# **Standard NSF Proposal Outline**

*Note: This outline addresses key development components of a standard National Science Foundation (NSF) application; however, it does not address all elements required to complete the application or budget. Complete instructions are available in the* [*Proposal & Award Policies & Procedures Guide*](https://beta.nsf.gov/policies/pappg/23-1) *(PAPPG) and specific program announcements or program solicitations.*

**Proposal Format**

The PAPPG [(Part I Chapter II.C.)](https://beta.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation#c-format-of-the-proposal-0a4) provides detailed instructions regarding the font, pagination, spacing and page formatting of proposals. PIs are STRONGLY encouraged by OSP to review these guidelines as failure to comply with the guidelines may be grounds for NSF to return the proposal without review.

**Proposal Contents**

A. Cover Sheet

B. Project Summary

C. Table of Contents

D. Project Description

E. References Cited

F. Budget and Budget Justification

G. Facilities, Equipment and Other Resources

H. Senior Personnel Documents

(i) Biographical Sketch(es)

(ii) Current and Pending Support

(iii)Collaborators and Other Affiliations (see also PAPPG [Chapter II.D.1](https://beta.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation#2D1) for additional information on submission of single copy document

I. Special Information and Supplementary Documentation

* Postdoctoral Mentoring Plan (if applicable)
* Data Management Plan

J. Single Copy Documents

• Collaborators & Other Affiliations Information

1. **Cover Sheet**

The coversheet information will be created through the Research.gov entry process.

1. **Project Summary (limited to 1 page)**

The Project Summary should be informative to other persons working in the same or related fields, and, insofar as possible, understandable to a scientifically or technically literate lay reader. It should not be an abstract of the proposal. The Project Summary consists of an overview, a statement on the intellectual merit of the proposed activity, and a statement on the broader impacts of the proposed activity.

* **Overview:**Describe the activity that would result if the proposal were funded and state the objectives and methods to be employed.
* **Intellectual Merit:** Describe the potential of the proposed activity to advance knowledge.
* **Broader Impacts:** Describe the potential of the proposed activity to benefit society and contribute to the achievement of specific, desired societal outcomes.

1. **Table of Contents**

A Table of Contents is automatically generated for the proposal and cannot be modified by the user.

1. **Project Description (limited to 15 pages)**

The Project Description (including Results from Prior NSF Support, which is limited to five pages) **may not exceed** 15 pages. Visual materials, including charts, graphs, maps, photographs and other pictorial presentations are included in the 15-page limitation. **Do not include URLs.**

The Project Description should provide a clear statement of the work to be undertaken and must include the objectives for the period of the proposed work and expected significance; the relationship of this work to the present state of knowledge in the field, as well as to work in progress by the PI under other support.

The Project Description should outline the general plan of work, including the broad design of activities to be undertaken, and, where appropriate, provide a clear description of experimental methods and procedures. Proposers should address what they want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits could accrue if the project is successful. The project activities may be based on previously established and/or innovative methods and approaches, but in either case must be well justified. These issues apply to both the technical aspects of the proposal and the way in which the project may make broader contributions.

**Broader Impacts Section**

The Project Description also must contain, as a separate section within the narrative, a section labeled "Broader Impacts". The broader impacts section should provide a discussion of the broader impacts of the proposed activities. Broader impacts may be accomplished through the research itself, through the activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to the project. NSF values the advancement of scientific knowledge and activities that contribute to the achievement of societally relevant outcomes. Such outcomes include, but are not limited to: full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM); improved STEM education and educator development at any level; increased public scientific literacy and public engagement with science and technology; improved well-being of individuals in society; development of a diverse, globally competitive STEM workforce; increased partnerships between academia, industry, and others; improved national security; increased economic competitiveness of the U.S.; use of science and technology to inform public policy; and enhanced infrastructure for research and education. These examples of societally relevant outcomes should not be considered either comprehensive or prescriptive. Proposers may include appropriate outcomes not covered by these examples.

Plans for data management and sharing of the products of research, including preservation, documentation, and sharing of data, samples, physical collections, curriculum materials and other related research and education products should be described in the [Special Information and Supplementary Documentation](#SpecialInfoandsupple) section of the proposal. For additional details please refer to the NSF [PAPPG Chapter II.D.2.i)(ii).](https://beta.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation" \l "2D2i" \o "NSF PAPPG)

For proposals that include funding to an International Branch Campus of a U.S. IHE or to a foreign organization (including through use of a subaward or consultant arrangement), the proposer must provide the requisite explanation/justification in the project description. See PAPPG [Chapter I.E](https://beta.nsf.gov/policies/pappg/23-1/ch-1-pre-submission#e-who-may-submit-proposals-ddc) for additional information on the content requirements.

