NASA funds and \$250,000 for BOR Support Funds). Furthermore, the annual budgets for each research project should be

held constant for all three years of the proposed project (i.e., budget requests for year one should equal the amounts requested in years two and three).

The cost-share requirement for NASA is covered by the Board of Regents matching funds. Therefore, institutional match funds are not required and should not be included in the budget.

Note that this program is designed to improve aerospace research capability in Louisiana and, consequently, funding should support effort within the state. Note that Subawards using NASA EPSCoR funds can only be issued to institutions in NASA EPSCoR jurisdictions and BOR cost share can only be expended on institutions in Louisiana. Funding allocated outside of the state must be justified in detail and shown how such an expenditure will significantly enhance aerospace research infrastructure in Louisiana.

Proposers including the use of NASA Unique facilities must include a letter of support from the hosting center. **EPSCoR funds may not be used to support Civil Servant or NASA Contractor participation in the research.** Funding for the use of NASA Unique facilities must be explicitly included in the Budget section with the basis of estimate and justification.

The drawdown of NASA funds is tracked very closely by the federal government. Therefore, it is recommended as good practice to plan your budget as to maximize the timely expenditure of NASA funds. For example, Subawards to collaborating institutions should make minimum use of NASA funds. Further, daily expenses that can be invoiced rapidly (e.g. salaries, supplies, travel) should be allocated to the NASA budget.

I.G ASSESSMENT OF PRE-PROPOSALS AND PREPARATION OF FULL PROPOSALS

We hope to notify the PI of the pre-proposal selected by the panel in December; we plan to also provide feedback from the panel reviewers and a plan for revisions and development of the final proposal. The PI of a successful pre-proposal is required to work closely with the NASA EPSCoR Project Management Team and BOR staff to prepare the final proposal for submission by the BOR to NASA. Note that the Louisiana NASA EPSCoR Director, Colleen H. Fava, will serve as the managing Principal Investigator (PI) for the award, providing leadership and administrative direction for the team from an oversight role. The Pre-Proposal PI will, in turn, serve as the Science-I and will be responsible for the scientific direction and day-to-day management of the proposed work. Together the PI and Science-I will be responsible for reporting, as required, to the BOR and NASA. This organizational structure should be considered when developing the Pre-Proposal Management Plan. Full proposals completed by this team (with budgets approved by the Science-PI's office of sponsored programs) will be due at the BOR on a date to be determined based on the due date for proposal submission to NASA (a minimum of 5 business days prior to the NASA due date).

I.H TIMETABLE *(DATES MAY CHANGE, SUBJECT TO REQUIREMENTS OF FY2025 CAN)*

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| <u>Thursday, September 19, 2024</u> | <u>Pre-Proposal Notice of Intent due</u> |
| <u>Thursday, October 10, 2024</u> | <u>Last day to submit questions about this solicitation</u> |
| <u>Thursday, October 17, 2024</u> | <u>Pre-proposals due</u> |
| <u>December 2024</u> | <u>Notice of LA Selection</u> |
| <u>January 2025</u> | <u>Proposals due to NASA</u> |

I.I QUESTIONS ABOUT THIS SOLICITATION

Specific questions concerning this solicitation, and the requirements set forth herein should be directed **in writing** to Ms. Jessica Patton, Federal Programs Administrator, by email to

jessica.patton@laregents.edu. Questions will be accepted and answered on an ongoing basis through **Thursday, October 10th**. **Questions regarding this solicitation sent to anyone other than Ms. Patton or after the Q&A period closing date will not be answered.** A running compilation of all questions asked about this RFP and all answers provided in response to those questions will be periodically posted on the BOR website at <https://web.laregents.org>. Questions sent to anyone else may not be answered at all.

I.J RFP DOWNLOADS

Files associated with this RFP can be found on the Louisiana Board of Regents' Office of Sponsored Programs website (<https://web.laregents.org/>) and on the Louisiana NASA EPSCoR website: <http://lanasaepscor.lsu.edu/research-implementation/>. These guidelines, the notice of intent, the pre-proposal template, and the budget form will all be available to download. Additionally, several critical supporting documents have been posted to the Louisiana NASA EPSCoR website page linked above. These include a comprehensive listing of research priorities across NASA Mission Directorates and Centers which will be included in the FY25 CAN as Section A, the official NASA EPSCoR CAN from the FY24 cycle, a full list of abstracts for winning proposals from recent years, the current space technology roadmap, and a structural breakdown of the space technology areas. Additional resources will be posted as/if they become available, including the FY2025 solicitation.

All revisions to the proposal will be made based on programmatic expertise from the LA NASA EPSCoR Management team and/or driven by recommendations from the review panel. Substantial changes driven by the PI or PI's institution will not be allowed. Significant change requests could result in deselection and movement to the runner-up proposal.

II. PRE-PROPOSAL SUBMISSION AND FORMAT REQUIREMENTS

II.A NOTICE OF INTENT (Required)

Before a pre-proposal will be accepted, a notice of intent (NOI) in portable document format (pdf) must be submitted by the PI no later than the close of business (4:30 p.m.) on **Thursday, September 19, 2024**. **The NOI form included in this document must be used. No other NOI formats will be accepted.** The NOI must be submitted to the Louisiana Board of Regents EPSCoR office through their online system, <https://laepscor.piestar-rfx.com/opportunities>. Proposal titles and exact team composition may be modified for the final proposal.

II.B TYPE SIZE AND FORMATTING

Formatting guidelines for this proposal must follow the [2023 NASA Guidebook for Proposers](#). Standard proposal format requirements are copied here:

- Required paper size is 8.5x11.
 - Pages must have at least 1-inch (2.5 cm) margins on all sides.
 - Proposals must adhere to the page limits listed in the NOFO.
- Proposal must be single-spaced, typewritten in 12-point font, English-language text, and formatted using one column.
 - The font size for symbols in equations must be consistent with this guideline.
 - Proposers may not adjust or otherwise condense a font or line from its default appearance.
- While text within figures and tables may use a smaller font, it must, in the judgment of reviewers, be legible without magnification.
 - Figure and table captions must follow the same font requirements and restrictions as the main proposal text.
 - Expository text necessary for the proposal may not be located solely in figures or tables, or in their captions.
- Units must report in the common standard for the relevant discipline.
- Fold-out pages, illustrations, and/or photographs are allowed, for the display of unique and critically essential proposal data.
 - Fold-out pages will count as multiple pages, dependent on the number of fold-out sections, against the required page limit. For example, a three-section fold-out would be equal to three pages on the page limitation.
- Only non-proposal material, e.g., page numbers, section titles, disclaimers, etc., are permitted in headers and footers.
- Proposals may not include references to materials outside the proposal (e.g., published articles and sites on the internet) for information or material needed to either complete or understand the proposal.

These format requirements refer only to the proposal narrative and not to the required forms attached to this RFP.

II.C PRE-PROPOSAL ELEMENTS

The pre-proposal must contain the following elements, in the order presented here. A proposal template (keyed to the NASA EPSCoR FY24 CAN) with further details about the pre-proposal elements is provided in Appendix C. **We strongly suggest** you use this template to ensure all requirements are met and to allow for a greater uniformity of submissions.

