



LOUISIANA NASA EPSCoR



Summer Assisted Research (SAR) Program

A NASA EPSCoR

Research Infrastructure Development (RID) Project

Sponsored by NASA & the Louisiana Board of Regents (BoR)
With Technical & Management Support from LaSPACE

La NASA EPSCoR / LaSPACE Management Office
364 Nicholson Hall, Department of Physics and Astronomy
Louisiana State University, Baton Rouge, LA 70803
225.578.8697 | Fax: 225.578.1222 | <http://lanasaepscor.lsu.edu/>

SAR Program Summary Page

About the SAR

The SAR sub-program is designed to support faculty research at non-research intensive institutions during the summer semester. The proposed research must always be NASA relevant, be shown to address specific NASA priorities, and could take place at a NASA Center or a Louisiana research intensive institution already engaged in NASA-supported research.

The proposed summer research project will have goals, objectives, and evaluation criteria similar to a RAP-SIP project. The exceptions are that the primary research goals must be accomplished over a single summer, institution cost share will not be required, and the Collaboration Development Plan could include establishing a partnership with faculty at a research intensive Louisiana institution that already has or is in the process of establishing a NASA connection instead of a researcher at a NASA Center.

The SAR proposal must include evidence that the NASA Center researcher or Louisiana institution faculty will in fact partner with the SAR research team. A SAR award will provide support up to \$20,000 and can be used for faculty summer salary, student support, and moderate amounts of supplies and travel. The period of performance, which should be specified in the proposal, is expected to range from no less than 6 weeks to up to 12 weeks. The project is expected to commence sometime in June with an end date no later than September 1st of the same year.

Proposal Submissions

- **Submit all properly executed proposals via email as fully searchable pdf documents to laspace@lsu.edu by 11:59 pm on Wednesday, February 15, 2017.**
- Important Dates:
 - Proposal Release Date: December 15, 2016
 - Proposal Due Date: Wednesday, February 15, 2017
 - Anticipated Award Announcements: Late March 2017
 - Anticipated Period of Performance: 6-12 Weeks beginning no earlier than June 1, 2017 and concluding no later than September 1, 2017.

SAR Program Guidelines

Introduction to the NASA EPSCoR RID Program

The NASA Experimental Program to Stimulate Competitive Research (EPSCoR) is administered through NASA's Office of Education. The purpose of NASA EPSCoR is to strengthen the research capability of jurisdictions that have not in the past participated equably in competitive federal research and development activities.

The NASA EPSCoR Research Infrastructure Development (RID) 2015 program focuses on building the core strength needed to develop competitive research and technology development methods and activities for the solution of scientific and technical problems of importance to NASA as defined by one or more of the four Mission Directorates and/or one or more of the ten NASA Centers (including JPL). RID programs will also contribute to the overall research infrastructure, science and technology capabilities, higher education, and/or economic development of the EPSCoR jurisdiction. An emphasis should be placed on developing a core expertise and robust research program capable of successfully competing for funds offered by NASA, industry, other federal agencies, and additional external sources beyond the EPSCoR program.

NASA Agency Information

NASA Vision

We reach for new heights and reveal the unknown for the benefit of humankind.

NASA Mission

Drive advances in science, technology, aeronautics, and space exploration to enhance knowledge, education, innovation, economic vitality, and stewardship of Earth.

From the 2014 NASA Strategic Plan: "NASA's Vision and Mission statements remind us of our purpose and our path. NASA's Vision leads to a future with an American-made launch capability supporting cutting-edge science, technology, and human exploration with strong technology and aeronautics programs. We will develop new technologies for use in air, space, and on the ground. We will be a part of a strong, high-tech economy, and we will continue to partner with other nations to create a better world. We will increase our understanding of the universe and our place in it. Our Mission statement outlines our fundamental purpose and role in bringing that Vision to life. As the Nation's leading organization for research and development in aeronautics and space, we are explorers and innovators who create and use our unique tools and capabilities for the benefit of the Nation and the world."