**Results from Prior NSF Support (up to five pages)**

The purpose of this section is to assist reviewers in assessing the quality of prior work conducted with prior or current NSF funding. If any PI or co-PI identified on the proposal has received prior NSF support including:

* an award with an end date in the past five years; or
* any current funding, including any no cost extensions

Information on the award is required for **each PI and co-PI**, regardless of whether the support was directly related to the proposal or not. In cases where the PI or any co-PI has received more than one award (excluding amendments to existing awards), they need only report on the one award that is most closely related to the proposal. Support means salary support, as well as any other funding awarded by NSF, including research, Graduate Research Fellowship, Major Research Instrumentation, conference, equipment, travel, and center awards, etc.

The following information must be provided:

• the NSF award number, amount and period of support;

• the title of the project;

• a summary of the results of the completed work, including accomplishments, supported by the award. The results must be separately described under two distinct headings: Intellectual Merit and Broader Impacts;

• a listing of the publications resulting from the NSF award (a complete bibliographic citation for each publication must be provided either in this section or in the References Cited section of the proposal); if none, state “No publications were produced under this award.”

• evidence of research products and their availability, including, but not limited to: data, publications, samples, physical collections, software, and models, as described in any Data Management Plan; and

• if the proposal is for renewed support, a description of the relation of the completed work to the proposed work.

If the project was recently awarded and therefore no new results exist, describe the major goals and broader impacts of the project. Note that the proposal may contain up to five pages to describe the results. Results may be summarized in fewer than five pages, which would give the balance of the 15 pages for the Project Description.

**Unfunded Collaborations**

Any substantial collaboration with individuals not included in the budget should be described in the Facilities, Equipment and Other Resources section of the proposal and documented in a letter of collaboration from each collaborator. Such letters should be provided in the supplementary documentation section of Research.gov and follow the format instructions specified in PAPPG [Chapter II.D.2.i](https://beta.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation#2D2i-iv).Please refer to the [Facilities, Equipment and Other Resources instructions.](https://beta.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation" \l "2D2g)

**Group Proposals**

NSF encourages submission of proposals by groups of investigators; often these are submitted to carry out interdisciplinary projects. Unless stipulated in a specific program solicitation, however, such proposals will be subject to the 15-page Project Description limitation. PIs who wish to exceed the established page limitations for the Project Description must request and receive a deviation in advance of proposal submission. ([PAPPG Chapter II.A](https://beta.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation#2A1) contains information on deviations.)

**Proposals for Renewed Support**

See [PAPPG Chapter V](https://beta.nsf.gov/policies/pappg/23-1/ch-5-renewal-proposals) for guidance on preparation of renewal proposals

1. **References Cited (no page limit)**

Reference information is required. Each reference must include:

* the names of all authors (in the same sequence in which they appear in the publication),
* the article and journal title, book title, volume number, page numbers, and year of publication. ([See also PAPPG Chapter II.D.2.d(iii)(d))](https://beta.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation" \l "2D2d" \o "NSF References Cited)
* If there is a website address readily available, that information should be included in the citation. It is not NSF's intent, however, to place an undue burden on proposers to search for the URL of every referenced publication. Therefore, inclusion of a website address is optional. A proposal that includes reference citation(s) that do not specify a URL is not considered to be in violation of NSF proposal preparation guidelines and the proposal will still be reviewed.

Proposers must be especially careful to follow accepted scholarly practices in providing citations for source materials relied upon when preparing any section of the proposal. While there is no established page limitation for the references, this section must include bibliographic citations only and must not be used to provide parenthetical information outside of the 15-page Project Description.

1. **Budget and Budget Justification (limited to 5 pages)**

Please refer to the [Budget Template](https://www.lsu.edu/osp/links/proposal_toolkit.php#nsf) and [Budget Justification](https://www.lsu.edu/osp/links/proposal_toolkit.php#nsf) sample for instructions.

1. **Facilities, Equipment, and Other Resources (no page limit)**

Please refer to the [Facilities, Equipment, and Other Resources Instructions.](https://beta.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation#2D2g)

1. **Senior Personnel Documents**

**Biographical Sketches (limited to 3 pages each)**

Note: The mandate to use SciENcv only for preparation of the biographical sketch will go into effect for new proposals submitted or due on or after October 23, 2023. In the interim, proposers may continue to prepare and submit this document via use of SciENcv or the NSF fillable PDF. NSF, however, encourages the community to use SciENcv prior to the October 2023 implementation. Please refer to [PAPPG Chapter II.D.2.h.(i).](https://beta.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation#2D2hi)

**Current and Pending Support (no page limit)**

Note: The mandate to use SciENcv only for the preparation of Current and Pending (Other) Support information will go into effect for new proposals submitted or due on or after October 23, 2023. In the interim, proposers may continue to prepare and submit this document via use of SciENcv or the NSF fillable PDF. NSF, however, encourages the community to use SciENcv prior to the October 2023 implementation. Please refer to PAPPG [Chapter II D. 2.h.(ii) for additional information.](https://beta.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation" \l "2D2hii" \o "NSF-Approved Formats for Current and Pending Support website)

**Collaborators & Other Affiliations Information (Single Copy Document)**

Please refer to [PAPPG Chapter II D. 2.h.(iii)](https://beta.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation#2D2hiii) for additional information.