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| <p>Cover Page</p> <p>Cover Sheet Form is provided in the template.</p> | <p>1 page</p> |
| <p>Proposal Summary (abstract)</p> | <p>4,000 characters (including spaces)</p> |
| <p>Open Science Data Management Plan (see section I.E)</p> | <p>4,000 characters (including spaces)</p> |
| <p>Table of Contents</p> | <p>As needed</p> |
| <p>Scientific/Technical/Management Plan (Proposal Body)</p> <p>Project Overview: Include a summary of the overall project, an explicit description of the relevance of this project to NASA and to the State of Louisiana. Identify the major research tasks, project goals, objectives, and team structure.</p> <p>Project Purpose: Describe how the proposed research activities will make significant contributions to the strategic research and technology development priorities of one or more of the NASA Mission Directorates (and Centers, as applicable) and will contribute to the overall research infrastructure, science and technology capabilities, higher education, and economic development of the State of Louisiana. Include alignment with the 2021 NASA Strategic Plan, as well as any additional Agency or federal/state government policy documents that this work aligns with.</p> <p>Goals and Objectives: Clearly state goals and objectives for the proposed effort and provide a rationale for the research plan that will be used to achieve them.</p> <p>Project Content: Clearly describe the proposed effort and how the goals and objectives will be achieved. Provide an overview of the science background and ongoing work in this area. Detail the gaps in knowledge and the questions to be answered by your project; explicitly state what your project team will do that is new. Follow with a detailed research plan which includes all major tasks and subtasks and clearly identifies the members of the project team working each task.</p> <p>When preparing a proposal that involves the use of human subjects, animals, hazardous materials, select agents, recombinant DNA, or any other issue requiring institution certification, waiver or approval the proposers will need to address applicable compliance issues in advance. All necessary internal approvals from the lead and collaborator institutions must be secured and documented in writing. Failure to provide this commitment in the approved time frame may result in disqualification and selection of a runner-up proposal at an alternate institution. See section 1.D for details</p> <p>Anticipated Results: Describe the anticipated results of the proposed effort.</p> <p>Project Timeline and Milestones: Include a project timeline table for achieving the stated goals and objectives, including significant milestones.</p> <p>Partnerships and Interactions: Describe any partnerships or cooperative arrangements among academia, government agencies, business and industry, private research foundations, jurisdiction agencies, and local agencies as well as partnerships with minority-serving institutions and the inclusion of faculty and</p> | <p>14 Pages Maximum</p> |

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| <p>students from underrepresented/underserved groups. Collaborations with NASA researchers and use of NASA facilities should be explicitly referenced here. We strongly encourage the inclusion of additional Louisiana campuses, especially HBCU's and those traditionally not research-intensive, as that will support the goal of infrastructure development across the jurisdiction.</p> <p>Sustainability: Describe how the research capability will be sustained beyond the funding period. There should be a clear plan for sustaining the research beyond NASA EPSCoR funding and for seeking non-EPSCoR funding. Identify potential CAN's, NRA's, RFP's, etc., specifically as examples.</p> <p>Dissemination: Outline the plan for disseminating the results to NASA and the broader community.</p> <p>Management & Evaluation Summation: Brief Summary of the Management and Evaluation Section which follows the proposal body. Include this statement, "As per the guidance in the NOFO, the Management and Evaluation information shall be included in the proposal with page limits as required and does not count toward the 15-page limit for the Scientific, Technical, or Management section."</p> | |
| <p>Management and Evaluation</p> <p>The following information shall be included in the proposal with page limits as required and does not count toward the 15-page limit for the Scientific, Technical, or Management section.</p> <p>This section shall describe the management structure for the proposed research, and coordination with the jurisdiction's NASA EPSCoR project management.</p> <p>Personnel: Identify and summarize the roles and responsibilities of team members involved in the development and execution of proposed activities. The proposal shall include a list of the personnel participating in this research program, including Principal Investigator, Science-Investigator, and all Co-Investigators, Research Associates, Post-Doctoral Fellows, Research Assistants, Graduate students, and other research participants. The credentials of the researchers are important; however, EPSCoR includes the concept of encouraging and helping new researchers. <u>Tuition remission is not an allowable cost on the Board of Regents cost-share.</u> Any costs for funding student tuition must be charged against the NASA funds.</p> <p>Research Project Management: A description of the Science-I's management structure of the proposed research project, and the extent to which the project's management and research team will lead to a well-coordinated, efficiently-managed, and productive effort shall be included.</p> <p>Multi-Jurisdiction Projects: If the proposed research is a collaboration between or among more than one NASA EPSCoR jurisdiction, one jurisdiction shall be identified as the lead with additional partners identified as sub-awardees. The proposal shall detail the inter-jurisdiction management structure of the proposed research project, including a list of the participating jurisdictions, and the participating universities and agencies within each jurisdiction. Multi-jurisdictional proposals shall not exceed the \$750,000 award limit.</p> <p>Project Evaluation: Proposals shall document the intended outcomes and offer metrics to demonstrate progress toward and achievements of these outcomes. They shall discuss metrics to be used for tracking and evaluating project progress. Milestones and timetables for achievement of specific objectives</p> | <p>As needed</p> |

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| <p>during the award period shall be presented. The proposal shall describe an appropriate evaluation plan/process to document outcomes and demonstrate progress toward achieving objectives of proposed project elements. Evaluation methodology shall be based upon reputable models and techniques appropriate to the content and scale of the project. Projects shall implement improvements throughout the entire period of performance based on ongoing evaluation evidence.</p> <p>Results of Prior NASA EPSCoR Research Support (Leave this section blank. The NASA EPSCoR Program Director will write this for the proposal selected to represent Louisiana): Examples of accomplishments commensurate with the managerial and administrative expectations of the award shall be provided. The EPSCoR Director will not be assessed on his/her expertise in the specific proposed research area since the Science-PI is tasked with managing the scientific/technical development progress. The following information shall be provided: the NASA EPSCoR award number(s), the title of the projects(s); and period(s) of performance; primary outcomes resulting from the NASA EPSCoR award, including a summary discussion of accomplishments compared to the proposed outcomes from the original proposal; coordination with the research and technical development priorities of NASA, and contribution(s) to the overall research capacity of the jurisdiction.</p> | |
| <p>References and Citations</p> | <p>As needed</p> |
| <p>Biographical Sketches</p> <p>Submit short CVs for key personnel using the following guidelines: Science Investigator (Sc-I): maximum 2 pages each Co-Investigator (Co-I): 1 page</p> | <p>As needed</p> |
| <p>Current and Pending Support (Sci-I & Co-Is)</p> <p>Use BOR Form 1001CP included in the template. Current and Pending Support for PI and Co-Is must be provided. The NASA current and pending support form may be substituted.</p> | <p>As needed</p> |
| <p>Statements of Commitment and Letters of Support</p> <p>Letters of support from NASA collaborators and collaborators at other facilities who will be engaged in the research project.</p> | <p>As needed</p> |
| <p>Budget Justification: Narrative and Details</p> <p>Budget Narrative Please refer to Section 7 (budget) of the pre-proposal template in Appendix C, which includes some examples of acceptable descriptions for the various categories. All budget line items require detailed explanations without exception. NASA requires significantly more budget justification data than many other agencies, thus we created the template.</p> <p>Budget Details Follow the format and subsection headings included in Section 7 of the Template provided in Appendix C.</p> <p>Budget Form Use Louisiana NASA EPSCoR Pre-proposal Budget Form included in the pre-proposal template (this form is also provided in MS Excel as a separate</p> | <p>As needed</p> |

