

The following details Part IV, C. of the FY 2021 Sustainable Agricultural Systems Request for Applications.

PART IV—APPLICATION AND SUBMISSION INFORMATION

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C. Content and Form of Application Submission

Electronic applications are to be prepared following Parts V and VI of the NIFA Grants.gov Application Guide. This guide is part of the corresponding application package (see Section A of this part). The following is **additional information** you need to prepare an application in response to this RFA. **If there is a discrepancy between the RFA and the NIFA Grants.gov Application Guide, the information contained in the RFA and this document overrides the Application Guide.**

Note the attachment requirements (e.g., PDF) in Part III, Section 3 of the guide. ANY PROPOSALS THAT ARE NON-COMPLIANT WITH THE REQUIREMENTS (e.g., content format, PDF file format, file name restrictions, and no password protected files) WILL BE AT RISK OF BEING EXCLUDED FROM NIFA REVIEW. Grants.gov does not check for NIFA required attachments or whether attachments are in PDF format; see Part III, Section 6.1 of the guide for how to check the manifest of submitted files. Partial applications will be excluded from NIFA review. We will accept subsequent submissions of an application until close of business on the closing date in the RFA (see Part V, 2.1 of the NIFA Grants.gov Application Guide for further information).

For any questions related to the preparation of an application, review the [NIFA Grants.gov Application Guide](https://www.nifa.gov/application-guide) and the applicable RFA.

1. SF 424 R&R Cover Sheet

Information related to the questions on this form is dealt with in detail in Part V, 2 of the NIFA Grants.gov Application Guide. See Part V, Section 2.18 of the NIFA Grants.gov Application Guide for the required certifications and assurances (e.g., Prohibition Against Entities Requiring Certain Internal Confidentiality Agreements).

2. SF 424 R&R Project/Performance Site Location(s)

Detailed information related to the questions on this form is available in Part V, 3 of the NIFA Grants.gov Application Guide.

3. R&R Other Project Information Form

Detailed information related to the questions on this form is available in Part V, 4 of the NIFA Grants.gov Application Guide.

a. Field 7. Project Summary/Abstract – PDF Attachment. Title the attachment as ‘Project Summary’ in the document header and save file as ‘ProjectSummary’

The summary should also include the relevance of the project to the goals of the Program Area or Program area Priority within this RFA to which the application is submitted. See Part V. 4.7 of NIFA Grants.gov Application Guide for further instructions and a link to the suggested template. If relevant, applicants must state in the last sentence of their application's Project Summary section that the proposal is submitted in response to a specific commodity board topic.

b. Field 8. Project Narrative - PDF Attachment. Title the attachment as 'Project Narrative' in the document header and save file as 'ProjectNarrative'

For Standard, Strengthening Standard, Coordinated Agricultural Project (CAP), and Strengthening CAP Grant applications, the Project Narrative section may **not exceed a total of 18 pages** with 12-point font and line spacing not exceeding six lines of text per vertical inch, including all figures and tables. To ensure fair and equitable competition, applications exceeding the applicable page limitation will be returned without review.

Applicants requesting consideration of COE status must include their justification at the end of their Project Narratives and within the page limits provided for the project narratives.

Each Project Narrative is expected to be complete; however, preprints (see Part IV, C. 3. f. 6) related to the Project Narrative are allowed if they are directly germane to the proposed project. Information may not be appended to an application to circumvent page limitations prescribed for the Project Narrative.

The Project Narrative Attachment must include all of the following:

1) Response to Previous Review (if applicable)

This requirement only applies to Resubmitted Applications as described in Part II, B. The Project Narrative attachment should include two components: 1) a one-page response to the previous review (containing the previous proposal number in the first line) titled "Response to Previous Review" as the first page of the attachment and 2) the 18-page Project Narrative, as required (see Part IV, C. 3. b., above). The one-page "Response to Previous Review" does not count against the 18-page limit of the Project Narrative.

2) Global engagement (if applicable)

You must describe the indicators you will use to assess proposed international activities (e.g., partnerships, exchanges, travel); see Part I, B. Appropriate indicators include, but are not limited to, those posted at the U.S. government's [Feed the Future global food security initiative website](#). For additional information, see [Global Engagement Programs](#) at the NIFA website, including a resource section that contains various guidance documents for NIFA applicants.