Complete Plan available: http://www.nasa.gov/sites/default/files/files/2014_NASA_Strategic_Plan.pdf

NASA Education

NASA contributes to national efforts for achieving excellence in STEM education through a comprehensive education portfolio implemented by the Office of Education, the Mission Directorates, and the NASA Centers. The NASA EPSCoR Program is managed through the NASA Office of Education at NASA Headquarters in D.C., <http://www.nasa.gov/offices/education/about/index.html>. The

2015-2017 NASA Education Implementation Plan (NEIP) provides an understanding of the role of NASA in advancing the nation's STEM education and workforce pipeline. The document outlines the roles and responsibilities that NASA Education has in approaching and achieving the agency's and the administration's strategic goals in STEM Education. The specific purpose of the 2015-2017 NASA Education Implementation Plan is to present and describe the following:

- The alignment of NASA Education with national priorities and the 2014 NASA Strategic Plan;
- The framework for specific and measurable outcomes to guide and monitor performance within the education portfolio;
- The roles, responsibilities and management of the Associate Administrator for Education, the Office of Education, Mission Directorate Leads, and Education Offices;
- The key agency stakeholders responsible for strategic coordination and requirements development;
- The monitoring and control structure for determining the outcomes of NASA's education portfolio across the agency.

In addition, this document describes the processes and principles of strategic planning and management for all of NASA's education efforts. It also explains how NASA Education is governed and managed and what internal and external requirements drive this strategy. Complete NEIP available here: http://www.nasa.gov/sites/default/files/atoms/files/nasa_education_implementation_plan_2015-2017.pdf

The Aerospace Research and Career Development program's two major components, Space Grant and EPSCoR, strengthens the research capabilities of the Nation's colleges and universities and provides opportunities that attract and prepare increasing numbers of students for NASA related careers. The Space Grant student programs serve as a major link in the pipeline for addressing NASA's human capital strategies. The EPSCoR research conducted contributes to the research needs of NASA's Mission Directorates and advances the scientific and technology innovation agenda of the nation, as well as the jurisdiction's aerospace research and development priorities.

NASA Education Mission

Advance high-quality STEM education using NASA's unique capabilities.

NASA Mission Directorates

Programs supported by La NASA EPSCoR must support the NASA organization, align with the NASA Strategic Plan, and support the goals of one or more directorates, NASA centers, and the Office of Education.

The Aeronautics Research Mission Directorate (ARMD), Tony Springer Lead, Communications and Education NASA Headquarters Phone: (202) 358-0848 Tony.Springer@nasa.gov, http://www.aeronautics.nasa.gov/about_us.htm

Human Exploration and Operations Mission Directorate (HEOMD), Bradley Carpenter Space Life and Physical Sciences Research and Applications Division NASA Headquarters Phone: (202) 358-0826 BCarpenter@nasa.gov, <http://www.nasa.gov/directorates/heo/home/about.html#.VXiCQUZURmM>

Science Mission Directorate (SMD), Stephanie Stockman Education/Public Outreach Lead NASA Headquarters Phone: (202) 358-0039 Stephanie.A.Stockman@nasa.gov, <http://science.nasa.gov/about-us/>

Space Technology Mission Directorate (STMD), Joseph Grant Education Lead NASA Headquarters Phone: (202) 358-0070 Joseph.Grant@nasa.gov, http://www.nasa.gov/directorates/spacetech/about_us/index.html

NASA EPSCoR Center Liaisons

Ames Research Center, <i>Elizabeth Cartier</i> Space Grant Coordinator, Office of Education and Public Outreach Phone: 650-604-6958 Elizabeth.A.Cartier@nasa.gov	Kennedy Space Center, <i>Benita DeSuza</i> NASA Internships, Fellowships and Scholarships (NIFS) Lead Phone: (321) 867-3671 Benita.W.Desuza@nasa.gov
Armstrong Flight Research Center, <i>Oscar Murillo</i> MIRO Project Manager Phone: (661) 276-6110 Oscar.J.Murillo@nasa.gov	Langley Research Center, <i>Gamaliel (Dan) Cherry</i> University Affairs Officer Phone: (757) 864-6113 Gamaliel.R.Cherry@nasa.gov
Goddard Space Flight Center <i>Vigdor Teplitz</i> University Affairs Officer Phone: (301) 286-2362 Vic.Teplitz@nasa.gov	Glenn Research Center, <i>Mark David Kankam, Ph.D.</i> University Affairs Officer Dir. of NASA Space & Aeronautics Academy at Glenn, Phone: (216) 433-6143 Mark.D.Kankam@nasa.gov
Jet Propulsion Laboratory, <i>Linda Rodgers</i> University Programs Administrator Phone: (818) 354-3274 inda.L.Rodgers@jpl.nasa.gov	Marshall Space Flight Center, <i>Norman (Frank) Six</i> University Affairs Officer Office of Academic Affairs (HS30) Phone: (256) 961-0678 Norman.F.Six@nasa.gov
Johnson Space Center, <i>Kamlesh Lulla</i> Director, University Research Collaborations and Partnership Office Phone: (281) 483-3065 Kamlesh.P.Lulla@nasa.gov	Stennis Space Center, <i>Nathan Sovik</i> University Affairs Officer Phone: (228) 688-7355 Nathan.A.Sovik@nasa.gov