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| <p>attachment). You should have a total of 4 completed budget forms per institution. Prepare a separate budget page for each of the 3 years, plus a cumulative budget page. On the Board of Regents funds F&A (indirect) is limited to 25% of total salaries, wages, and fringe benefits. Your institution's fully negotiated federal rate should be used on the NASA funds.</p> <p>Additional Notes See section 1.E of these guidelines for the limitations and requirements on the yearly and total NASA and BOR funding levels. Further, the pre-proposal template provides additional budget details (Appendix D).</p> <p>Dollar amounts proposed without detailed explanation (e.g., Equipment: \$12,000, or Labor: \$35,000) will reduce proposal acceptability, or cause delays in funding should the proposal be selected. Each item should be explained in reasonable detail.</p> <p>Direct labor costs should be separated by titles or disciplines (e.g., Principal Investigator, graduate research assistant, clerical support, etc.) with estimated hours, hourly rates, and total amounts of each. Indirect costs should be sufficiently explained such that evaluators can understand the basis of the proposed costs. Direct labor costs can only be applied to individuals employed within Louisiana.</p> <p>Foreign travel is allowable up to \$3,000/trip and a total of two trips (maximum \$6,000) for the entire jurisdiction's EPSCoR proposal (NASA and BOR funds). Requested foreign travel should include justification, purpose, the number of trips and expected location, duration of each trip, airfare, and per diem.</p> <p>Tuition remission is not an allowable cost on the Board of Regents cost-share. Any costs for funding student tuition must be charged against the NASA funds.</p> <p>We suggest, whenever possible, that all Subawards be costed entirely with either NASA funds or BOR funds, instead of being split across the two funding streams. This simplifies your subaward budgets and, in the event your project is selected for funding, greatly simplifies your project accounting.</p> <p>All costs to be incurred by NASA Centers on behalf of NASA EPSCoR for the use of facilities and contracted technical work should be identified in the research proposal funding request. <u>In advance of proposal submission</u>, proposers should contact NASA installations from which services will be requested in order to ascertain the availability and anticipated costs of such services. <u>Salaries and travel of NASA civil servants or contractor participation in the research is not allowed.</u></p> <p>Proposers are reminded that NASA projects cannot include collaboration with institutions in the People's Republic of China.</p> | |
| <p>Summary of Previous Submittal</p> <p>PIs who were previously selected to proceed to the national competition but were unsuccessful <u>may</u> re-propose to this RFP. In addition, PIs who submitted a pre-proposal but were not selected to proceed to the national competition may also re-propose to this RFP. However, in both these cases the application must include a copy of, or summary of, the BoR pre-proposal or NASA submission reviewer's criticisms <u>plus</u> a discussion of how the re-submission has been re-structured to meet the reviewer's criticisms. This is over and above the page limits specified later.</p> | <p>As needed</p> |

All NASA-EPSCoR pre-proposals will be reviewed by a panel of experts from outside Louisiana. The reviewers will evaluate the proposals based on the evaluation criteria established in the FY2024 CAN issued by NASA. The evaluation criteria set forth in the 2024 NASA-EPSCoR CAN is reproduced here in Appendix A. Proposers are advised to review said criteria as they prepare their proposals.

II.E. SUBMISSION OF PRE-PROPOSAL

The pre-proposal must be submitted by the PI to the Board of Regents through the LA EPSCoR online submission system, <https://laepscor.piestar-rfx.com/opportunities>, no later than the close of business (4:30 p.m.) **Thursday, October 17, 2024**. Deadlines listed in the RFP are absolute. The proposal submission system will automatically close at 4:30 p.m. Central on the deadline date.

Appendix A

Proposal Evaluation Criteria from the FY2024 NASA EPSCoR CAN

NASA-EPSCoR FY2024 Competitive Research Award NOFO Evaluation Criteria

The proposal evaluation criteria included in the FY2024 NASA-EPSCoR NOFO is provided here as an example of how proposals will likely be evaluated for FY 2025. Over the last several years, these criteria have remained relatively steady with slight changes in language and/or focus. Please consider these criteria carefully as you develop your project proposal.

5.0 Proposal Evaluation

Successful research proposals shall provide sound contributions to both immediate and long-term scientific and technical needs of NASA, as explicitly expressed in current and publicly available NASA documents and communications, as well as contribute to the overall research infrastructure, science and technology capabilities of higher education, and economic development of the jurisdiction.

Successful proposals shall also include pragmatic plans for generation of sustained non-EPSCoR support.

Proposals will be evaluated based on the following criteria: Intrinsic Merit, Management, and Budget Justification. The bulleted lists after each criterion below should not be construed as any indication of priority or relative weighting. Rather, the bullets are provided for clarity and to facilitate of proposal development. Note: Each proposer shall provide specific information on how it determined the relevance of the proposed effort to NASA and the jurisdiction.

5.1 Intrinsic Merit (35% of score)

- *Proposed research shall have clear goals and objectives; address the expectations described in the announcement; and be consistent with the proposed budget, effectively utilize the program management, and demonstrate a high probability for successful implementation.*
- *Proposals shall provide a detailed narrative of the proposed research activity, including the scientific and/or technical merit of the proposed research, unique and innovative methods, approaches, concepts, or advanced technologies, and the potential impact of the proposed research on its field.*
- *Existing research proposals shall provide baseline information about current research activities within the jurisdiction in the proposed research area, including projects currently funded under NASA EPSCoR.*
- *If the proposed research represents a new direction for the jurisdiction, the technical team's ability to conduct the research shall be explained. Other relevant research and technology development programs within the jurisdiction shall also be included.*

5.2 NASA Alignment and Partnerships (35% of score)

- *Proposals shall discuss the value of the proposed research to NASA and to the jurisdiction's research priorities.*
- *Proposals shall describe the use of NASA content, people, or facilities in the execution of the research activities.*
- *Proposals shall describe current and/or previous interactions, partnerships, and meetings with NASA researchers, engineers, and scientists in the area of the proposed research, and discuss how future partnerships will be fostered between or among the institution's researchers and personnel at the Mission Directorates, NASA Centers, and/or JPL.*
- *The name(s) and title(s) of NASA researchers with whom the proposers will partner shall be included. NASA shall consider the utilization of NASA venues for recipients to publish their accomplishments.*
- *Proposals shall clearly articulate how the proposed research activities build capacity in the jurisdiction.*

- *In particular, proposers shall explain how the proposed research is related to the strategic plan for NASA EPSCoR-related research in the jurisdiction.*
- *Proposals shall state how they plan to develop research competitiveness both in the jurisdiction and nationally.*
- *Proposals shall delineate mechanisms for building partnerships with universities, industry, and/or other government agencies to enhance the ability of the jurisdiction to achieve its objectives, to obtain and leverage sources of additional funding, and/or to obtain essential services not otherwise available.*

5.3 Management and Evaluation (15% of score)

NOTE: The following information shall be included in the proposal with page limits as required and does not count toward the 15-page limit for the Scientific, Technical, or Management section.

- *Personnel: The proposal shall include a list of the personnel participating in this research program, including the Principal Investigator, Science-Investigator, and all Co-Investigators, Research Associates, Post-Doctoral Fellows, Research Assistants, and other research participants. The credentials of the researchers are important; however, EPSCoR encourages and helps new researchers. Participation of undergraduate and graduate student researchers is expected.*
- *Research Project Management: A description shall be included of the Science-I's management structure of the proposed research project, and the extent to which the project's management and research team will lead to a well-coordinated, efficiently managed, and productive effort.*
- *Multi-Jurisdiction Projects: If the proposed research is a collaboration between or among more than one NASA EPSCoR jurisdiction, one jurisdiction shall be identified as the lead with additional partners identified as sub-awardees. The proposal shall detail the inter-jurisdiction management structure of the proposed research project, including a list of the participating jurisdictions, and the participating universities and agencies within each jurisdiction. Multi-jurisdictional proposals shall not exceed the \$750,000 award limit.*
- *Project Evaluation: Each proposal shall document the intended outcomes and offer metrics to demonstrate progress toward and achievements of these outcomes. The proposal shall discuss metrics to be used for tracking and evaluating project progress. Milestones and timetables for achievement of specific objectives during the award period shall be presented. The proposal also shall describe an appropriate evaluation plan/process to document outcomes and demonstrate progress toward achieving objectives of proposed project elements. The evaluation methodology shall be based upon reputable models and techniques appropriate to the content and scale of the project. Projects shall implement improvements throughout the entire period of performance based on ongoing evaluation evidence.*
- *Results of Prior NASA EPSCoR Research Support: Examples of accomplishments commensurate with the managerial and administrative expectations of the award shall be provided. The EPSCoR Director will not be assessed on their expertise in the specific proposed research area since the Science-PI is tasked with managing the scientific/technical development progress. However, the following information shall be provided: the NASA EPSCoR award number(s), the title of the projects(s); and period(s) of performance; primary outcomes resulting from the NASA EPSCoR award, including a summary discussion of accomplishments compared to the proposed outcomes from the original proposal; coordination with the research and technical development priorities of NASA, and contribution(s) to the overall research capacity of the jurisdiction.*