1. **Special Information and Supplementary Documentation**

Except as specified below, special information and supplementary documentation must be included as part of the Project Description (or part of the budget justification), if it is relevant to determining the quality of the proposed work. Information submitted in the following areas is not considered part of the 15-page Project Description limitation. This Special Information and Supplementary Documentation section also is not considered an appendix.

* **Postdoctoral Research Mentoring Plan (limited to 1 page)** - Please refer to the [Postdoctoral Mentoring Plan Instructions.](https://beta.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation#2D2i-i)
* **Data Management Plan (limited to 2 pages)** - The Data Management Plan should describe how the proposal will conform to NSF policy on the dissemination and sharing of research results [(see PAPPG Chapter XI.D.4](https://beta.nsf.gov/policies/pappg/23-1/ch-11-other-post-award-requirements#11D4)) and may include:

1. The types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project;
2. The standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
3. Policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
4. Policies and provisions for re-use, re-distribution, and the production of derivatives; and
5. Plans for archiving data, samples, and other research products, and for preservation of access to them.

Data management requirements and plans specific to the Directorate, Office, Division, Program, or other NSF unit, relevant to a proposal are available at: <https://www.nsf.gov/bfa/dias/policy/dmp.jsp>. If guidance specific to the program is not available, then the requirements established in this section apply.

Simultaneously submitted collaborative proposals and proposals that include subawards are a single unified project and should include only one supplemental combined Data Management Plan, regardless of the number of non-lead collaborative proposals or subawards included. In such collaborative proposals, the data management plan should discuss the relevant data issues in the context of the collaboration.

A valid Data Management Plan may include only the statement that no detailed plan is needed, as long as the statement is accompanied by a clear justification. Proposers who feel that the plan cannot fit within the limit of two pages may use part of the 15-page Project Description for additional data management information. Proposers are advised that the Data Management Plan must not be used to circumvent the 15-page Project Description limitation. The Data Management Plan will be reviewed as an integral part of the proposal, considered under Intellectual Merit or Broader Impacts or both, as appropriate for the scientific community of relevance.

For additional information please refer to the [LSU Office of Research & Economic Development website](https://www.lsu.edu/research/compliance/policies/data_management.php) and [LSU Library](https://guides.lib.lsu.edu/data) website.

* **Rationale for performance of all or part of the project off-campus or away from organizational headquarters.**
* **Documentation of collaborative arrangements of significance to the proposal through letters of collaboration.**

Any substantial collaboration with individuals not included in the budget should be documented in a letter of collaboration from each collaborator. Letters of collaboration should be limited to stating the intent to collaborate and should not contain endorsements or evaluation of the proposed project. The recommended format for letters of collaboration is as follows:

"If the proposal submitted by Dr. [insert the full name of the Principal Investigator] entitled [insert the proposal title] is selected for funding by NSF, it is my intent to collaborate and/or commit resources as detailed in the Project Description or the Facilities, Equipment and Other Resources section of the proposal."

While letters of collaboration are permitted, unless required by a specific program solicitation, letters of support should not be submitted as they are not a standard component of an NSF proposal. A letter of support is typically from a key stakeholder such as an organization, collaborator or Congressional Representative, and is used to convey a sense of enthusiasm for the project and/or to highlight the qualifications of the PI or co-PI. A letter of support submitted in response to a program solicitation requirement must be unique to the specific proposal submitted and cannot be altered without the author’s explicit prior approval. Proposals that contain letters of support not authorized by the program solicitation may be returned without review.

* **Other Documents (if applicable)** - [Refer to PAPPG Chapter II.D.2.](https://beta.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation#2D2i)i and the full program solicitation for information on any other required documents.

In addition, the supplementary documentation section should alert NSF officials to unusual circumstances that require special handling, including, for example, proprietary or other privileged information in the proposal, matters affecting individual privacy, required intergovernmental review under E.O. 12372 (Intergovernmental Review of Federal Programs) for activities that directly affect State or local governments, or possible national security implications.

1. **Single-Copy Documents**

Certain categories of information that are submitted in conjunction with a proposal are for "NSF Use Only." As such, the information is not provided to reviewers for use in the review of the proposal. With the exception of NSF-specific proposal certifications, these documents should be submitted in Research.gov. A summary of each of these categories follows:

* Authorization to Deviate from NSF Proposal preparation Requirements (if applicable)
* List of Suggested Reviewers, or Reviewers Not to Include (optional)
* Proprietary or Privileged Information (if applicable)
* Collaborators & Other Affiliations Information
* Proposal Certifications Provided by the Organization
* Certification Provided by Senior Personnel
* Submission of Proposals by Former NSF Staff

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| **Resources:** |
| [National Science Foundation Proposal & Award Policies and Procedures Guide (PAPPG)](https://beta.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation#top), NSF 23-1 - effective January 30, 2023 |