NASA EPSCoR RID Program in Louisiana

The Louisiana Board of Regents (BOR) has received an EPSCoR Research Infrastructure Development (RID) award, “Developing Aerospace Research in Louisiana,” from the NASA EPSCoR program. The overarching theme for NASA EPSCoR in Louisiana is *Moving the State forward in Competitiveness*. This involves a combination of education, research, and infrastructure to both develop the workforce for the future and to foster the technological advances that contribute to long-term economic development. Achieving this goal involves expanding university educational opportunities, enhancing research infrastructure, fostering R & D capacity building, and capitalizing upon the resultant intellectual property. EPSCoR contributes to this hierarchy through exposure and involvement of university students in the research enterprise, improvement of faculty research capabilities (both at a given institution and between institutions), enhancement of research facilities, and provision of opportunities for faculty (particularly junior faculty), post-doctoral researchers and students to engage in meaningful Aerospace related R & D and, eventually, to move beyond the EPSCoR program.

The overall goal for NASA EPSCoR is to *Elevate the Competitiveness of the State's researchers in Aerospace fields*. Flowing from this goal are the following Objectives for our program:

- Develop new capabilities in Aerospace R & D through advancement of junior faculty.
- Refocus research capacity onto areas relevant to the 2014 NASA Strategic Plan and corresponding roadmaps.
- Re-invigorate Aerospace R & D in the State, continuing the recovery from the many recent disasters.
- Instill competitive techniques into the research enterprise.
- Foster linkages with NASA based scientists and engineers.
- Form partnerships with MSIs and involve minority faculty and students in Aerospace R & D.
- Support workforce development through utilization of students and post-doctoral researchers in supported projects.
- Develop linkages with industry, research centers and other federal facilities.

To accomplish these goals and objectives the Louisiana NASA EPSCoR RID program has established the following subprograms:

- **Travel Award Program (TAP):** provides travel support for researchers to interact with NASA counterparts and investigate possible collaborative efforts.
- **Research Award Program (RAP):** supports “seed” project research, including a “partnership” component.
- **Summer Assisted Research (SAR):** provides summer research support for faculty at non-research intensive institutions.

All subprograms are competitive but operate on different time scales. Travel proposals may be submitted at any time to respond to changing federal research priorities and needs of state researchers to interact with NASA researchers. The RAP ‘Seed’ Research Projects will be conducted on a schedule, e.g. RFP issued in the fall for projects to commence early each calendar year or, in some cases, two competitions per year. The new SAR program will provide an option for faculty at non-research intensive institutions, who are primarily committed to teaching during the academic year, to engage in a

research project during the summer. The RFP for this program will be issued early each calendar year so that support funding can be in place prior to the beginning of the summer.

Summer Assisted Research (SAR)

The SAR sub-program is designed for those faculty at non-research intensive institutions who would like to engage in research, but cannot do so during the academic year due to, for example, high course loads. Thus, the SAR provides support for such faculty to engage in a summer research project with the assistance of partners at a NASA Center or a Louisiana research intensive institution that already has or is in the process of establishing a NASA connection. In this context the objectives of the SAR sub-program are to (i) engage faculty at non-research intensive institutions, (ii) promote partnerships, (iii) provide opportunity for emerging research talent, (iv) utilize students as feasible, and (v) provide significant contributions to NASA related research.

The summer research program proposed in a SAR project should have goals and objectives similar to that for a RAP-SIP “seed” research project, but have a scope that can be accomplished during a single summer semester. The proposed research must always be NASA relevant and be shown to address particular NASA priorities. The project could involve almost any type of NASA relevant work, such as utilizing a specific NASA facility, employing NASA expertise, or building upon previous NASA work (akin to technology/knowledge transfer) or working with a NASA supported group on problems of common interest.