5.4 Budget Justification: Narrative and Details (15%)

- *The proposed budget shall be adequate, appropriate, reasonable, and realistic, and demonstrate the effective use of funds that align with the content and text of the proposed project. Preparation guidelines for the budget can be found in the NASA Guidebook for Proposers, Section 3.18 and Appendix C.*

- *A detailed budget, including both NASA provided and cost-shared funds, is required. This section shall include detailed budgets for each of the three years of the funding and a summary budget for all three years. All sources of cost-sharing shall be thoroughly described and documented.*
- *The budget will be evaluated based upon the clarity and reasonableness of the funding request. A budget narrative shall be included that discusses relevant budgetary issues such as the extent and level of jurisdiction, industrial, and institutional commitment and financial support, including resources (e.g., staff, facilities, laboratories, indirect support, waiver of indirect costs).*
- *Proposers including the use of NASA Unique facilities must include a letter of support from the hosting center. EPSCoR funds may not be used to support Civil Servant or NASA Contractor participation in the research. Funding for the use of NASA Unique facilities must be explicitly included in the Budget section with the basis of estimate and justification.*
- *Investigators are encouraged to prioritize requests for funding of research equipment and instrumentation requests early in the award to maximize its availability for research in the following years.*

Appendix B

FY2025 Pre-Proposal Notice of Intent Form
This form is required

NOTICE OF INTENT: FY2025 LA NASA EPSCoR Pre-proposal

| | |
|---|-----------------------------------|
| NAME OF PRINCIPAL INVESTIGATOR (PI): | NAME OF LEAD ORGANIZATION: |
| PI DEPARTMENT | PI PHONE NUMBER and EMAIL ADDRESS |
| TITLE OF PROPOSED PROJECT(included reference to the Research Priority at NASA within your title): | |
| LIST PARTICIPATING INSTITUTIONS/CAMPUSES: | |
| LIST PROJECT DISCIPLINES: | |
| THE PROPOSED WORK WILL SUPPORT THE RESEARCH PRIORITIES OF THE FOLLOWING NASA DIRECTORATES AND NASA FIELD CENTERS: | |
| PROJECT ABSTRACT (maximum 250 words): | |
| NAMES of OTHER INVESTIGATORS | INSTITUTION/DEPARTMENT |
| CO-I | |
| CO-I | |
| CO-I | |
| CO-I | |

Appendix C
Required Letter of Commitment from Lead and Co-I Institutions
(see section I.D)

INSTITUTION

Authorized Organization Representative Office

<Date>

Ms. Jessica Patton
Federal Program Administrator
Board of Regents, State of Louisiana
1201 North 3rd Street, Suite 6-200
Baton Rouge, LA 70802

Dear Ms. Patton:

<Institution> agrees to participate as a subrecipient in Louisiana Board of Regents' proposed NASA EPSCoR project entitled "**<Title>**." The <institution> portion of the work as described in the attached proposed scope of work will be under the primary direction of <Science or Institutional lead investigator, title>.

The amount requested for <institution>'s participation in this research project is **<total budget amount NASA plus BOR>** over three years. Please see the attached budget and budget justification for a detailed explanation of costs.

This letter also acknowledges that the institution has conducted all reviews, and signed all waivers, and certifications associated with the proposed effort so that the project can be immediately implemented following award by the Board of Regents.

We look forward to a rewarding and productive research effort.

Sincerely,

<Authorized Organization Representative>
<Office of Authorized Organization Representative>

Enclosures: <Any necessary attachments>

Appendix D

Pre-Proposal Template for FY2025
NASA / LA BOR EPSCoR Basic Research CAN

Cover Sheet: FY2025 NASA EPSCoR Pre-proposal

| | | | |
|--|---|-------------------------------|---------------------------------|
| FOR CONSIDERATION BY BOR ORGANIZATION UNITS(S) | | | |
| Sponsored Programs | | | |
| PROGRAM ANNOUNCEMENT | | | |
| NASA EPSCoR | | | |
| NAME OF LEAD ORGANIZATION: | ADDRESS OF LEAD ORGANIZATION, INCLUDING ZIP CODE: | | |
| | | | |
| Science PI DEPARTMENT | Science PI POSTAL ADDRESS | | |
| | | | |
| TITLE OF PROPOSED PROJECT: | | | |
| | | | |
| REQUESTED AMOUNT, YR 1: \$ | REQUESTED AMOUNT, YR 2: \$ | REQUESTED AMOUNT, YR 3: \$ | TOTAL REQUESTED: \$ |
| START DATE, YR 1: 09/01/25 | START DATE, YR 2: 09/01/26 | START DATE, YR 3: 09/01/27 | TOTAL PERIOD: 09/01/25-08/31/28 |
| LIST PARTICIPATING INSTITUTIONS/CAMPUSES: | | | |
| | | | |
| LIST PROJECT DISCIPLINES: | | | |
| | | | |
| NAMES (TYPED) | Highest Degree/ year attained | Telephone Number | Email Address |
| SCIENCE PRINCIPAL INVESTIGATOR (Sci-I) | | | |
| CO-I | | | |
| CO-I | | | |
| CO-I | | | |
| CO-I | | | |

Proposal Summary (Abstract)

Abstract is limited to 4,000 characters (including spaces) by NASA. This equates to roughly 500 words / 1 page of single-spaced text.

Data Management Plan

The guidance for this section has been strengthened to reflect the provisions set forth in the [NASA Plan for Increasing Access to the Results of Scientific Research](#). Please reference the NASA SMD [Science Information Policy](#) for examples on how to implement these provisions in your proposal. In particular, all proposals shall include an Open Science and Data Management Plan (OSDMP) that addresses three major objectives:

- 1) As-accepted manuscript versions of publications that derive from NASA funding must be publicly available at the time of publication;
- 2) Data and software developed using NASA funding in support of a peer-reviewed publication shall be made publicly available at the time of publication; and
- 3) Scientifically useful data and software developed during the award that was not already published must be made publicly available by the end of the award.

Note that a project may not need a detailed OSDMP, but a detailed explanation as to why no scientifically useful data will be generated needs to be discussed. Possible reasons include 1) the proposed work is inexorably linked to the handling of already available data (e.g. from remote sensing platforms) so the OSDMP is part of the page-limited Science, Technical, & Management section of the proposal; 2) instrument development and technology development programs generally do not generate “scientifically useful data;” or 3) data is subject to ITAR (International Traffic in Arms Regulations) restrictions. In any event where the project produces “no data” or only data specifically exempted, the OSDMP must state that no data preservation or data sharing is needed and explain why.

When an OSDMP is required the plan shall contain the following elements, as appropriate to the project:

- A description of data types, volume, formats, and (where relevant) standards;
- A description of the schedule for data archiving and sharing;
- A description of the intended repositories for archived data, including mechanisms for public access and distribution;
- A discussion of how the plan enables long-term preservation of data; and
- A discussion of roles and responsibilities of team members in accomplishing the DMP.

The OSDMP is limited to 4000 characters including spaces (which equates roughly to 500 words / ~2 pages double spaced) and is included as a separate component in the proposal following the Cover Page and prior to the Table of Contents. See section II.C Pre-proposal Elements. Note that if funds are required for data management activities, these shall be included in the budget and budget justification sections of the proposal.

The following links provide additional information about the NASA strategy for increasing access to NASA funded project results, more detailed discussion on how to create an OSDMP, and some illustrative OSDMP templates for particular NASA SMD divisions. Note that not all the material in all of the references below will apply to your specific project but are listed here to provide examples of the kind of information NASA will want to see in your OSDMP.

NASA Plan for Increasing Access to the Results of Scientific Research:

https://www.nasa.gov/sites/default/files/atoms/files/206985_2015_nasa_plan-for-web.pdf

NASA SMD Science Information Policy:

<https://science.nasa.gov/researchers/science-data/science-information-policy>

How to Create and Maintain a Data Management Plan for Proposals – Earth Science Division:
<https://www.earthdata.nasa.gov/engage/dmp-earth-science>

Data Management Guidance for Earth Science Division Researchers:
<https://www.earthdata.nasa.gov/engage/data-management-guidance>

Earth Science specific OSDMP template – MS Word document:
<https://www.earthdata.nasa.gov/s3fs-public/2023-02/Earth%20Science%20Division%20OSDMP%20Template.docx?VersionId=fBxuNKFmIk3VCk4rhWKpKqVgVzwrhJE>

Heliophysics Division OSDMP template – MS Word document:
https://science.nasa.gov/files/atoms/files/HPD_DMP_Template_022820.docx

Planetary Science Division OSDMP template --- MS Word document:
<https://science.nasa.gov/files/atoms/files/PSD%20Open%20Science%20%20and%20Data%20Management%20Plan%20TEMPLATE.docx>

Project Title

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1. Scientific / Technical / Management Plan

[Section 1 is not to exceed 14 pages, including all illustrations, tables, and figures]

1.1 PROJECT OVERVIEW

Include a summary of the overall project, a description of the relevance of this project to NASA and the State of Louisiana, and list the major research tasks, project goals, objectives, and team structure.

1.2 PROJECT PURPOSE

Describe how the proposed research activities will make significant contributions to the strategic research and technology development priorities of one or more of the NASA Mission Directorates or Centers and will contribute to the overall research infrastructure, science and technology capabilities, higher education, and economic development of the State of Louisiana. Include alignment with the [2022 NASA Strategic Plan](#), as well as any additional Agency or federal/state government policy documents that this work aligns with.

1.2.1 Relevance to NASA

Describe how the proposed research activities will make significant contributions to the strategic research and technology development priorities of one or more of the NASA Mission Directorates, the OCT, and the ten NASA Centers. See the “FY25 NASA Research Topics & Contacts” document distributed with this solicitation.

1.2.2 Relevance to Louisiana

Describe how the proposed research activities will make significant contributions to the overall research infrastructure, science and technology capabilities, higher education, and economic development of Louisiana. Describe partnerships with other campuses, and how their involvement will serve to develop the research infrastructure in our jurisdiction. One reference for Louisiana priorities in the Louisiana Board of Regents Science & Technology Plan known is [Fostering Innovation through Research in Science and Technology in Louisiana \(FIRST Louisiana\)](#).

1.3 GOALS AND OBJECTIVES

Clearly state goals and objectives for the proposed effort and provide a rationale for the research plan that will be used to achieve them.

1.4 PROJECT CONTENT

Clearly describe the proposed effort and how the goals and objectives will be achieved. Provide an overview of the science background and ongoing work in this area. Detail the gaps in knowledge and the questions to be answered by your project.

Follow with a detailed research plan which includes all major tasks and subtasks and clearly identifies the members of the project team working each task. *Please note, when preparing a proposal that involves the use of human subjects, animals, hazardous materials, select agents, and/or recombinant DNA, the proposers will need to address applicable compliance issues for the pre-proposal. Not addressing these issues in your description, including obtaining approval from relevant committees, will preclude any review of your submission.*

1.5 ANTICIPATED RESULTS

Clearly describe the anticipated results for the proposed effort.

1.6 PROJECT TIMELINE AND MILESTONES

Include a project timeline table for achieving the stated goals and objectives, including significant milestones. Provide a narrative description of milestones planned for each year.

1.7 PARTNERSHIPS AND INTERACTIONS

Describe any partnerships or cooperative arrangements among academia, government agencies, business and industry, private research foundations, jurisdiction agencies, and local agencies as well as partnerships with minority-serving institutions and the inclusion of faculty and students from underrepresented/underserved groups. Collaborations with NASA researchers and use of NASA facilities should be explicitly referenced here. We strongly encourage the inclusion of additional Louisiana campuses, especially HBCU's and those traditionally not research-intensive, as that will support the goal of infrastructure development across the jurisdiction.

1.8 SUSTAINABILITY

Describe how the research capability will be sustained beyond the funding period. There should be a clear plan for sustaining the research beyond NASA EPSCoR funding and for seeking non-EPSCoR funding. Identify potential CAN's, NRA's, RFP's, etc., specifically as examples.

1.9 DISSEMINATION

Outline the plan for disseminating the results to NASA and the broader community.

Include this statement prior to section 2, "As per the guidance in the NOFO, the Management and Evaluation information shall be included in the proposal with page limits as required and does not count toward the 15-page limit for the Scientific, Technical, or Management section."

2. Management and Evaluation

The following information shall be included in the proposal with page limits as required and does not count toward the 14-page limit for the Scientific, Technical, or Management section. This section shall describe the management structure for the proposed research, and coordination with the jurisdiction's NASA EPSCoR project management. This section shall describe the management structure for the proposed research, and coordination with the jurisdiction's NASA EPSCoR project management.

2.1 PERSONNEL

Identify and summarize the roles and responsibilities of team members involved in the development and execution of proposed activities. The proposal shall include a list of the personnel participating in this research program, including Principal Investigator, Science-Investigator, and all Co-Investigators, Research Associates, Post-Doctoral Fellows, Research Assistants, Graduate students, Undergraduate students, and other research participants. The credentials of the researchers are important; however, EPSCoR includes the concept of encouraging and helping new researchers. Tuition remission is not an allowable cost on the Board of Regents cost-share. Any costs for funding student tuition must be charged against the NASA funds.

2.2 RESEARCH PROJECT MANAGEMENT

A description of the Science-I's management structure of the proposed research project, and the extent to which the project's management and research team will lead to a well-coordinated, efficiently managed, and productive effort shall be included. Remember to include coordination with LaSPACE NASA EPSCoR Management and Board of Regents for annual reporting and financial management.

2.3 MULTI-JURISDICTION PROJECTS

If the proposed research is a collaboration between or among more than one NASA EPSCoR jurisdiction, one jurisdiction shall be identified as the lead with additional partners identified as sub-awardees. The proposal shall detail the inter-jurisdiction management structure of the proposed research project, including a list of the participating jurisdictions, and the participating universities and agencies within each jurisdiction. Multi-jurisdictional proposals shall not exceed the \$750,000 award limit.

2.4 PROJECT EVALUATION

Proposals shall document the intended outcomes and offer metrics to demonstrate progress toward and achievements of these outcomes. They shall discuss metrics to be used for tracking and evaluating project progress. Milestones and timetables for achievement of specific objectives during the award period shall be presented. The proposal shall describe an appropriate evaluation plan/process to document outcomes and demonstrate progress toward

achieving objectives of proposed project elements. Evaluation methodology shall be based upon reputable models and techniques appropriate to the content and scale of the project. Projects shall implement improvements throughout the entire period of performance based on ongoing evaluation evidence.