Team work is a hallmark of modern scientific research and establishing partnerships, particularly with NASA researchers, is an important component of the Louisiana NASA EPSCoR program. Thus, as with a RAP, a SAR proposal must include a Collaboration Development Plan that details the current effort and plans in establishing such a partnership. Unlike the RAP, however, which requires establishing a partnership with a NASA researcher, the SAR partnership could involve faculty at Louisiana research intensive institutions already engaged in NASA research. The goal here is to develop larger, longer-lasting collaborative projects that can transition to the next level.

Eligibility

The SAR sub-program is designed to provide summer research assistance to LA researchers for R & D that has a demonstrated tie-in to NASA. Projects must involve Research or Technology, and are open to any area relevant to NASA.

The project PI must be a faculty member at one of Louisiana’s institutions of higher education or community colleges excluding those institutions that have traditionally been well represented in previous NASA EPSCoR or Space Grant research award competitions. Ineligible institutions include Louisiana State University – Baton Rouge, Louisiana Tech University, Loyola University, Tulane University, University of Louisiana – Lafayette, and the University of New Orleans. Post-doctoral associates, graduate students, and undergraduates should be involved as required.

Collaboration Development Plan

Each project proposal must include a Collaboration Development Plan that describes what effort has already been, and will be, undertaken to establish a partnership with one or more researchers at a NASA Center or with faculty at a Louisiana research intensive institution that already has or is in the process of

establishing a NASA connection. Proposal evaluation criteria will include whether the PI has already established such a link as evidenced by a letter or e-mail from one or more researchers indicating their interest and commitment to the project partnership. The proposal should include a description of the partner(s) contribution to the project, possibly including hosting the PI team for all or part of the summer semester, as well as how the PI team and partner(s) will work together to accomplish the research tasks.

Period of Performance

The SAR period of performance is expected to range from 6 to 12 weeks, commencing sometime in May or June with a project end date no later than September 1st of the same year. The PI should specify the desired project start and end dates on the Project Summary page as described below. Every effort will be made to establish the award at the PI institution prior to the desired start date. Note that SAR awards are expected to be of limited duration and, consequently, No Cost Extensions (NCE) are not allowed.

Award Funding Amounts

We anticipate funding one to two SAR awards at about \$20,000 per award.

Proposed Costs

This program is intended to improve research capability. Project costs should be documented in the proposal as necessary to meet the project goals and objectives. Reasonable costs include salary and wages for faculty, research associates, and student researchers, travel to NASA centers or partner institutions for collaboration development meetings or to conduct research activities, and basic materials and supplies to conduct the research. This program is not designed to fully support a graduate student, and student tuition is not an acceptable expense.

Cost-Share

No cost share is required with this program. However, cost share is taken by the reviewers as evidence of commitment on the part of the proposing institution(s) project and PI team. All cost sharing must be certified in monthly billings and in the project final financial report.

Indirect (F&A) Costs

Indirect (F&A) cost recovery will be allowed at the federally negotiated institution rate. SAR funding, however, is intended to help with the development of institution faculty and students, and, therefore, we encourage the institution to support the project with a reduced F&A rate. Unrecovered indirect is allowable (and recommended) component to cost sharing. Note that in order to expedite award processing the proposal should include in the budget narrative section a copy of the federal agency letter documenting the institution F&A and fringe benefit rates or a link to an online version of this letter.

Award Subcontract

Award funds will be provided by subcontract from the Board of Regents to the lead applicants' college or university, which will assume responsibility for administering the funds according to standard procedures.

Diversity

It is a national priority to increase diversity in Science, Technology, Engineering, and Mathematics (STEM), from university students, faculty, and staff to industry employees. Traditionally, minority groups and women have been under-represented in the STEM disciplines as students and faculty as well as in the workplace after graduation. All proposers are encouraged to help recruit diverse participants to their proposed projects.

Animal Use

Any project proposing the use of an animal model for validation must include a local IACUC approval letter, fully signed, which specifies a validity period longer than the proposed project period. Further, if a significant portion of the research takes place at a partner institution then it may be necessary to obtain a IACUC approval from the partner institution as well. Failure to obtain all required Institutional Animal Care and Use Committee's approvals in advance, is grounds for returning the proposal unreviewed. Attach the IACUC material as an additional appendix.

Human Subjects

Projects that involve human subjects are not acceptable for this program.