2.5 RESULTS OF PRIOR NASA EPSCoR RESEARCH SUPPORT

(Leave this section blank. The NASA EPSCoR Program Director will write this for the proposal selected to represent Louisiana)

3. References and Citations

Include references and citations made in the body of the proposal here.

4. Biographical Sketches

[Submit short CVs for key personnel using the following guidelines: **Science-PI:** maximum 2 pages; **Co-I/Institutional-PI :** 1 page] *Note: NASA does not allow Co-PI's in any role.*

Provide the following information for the senior personnel on the project. Begin with the Principal Investigator.
DO NOT EXCEED 2 PAGES PER PERSON.

- A. Vitae, listing professional and academic essentials and mailing address.
- B. List up to 5 publications most closely related to the proposed project and up to 5 other significant publications, including those being printing. Patents, copyrights, or software systems developed may be substituted for publications. Do not include additional lists of publications, invited lectures, etc. Only the list of up to 10 will be used in merit review.
- C. List of persons, other than those cited in the publication list, who have collaborated on a project or a book, article, report or paper within the last 48 months, including collaborators on this proposal. If there are no other collaborators, please indicate that fact.
- D. Names of graduate and post-graduate advisors and advisees.

The information in C. and D. is used to help identify potential conflicts or bias in the selection of reviewers.

5. Current and Pending Support

The following information **MUST** be provided for each investigator and other senior personnel.

Use additional sheets as necessary. Complete Form 1001CP, provided on the following page.

List support from ALL sources, including BOR Support Fund.

NAME OF INVESTIGATOR:

| |
|---|
| <p>Status of Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future</p> <p>Project/Proposal Title:</p> <p>Source of Support:</p> <p>Award Amount (or Annual Rate): \$ _____ Period Covered: _____</p> <p>Location of Activity:</p> <p>Person-Months or % of Effort Committed to the Project: <input type="checkbox"/> Cal Yr <input type="checkbox"/> Acad <input type="checkbox"/> Summ</p> |
| <p>Status of Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future</p> <p>Project/Proposal Title:</p> <p>Source of Support:</p> <p>Award Amount (or Annual Rate): \$ _____ Period Covered: _____</p> <p>Location of Activity:</p> <p>Person-Months or % of Effort Committed to the Project: <input type="checkbox"/> Cal Yr <input type="checkbox"/> Acad <input type="checkbox"/> Summ</p> |
| <p>Status of Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future</p> <p>Project/Proposal Title:</p> <p>Source of Support:</p> <p>Award Amount (or Annual Rate): \$ _____ Period Covered: _____</p> <p>Location of Activity:</p> <p>Person-Months or % of Effort Committed to the Project: <input type="checkbox"/> Cal Yr <input type="checkbox"/> Acad <input type="checkbox"/> Summ</p> |
| <p>Status of Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future</p> <p>Project/Proposal Title:</p> <p>Source of Support:</p> <p>Award Amount (or Annual Rate): \$ _____ Period Covered: _____</p> <p>Location of Activity:</p> <p>Person-Months or % of Effort Committed to the Project: <input type="checkbox"/> Cal Yr <input type="checkbox"/> Acad <input type="checkbox"/> Summ</p> |

6. Statements of Commitment and Letters of Support

Letters of support should be included here.

7. Budget Justification: Narrative and Details

7.1 BUDGET NARRATIVE

[Budget Narrative/Details: All budget line items require detailed explanations without exception. We have created the following budget narrative template with some examples of acceptable descriptions for the various categories. This section must be duplicated for all sub-awardees.]

Include a brief (1-3 paragraph) narrative description of the funding structure and participating institutions, including NASA-EPSCoR, Louisiana BOR, the lead institution, and any sub-award institutions. Include a high-level table identifying contributions of the three funding sources (NASA, LA BOR, Institutions) for each of the years of the research project. In developing the project budget note the limitations and requirements as specified in section 1.E, Financial Considerations of the LA BOR / NASA EPSCoR Request for Pre-Proposal guidelines. This program is intended to improve research capability in Louisiana and, consequently, costs should primarily support effort within the state. Direct labor costs will be allowed exclusively for faculty, staff, students, and visiting researchers at Louisiana Institutions. Tuition remission is not an allowable cost on the Board of Regents cost-share. Any costs for funding student tuition must be charged against the NASA funds.

7.1.1 Summary of Proposal Personnel and Work Effort

Include a table of anticipated work effort in (person-months) for each year of the research project. Example Table below.

| Name | Role | Person-Months Year 1 | Person-Months Year 2 | Person-Months Year 3 |
|---|-------------------------------|-------------------------|-------------------------|-------------------------|
| <i>Lead Institution Name</i> | | | | |
| Jane C. Smith | Science PI, Institution-PI | 1.0 | 1.0 | 2.0 |
| John B. Doe | Co-I | 1.0 | 1.0 | 1.0 |
| To be named | Post-doctoral Associate | 12 | 12 | 12 |
| Graduate Students (3 per year) | Student | 18 | 18 | 18 |
| Undergraduate students (up to 5 per year) | Student | 15 | 15 | 15 |
| <i>Sub-Award Institution Name</i> | | | | |
| James Smith | Co-I, Institution-PI | 1.0 | 1.0 | 1.0 |
| Graduate Student (1) | Student | 6 | 6 | 6 |
| Undergraduate Student (3) | Student | 6 | 6 | 6 |

Note: You must describe exactly how person-months/years are calculated for students

7.1.2 Facilities and Equipment

Existing Facilities and Equipment

Provide a 1-paragraph description of each facility (faculty labs, departmental labs, general department facilities). Follow each paragraph description with a list of all major equipment available to support this project, as needed.

Additional Facilities and Equipment to be Acquired using Project Funds

Identify any additional space or general equipment that will be acquired for this project in a brief narrative description (1 to 3 paragraphs). [Detailed descriptions of all proposed equipment / facility costs must be included in the detailed budget section.]

7.1.3 Cost Methodology

Provide a brief (1-3 sentences) description of the method used to estimate the following cost categories.

- ***Salaries and Wages***
- ***Equipment***
- ***Materials and Supplies***
- ***Travel***
- ***Other Applicable Costs (Operating Services)***

7.2 BUDGET DETAILS – LEAD INSTITUTION

[Dollar amounts proposed with no detailed explanation (e.g., Equipment: \$12,000, or Labor: \$35,000) will reduce proposal acceptability, or cause delays in funding should the proposal be selected. Each item should be explained in reasonable detail.]

Provide a summary table of the lead institution’s budget by major cost category as indicated below.