Public Nature of Applications

Once an application is received, it becomes public record. Although the staff will not disseminate applications to individuals other than to reviewers, applicants should be aware that, if a request for information is made by the public (e.g., the news media), a copy of the application, by law, must be provided.

Disclosure of Information

All LaSPACE/ La NASA EPSCoR programs must conform to applicable Federal, State and NASA regulations and stipulations. This includes annual reporting of award participant information to both the Louisiana Board of Regents and NASA. Part of this information will include both directory information such as name, address, telephone number, date of birth, and demographic information such as gender, ethnicity, and race for all award participants including faculty, staff, and students. Further, outreach includes public dissemination of its supported programs through *The Spaceporter Newsletter*, the La NASA EPSCoR website (<http://laNASAepscor.lsu.edu/>), as well as papers and/or presentations at Space Grant or related Education & Public Outreach conferences. The contents of award reports, including participant names, titles, institution, project summaries, results or conclusions and images, might be included in such public outreach articles. It is not intended that these public articles will disclose directory or demographic information except as aggregated statistical data.

Final Deliverables

At the end of the project, two final reports are required: the Final Technical Report and the Final Financial Report. These reports are due within 30 days, after the subcontract expiration date.

The Final Technical Report will be a multi-page write-up that is suitable for transmission to NASA and BOR. This report should describe the activities undertaken, the participants, the results, and your

assessment, as Principal Investigator(s), of the success of the venture, the impact that it had (or will have), any follow-on proposals in preparation/submitted and any further plans for a continuation of this or similar projects. Please also include a full bibliography. Copies of reports, presentations, publications, follow-on proposals, patent related material, technology transfer, or publicity may be submitted as required in the report narrative. These items should contain citations acknowledging NASA EPSCoR/BOR support. This report shall be submitted to the Board of Regents (Jessica.Domingue@REGENTS.LA.GOV) and the LA NASA EPSCoR/ LaSPACE (laspace@lsu.edu) via email.

The Final Financial Report is an official report that shows the final expenditure of the funds and certifies the cost sharing. This report is to be submitted to the Board of Regents by your university's financial office using the BOR electronic reporting system.

Additional instructions for reporting are given in the sub-award document.

Evaluation Criteria

A panel of external reviewers will rate all of the proposals on the following criteria.

- (25%) Scientific & Technical Merit
- (15%) Relevance to research and training in space/aerospace fields of study
- (10%) Relevance to on-going research priorities at NASA
- (25%) Realism of research implementation plan
- (15%) Comprehensive Collaboration Development Plan including letter of commitment from collaborators.
- (10%) Appropriateness of the budget to complete the work and evidence of institution investment

SAR Proposal Format & Submittal

SAR proposals should be submitted as fully searchable pdf documents via email to laspace@lsu.edu

A SAR proposal must include the following completed sections in the order presented:

- SAR Cover Page
- Proposed Project Summary Page
- Current & Pending Support Form
- Proposal Narrative (*not to exceed 10 pages, including figures and tables, no smaller than 11 point font & one inch margins*)
 - Introduction (overview of the scope of work for this proposal, include mention of the NASA mission directorate and any major ongoing NASA research projects this work is relevant to)
 - Background (provide a bigger picture of how the proposed work fits into your overall research plans and the field of study at large).
 - Research Objectives (clearly identify all science and technical objectives for this proposal)
 - Relevance to NASA and NASA Mission Directorates/Centers (identify all the current and potential applications/relevance to NASA, including future scalability of this project and where a larger scale project would fit in).
 - Implementation Strategy and Milestone Schedule (detail exactly what deliverables are expected, when, and by whom; clearly reference any partner contributed tasks)
 - Collaboration Development Plan (map out any contact you have had thus far with a reasonable plan for development over the course of this project, including number of meetings in person or via phone/web technology; be sure to identify what you will get from the partner and what the partner will get from you over the period of the award).
 - Management Plan (layout a hierarchy of individuals/institutions working on the project, a recruitment plan for team members not yet identified, and methods for tracking and reporting progress throughout the project).
 - Anticipated Outcomes/Plans for Future Endeavors/Future Collaborations with NASA (include plans for publications, conferences, funding opportunities, and full scale collaborations).
- References Cited within the proposal
- Budget Section: Completed the Budget Form followed by a narrative explanation of all costs listed on the form. Explanations are required for both requested funds and proposed cost-shares. Note that to expedite award processing narrative explanations of the costs need to be complete and fully descriptive.
- Letter of Support from a NASA Researcher or Faculty partner at a Louisiana research intensive institution.
- Short Vita for Principal Investigator (~ two pages)

Attachments

Required Proposal Forms

Required Forms for Proposal

All proposals submitted must use the forms included following this page. Proposals not using these forms may be rejected without review.

- Cover Sheet
- Proposed Project Summary
- Current & Pending Support Form
- Proposal Budget Form

**A NASA EPSCoR – La BOR SAR Project
Summer Assisted Research (SAR) Cover Sheet**

1. Title of Proposed Project: _____

2. Principal Investigator: _____
(Name)

(Department)

3. Institution of Higher Education: _____

4. PI Address: _____
(Street Address/P.O. Box Number)

(City, State) (Zip Code)

5. Telephone: _____ FAX: _____

E-mail: _____

6. NASA / LA Research Institution Partner: _____
(Name)

(Position) (Center/Institution) (e-mail)

7. Total Funds Requested: \$ _____ Institutional Commitment: \$ _____

Certification of Compliance with Applicable Executive Orders and U.S. Code: By signing and submitting this proposal, the signatories certify that the statements made in this proposal are true and complete to the best of their knowledge; they agree to comply with LaSPACE award terms and conditions if an award is made as a result of this proposal; and the institution and proposed project are in compliance with all applicable Federal and State laws and regulations including, but not limited to, Executive Order 12549, Debarment and Suspension, 34 CFR Part 85, Section 85.510, Participant's responsibilities; Non-Discrimination; Certification against Lobbying imposed by section 1352, title 31, U.S. Code; Compliance with China Funding Restriction as detailed in Public Laws 112-10 Section 1340(a) and 112-55, Section 539; ACORN Compliance in accordance with 534 of the Consolidated and Further Continuing Appropriations Act of 2012 (Pub. L.112-55); and does not have a federal tax liability or federal felony conviction (sections 544 and 543 of Public Law 112-55).

8. Signature of Principal Investigator: _____

9. Name of Authorized Institutional Rep: _____

10. Signature of Authorized Institutional Rep: _____

11. Date Signed: _____

Proposed Project Summary

NAME OF INSTITUTION (INCLUDE BRANCH/CAMPUS AND SCHOOL OR DIVISION)	
ADDRESS (INCLUDE DEPARTMENT)	
PRINCIPAL INVESTIGATOR	
PROJECT TITLE	
DESIRED START DATE:	DESIRED END DATE:
PARTNER NAME(S) AND INSTITUTION(S):	
ABSTRACT (DO NOT EXCEED 250 WORDS, suitable for general distribution)	

Current and Pending Support Form

This Form is to be filled out for the Principal Investigator and the Co-I for PP proposals. For each Project provide the following information: Funding Agency, Title, Funding Amount, Starting and Ending Dates, and Personnel Effort Committed to the Project (person-months or % of effort). Please add additional pages as needed.

1. Current Support

Agency/Grant No.:
Title:
Amount
Period:
Effort:
Location:

Agency/Grant No.:
Title:
Amount
Period:
Effort:
Location:

2. Pending Support

Agency:
Title:
Amount
Period:
Effort:
Location:

Agency:
Title:
Amount
Period:
Effort:
Location:

**A NASA EPSCoR – La BOR RID Project
Summer Assisted Research (SAR) Budget Request Sheet**

Include a budget narrative page with explanations and justifications for all costs following each budget form submitted.

Proposal Title: _____

Principal Investigator: _____

Institution: _____

	NASA/BORSF Funds Requested	Institutional Contribution*
A. Direct Labor		
1. Researchers	\$	\$
2. Graduate Student(s)	\$	\$
3. Undergraduate Student(s)	\$	\$
4. Fringe Benefits	\$	\$
5. Subtotal A	\$	\$
B. Supportive Expenses		
1. Travel	\$	\$
2. Supplies & Materials	\$	\$
3. Communications	\$	\$
4. Equipment	\$	\$
5. Other Expenses (Identify)	\$	\$
6. Subcontracts	\$	\$
7. Subtotal B	\$	\$
8. F&A (Indirect)	\$	\$
C. Total Project Cost		
	\$	\$

**Must be certified on all financial billings/reports.*