“Project Title,” Lead Institution Name: Budget Summary by Major Category

| Category | Year 1 | | Year 2 | | Year 3 | |
|---------------------------------|--------|-----|--------|-----|--------|-----|
| | NASA | BOR | NASA | BOR | NASA | BOR |
| Direct Labor | | | | | | |
| Other Direct Costs: | | | | | | |
| Supplies & Materials | | | | | | |
| Equipment | | | | | | |
| Travel Costs | | | | | | |
| Sub-Award Costs | | | | | | |
| Other Applicable Costs | | | | | | |
| <i>Total Direct Costs</i> | | | | | | |
| <i>F&A (Indirect) Costs</i> | | | | | | |
| Total Project Costs | | | | | | |

Note that in each of the “Detail” subsections below, you need to specify the costs allocated to NASA funds separately from those allocated to the BOR Support Funds. Your numbers for each year need to be shown to sum to the totals listed on the section 7.4 Budget Form for each column, “NASA Funds Requested,” “Non-Federal Match BOR,” for each year: Year 1, Year 2, Year 3, and Combined. A table such as below should be included in each budget detail subsection

| YEAR | NASA Request | BOR Request |
|-------------|---------------------|--------------------|
| Year 1 | \$XX,XXX | \$XX,XXX |
| Year 2 | \$XX,XXX | \$XX,XXX |
| Year 3 | \$XX,XXX | \$XX,XXX |

Direct Labor Detail

Direct labor costs should be separated by titles or disciplines (e.g., Principal Investigator, Co-Investigator, Collaborator, Research Associate, graduate or undergraduate research assistant, etc.) with estimated hours, hourly rates, or monthly rates and total amounts of each. Identify all faculty, staff, and students to be supported. Direct labor costs will be allowed exclusively for faculty, staff, and students at Louisiana Institutions. List amounts for each year for each one you list. Also provide brief summaries of the primary responsibilities for each of the categories. Specifically, mention what each Investigator will be responsible for, what research any post-docs or graduate students will perform, and what kind of work undergraduate students might

complete. Document fringe benefits (rates & totals) and lastly, summarize the yearly totals for wages, salaries, and benefits.

| YEAR | NASA Request | BOR Request |
|-------------|---------------------|--------------------|
| Year 1 | \$XX,XXX | \$XX,XXX |
| Year 2 | \$XX,XXX | \$XX,XXX |
| Year 3 | \$XX,XXX | \$XX,XXX |

Supplies & Materials Detail

Organized by year, identify amounts followed by a brief description (with concrete examples) of typical supplies required to conduct your research project. Pay special attention to high-cost materials and supplies (e.g. Platinum substrates or the like). Cite sources for cost estimates (vendor quote, website price listing, previous orders, etc). Supplies and Material is an area where NASA often requests additional information resulting in delayed implementation of the award. Therefore, it is highly recommended that you provide as much information here as you reasonably can.

| YEAR | NASA Request | BOR Request |
|-------------|---------------------|--------------------|
| Year 1 | \$XX,XXX | \$XX,XXX |
| Year 2 | \$XX,XXX | \$XX,XXX |
| Year 3 | \$XX,XXX | \$XX,XXX |

Equipment Detail

Organized by year, identify all equipment to be purchased for this project. For each piece of equipment, included the name of the equipment, model number & brand, supplier cost quote or website price, and 1-2 sentences describing what the equipment does and how it will be used in the project. The source of the cost estimate **must** be included.

| YEAR | NASA Request | BOR Request |
|-------------|---------------------|--------------------|
| Year 1 | \$XX,XXX | \$XX,XXX |
| Year 2 | \$XX,XXX | \$XX,XXX |
| Year 3 | \$XX,XXX | \$XX,XXX |

Travel Detail

Separate domestic and foreign travel, and then identify fund amounts and funding sources by year. Include visits to NASA Centers and relevant technical conferences. For each trip list the following: purpose, destination, number of travelers, airfare, per diem, registration, local transportation, and miscellaneous. If exact location of travel is not known, select a probable destination for the estimate.

Requested domestic travel should include purpose, the number of trips and expected location, duration of each trip, airfare, rental vehicle (if needed), and per diem. There is no limit placed on domestic travel. Domestic travel should be appropriate and reasonable to conduct the proposed research.

Foreign travel is allowable up to \$3,000/trip and a total of two trips (maximum \$6,000) for the entire jurisdiction's EPSCoR proposal (NASA and BOR funds). Requested foreign travel should include justification, purpose, the number of trips and expected location, duration of each trip, airfare, rental vehicle (if needed), and per diem.

| YEAR | NASA Request | BOR Request |
|-------------|---------------------|--------------------|
| Year 1 | \$XX,XXX | \$XX,XXX |
| Year 2 | \$XX,XXX | \$XX,XXX |
| Year 3 | \$XX,XXX | \$XX,XXX |

Sub-Award Detail

This section should describe all sub-awards anticipated to be funded by the lead institution. Include the institution name, project role, yearly funding level, and total funding level for each collaborating institution receiving an award. Note that Subawards using NASA EPSCoR funds can only be issued to institutions in NASA EPSCoR jurisdictions and BOR cost share can only be expended on institutions in Louisiana.

In addition, starting at section 7.4 each sub-award proposed must include a cover sheet, a statement of work for the sub-award institution, and a complete budget section (four total budget forms and the same budget details specified here). Sub-award packages should be approved and signed by the receiving institution prior to submission of the pre-proposal.

| YEAR | NASA Request | BOR Request |
|-------------|---------------------|--------------------|
| Year 1 | \$XX,XXX | \$XX,XXX |
| Year 2 | \$XX,XXX | \$XX,XXX |
| Year 3 | \$XX,XXX | \$XX,XXX |

Other Applicable Costs Detail

List any additional allowable costs to be covered by NASA, and BOR, such as consultants, preparing manuscripts, and F&A (indirect) costs. Organize by year and identify amounts with funding agencies. Tuition remission is not an allowable cost on the Board of Regents cost-share. Any costs for funding student tuition must be charged against the NASA funds.

| YEAR | NASA Request | BOR Request |
|-------------|---------------------|--------------------|
| Year 1 | \$XX,XXX | \$XX,XXX |
| Year 2 | \$XX,XXX | \$XX,XXX |
| Year 3 | \$XX,XXX | \$XX,XXX |

F&A (Indirect) Costs

Include rates and the base, plus total cost. Note that for this proposal, F&A (indirect) is limited to 25% of total salaries, wages, and fringe on funds from the Board of Regents; your campus's federally negotiated rate applies for the funds requested from NASA. Include a reference link or copy of the letter that specifies your institution's current federally negotiated F&A and fringe benefits rates. If you plan to escalate your fringe or F&A rate over the three years of the proposed budget, that escalation rate should be described in your documentation.

| YEAR | NASA Request | BOR Request |
|-------------|---------------------|--------------------|
| Year 1 | \$XX,XXX | \$XX,XXX |
| Year 2 | \$XX,XXX | \$XX,XXX |
| Year 3 | \$XX,XXX | \$XX,XXX |

7.3 BUDGET DETAILS – SUBAWARDS

For all anticipated Sub-Award Institutions, the items listed below are to be included on the following pages.

Cover Sheet

With authorized institutional signature.

Statement of Work

Summary of the work to be completed by the collaborating institution.

Budget Details

Budget Details for Subawards must be included just as described in the previous section for the lead institution.

7.4 BUDGET FORMS

[Budget Form: Use the Louisiana NASA EPSCoR Pre-proposal Budget Forms that follow this page (this form is also provided in MS Excel as a separate attachment). You should have a total of 4 completed budget forms per institution. Prepare a separate budget page for each of the 3 years, plus a cumulative budget page. A budget justification must be included. F&A (indirect) recovery is limited to 25% of total salaries, wages, and fringe benefits on BOR funds; use your negotiated federal rate on NASA funds. This section must be duplicated for all sub-awardees.]

Louisiana NASA EPSCoR Pre-proposal Budget Form Year 1

| | | | |
|--|----------------------|--|---------------|
| PROJECT TITLE: | | PROJECT YEAR: (circle one) | |
| | | 1 2 3 combined | |
| PRINCIPAL INVESTIGATOR: | | ORGANIZATION: | |
| 1 SALARY COSTS | NASA Funds Requested | Non-Federal Match | |
| | | BOR | Institutional |
| 1 | | | NA |
| 2 | | | NA |
| 3 | | | NA |
| 4 | | | NA |
| 5 Graduate Student Support | | | NA |
| 6 Undergraduate Student Support | | | NA |
| TOTAL PERSONNEL | | | NA |
| 2 FRINGE BENEFITS (if charged as direct costs) Specify Rate: | | | NA |
| 3 TOTAL WAGES, SALARIES, BENEFITS (1 + 2) | | | NA |
| 4 SUPPLIES & MATERIALS | | | NA |
| 5 EQUIPMENT (List item & dollar amount for items exceeding \$1,000) | | | |
| Total Permanent Equipment | | | NA |
| 6 TRAVEL COSTS | | | |
| Domestic (Incl. Canada & U. S. possessions.) | | | NA |
| Foreign | | | NA |
| 7 PUBLICATION & REPORT COSTS | | | NA |
| 8 SUBAWARD COSTS | | | NA |
| 9 CONSULTANT COSTS | | | NA |
| 10 COMMUNICATION COSTS | | | NA |
| 11 OTHER DIRECT COSTS | | | NA |
| 12 TOTAL DIRECT COSTS | | | NA |
| 13 INDIRECT COSTS (Specify rates.) | | | |
| 1. Federal: XX% | | | |
| 2. BOR: 25% of line 3 | | | |
| 3. Institutional: (specify rate) | | | |
| Total Indirect Costs | | | NA |
| 14 TOTAL PROJECT COSTS (12 + 13) | | | NA |

Louisiana NASA EPSCoR Pre-proposal Budget Form Year 2

| | | | |
|--|----------------------|----------------------------|---------------|
| PROJECT TITLE: | | PROJECT YEAR: (circle one) | |
| | | 1 | 2 |
| | | 3 | combined |
| PRINCIPAL INVESTIGATOR: | | ORGANIZATION: | |
| 1 SALARY COSTS | NASA Funds Requested | Non-Federal Match | |
| | | BOR | Institutional |
| 1 | | | NA |
| 2 | | | NA |
| 3 | | | NA |
| 4 | | | NA |
| 5 Graduate Student Support | | | NA |
| 6 Undergraduate Student Support | | | NA |
| TOTAL PERSONNEL | | | NA |
| 2 FRINGE BENEFITS (if charged as direct costs) Specify Rate: | | | NA |
| 3 TOTAL WAGES, SALARIES, BENEFITS (1 + 2) | | | NA |
| 4 SUPPLIES & MATERIALS | | | NA |
| 5 EQUIPMENT (List item & dollar amount for items exceeding \$1,000) | | | |
| Total Permanent Equipment | | | NA |
| 6 TRAVEL COSTS | | | |
| Domestic (Incl. Canada & U. S. possessions.) | | | NA |
| Foreign | | | NA |
| 7 PUBLICATION & REPORT COSTS | | | NA |
| 8 SUBAWARD COSTS | | | NA |
| 9 CONSULTANT COSTS | | | NA |
| 10 COMMUNICATION COSTS | | | NA |
| 11 OTHER DIRECT COSTS | | | NA |
| 12 TOTAL DIRECT COSTS | | | NA |
| 13 INDIRECT COSTS (Specify rates.) | | | |
| 1. Federal: XX% | | | |
| 2. BOR: 25% of line 3 | | | |
| 3. Institutional: (specify rate) | | | |
| Total Indirect Costs | | | NA |
| 14 TOTAL PROJECT COSTS (12 + 13) | | | NA |

Louisiana NASA EPSCoR Pre-proposal Budget Form Year 3

| | | | |
|-------------------------|--|----------------------------|------------------------|
| PROJECT TITLE: | | PROJECT YEAR: (circle one) | |
| | | 1 | 2 |
| | | 3 | combined |
| PRINCIPAL INVESTIGATOR: | | ORGANIZATION: | |
| 1 | SALARY COSTS | NASA Funds Requested | Non-Federal Match |
| | | | BOR Institutional |
| 1 | | | NA |
| 2 | | | NA |
| 3 | | | NA |
| 4 | | | NA |
| | 5 Graduate Student Support | | NA |
| | 6 Undergraduate Student Support | | NA |
| | TOTAL PERSONNEL | | NA |
| 2 | FRINGE BENEFITS (if charged as direct costs) Specify Rate: | | NA |
| 3 | TOTAL WAGES, SALARIES, BENEFITS (1 + 2) | | NA |
| 4 | SUPPLIES & MATERIALS | | NA |
| 5 | EQUIPMENT (List item & dollar amount for items exceeding \$1,000) | | |
| | Total Permanent Equipment | | NA |
| 6 | TRAVEL COSTS | | |
| | Domestic (Incl. Canada & U. S. possessions.) | | NA |
| | Foreign | | NA |
| 7 | PUBLICATION & REPORT COSTS | | NA |
| 8 | SUBAWARD COSTS | | NA |
| 9 | CONSULTANT COSTS | | NA |
| 10 | COMMUNICATION COSTS | | NA |
| 11 | OTHER DIRECT COSTS | | NA |
| 12 | TOTAL DIRECT COSTS | | NA |
| 13 | INDIRECT COSTS (Specify rates.) | | |
| | 1. Federal: XX% | | |
| | 2. BOR: 25% of line 3 | | |
| | 3. Institutional: (specify rate) | | |
| | Total Indirect Costs | | NA |
| 14 | TOTAL PROJECT COSTS (12 + 13) | | NA |

Louisiana NASA EPSCoR Pre-proposal Budget Form Combined 3 Years

| | | | | |
|--|----------------------|--|---------------|----|
| PROJECT TITLE: | | PROJECT YEAR: (circle one) | | |
| | | 1 | 2 | 3 |
| | | combined | | |
| PRINCIPAL INVESTIGATOR: | | ORGANIZATION: | | |
| 1 SALARY COSTS | NASA Funds Requested | Non-Federal Match | | |
| | | BOR | Institutional | |
| 1 | | | | NA |
| 2 | | | | NA |
| 3 | | | | NA |
| 4 | | | | NA |
| 5 Graduate Student Support | | | | NA |
| 6 Undergraduate Student Support | | | | NA |
| TOTAL PERSONNEL | | | | NA |
| 2 FRINGE BENEFITS (if charged as direct costs) Specify Rate: | | | | NA |
| 3 TOTAL WAGES, SALARIES, BENEFITS (1 + 2) | | | | NA |
| 4 SUPPLIES & MATERIALS | | | | NA |
| 5 EQUIPMENT (List item & dollar amount for items exceeding \$1,000) | | | | |
| Total Permanent Equipment | | | | NA |
| 6 TRAVEL COSTS | | | | |
| Domestic (Incl. Canada & U. S. possessions.) | | | | NA |
| Foreign | | | | NA |
| 7 PUBLICATION & REPORT COSTS | | | | NA |
| 8 SUBAWARD COSTS | | | | NA |
| 9 CONSULTANT COSTS | | | | NA |
| 10 COMMUNICATION COSTS | | | | NA |
| 11 OTHER DIRECT COSTS | | | | NA |
| 12 TOTAL DIRECT COSTS | | | | NA |
| 13 INDIRECT COSTS (Specify rates.) | | | | |
| 1. Federal: XX% | | | | |
| 2. BOR: 25% of line 3 | | | | |
| 3. Institutional: (specify rate) | | | | |
| Total Indirect Costs | | | | NA |
| 14 TOTAL PROJECT COSTS (12 + 13) | | | | NA |

8. Summary of Previous Submittal

PIs who were selected to proceed to the national competition but were not selected for funding by NASA or who submitted a pre-proposal but were not selected to proceed to the national competition may re-propose to this RFP. However, in both cases the application **must include a copy of, or summary of, the reviewer's criticisms plus a discussion of how the re-submission has been re-structured to meet the reviewer's criticisms.** Include relevant information here, if applicable.