In addition, the Project Narrative attachment must include all of the following:

a. Introduction

Include a clear statement of the long-term goal(s) and supporting objectives of the proposed project. Summarize the body of knowledge or past activities that substantiate the need for the proposed project. Describe ongoing or recently completed activities significant to the proposed project including the work of key project personnel. Include preliminary data/information pertinent to the proposed project. This section should include in-depth information on the following, when applicable:

1. Estimates of the magnitude of the issues and the relevance to stakeholders and ongoing state-federal food and agricultural research, education, and extension programs;
2. The role of stakeholders in problem identification, planning, implementation, and evaluation, as appropriate; and
3. Reasons for performing the work at the proposed institution.

All works cited should be referenced (see Bibliography & References Cited in PART IV, C. 3. c., below).

b. Rationale and Significance

1. Concisely present the rationale behind the proposed project;
2. Describe the specific relationship of the project's objectives to one of the Program Area Priorities. Applications that do not address at least one Program Area Priority will not be reviewed; and
3. The potential long-range improvement in and sustainability of U.S. agriculture and food systems should be shown clearly. These purposes are described under Purpose and Priorities in Part I, B. Any novel ideas or contributions that the proposed project offers should also be discussed in this section.

c. Approach

1. Objectives: All applications must include a statement of objectives or specific aims of the proposed project in clear, concise, complete, and logically arranged terms.
2. Methods: Explicitly state the procedures or methodology you will apply in the proposed project. This section should include, but not necessarily be limited to, descriptions of:
 - a. Stakeholder involvement, if applicable, in problem identification, planning, implementation, and evaluation;
 - b. Proposed project activities, listed sequentially;
 - c. Techniques to be employed in this project, including their feasibility and rationale;
 - d. Expected results;
 - e. How extension and education activities, if applicable, will be evaluated;

- f. How data will be analyzed or interpreted;
 - g. Plans to communicate results to appropriate audiences, including relevant scientific peers, stakeholders and the public, as appropriate;
 - h. Pitfalls that might be encountered;
 - i. Limitations to proposed procedures.
3. Project Timetable: The proposal must outline all important phases as a function of time, year by year, for the entire project, including periods beyond the grant funding period.

➤ *For Integrated Project Applications –*

- Integrated Project applications for AFRI SAS program area priority A9201 must include all three functions of the agricultural knowledge system (i.e., research, education, and extension). Each function should be represented by one or more objectives within the application.
- AFRI SAS integrated projects must budget sufficient resources to carry out the proposed set of research, education, and extension activities that will lead to the desired outcomes. No more than two-thirds of a project's budget may be focused on a single function.
- AFRI SAS Integrated Projects must include individuals on the project team with significant expertise in each component of the project (research, education, and extension).
- A plan for evaluating progress toward achieving project objectives must be included. The plan must include milestones, which signify the completion of a major deliverable, event, or accomplishment and serve to verify that the project is on schedule and on track for successful conclusion. The plan must also include descriptions of indicators that you will measure to evaluate whether the research, education, and extension activities are successful in achieving project goals and in contributing to the achievement of the stated program goals and outcomes.
- In addition to the Project Narrative requirements above, the proposed Integrated Project must clearly articulate:
 - Stakeholder involvement in project development, implementation, and evaluation, where appropriate;
 - Objectives for each function included in the project (note that extension and education activities are expected to differ and to be described in separate project objectives; see enumerated descriptions in Part II, C); and
 - A dissemination plan describing the methods that will be used to communicate the findings and the project accomplishments.
- NIFA encourages (but does not require) Integrated Projects that develop content suitable for delivery through eXtension.
- AFRI encourages (but does not require) Integrated Projects that are suitable for 4-H audiences and stakeholder groups while meeting identified program priorities. Opportunities for engaging 4-H in AFRI proposals should align with the 4-H Mission

Mandates of Science, Engineering and Technology; Healthy Living; and Citizenship. See guiding principles at [4-H website](#) or contact your university Cooperative Extension headquarters and/or State 4-H Program Office.

d. Center of Excellence

Only standard grant and CAP grant application may be considered for center of excellence (COE) designation.

In addition to meeting the other requirements detailed in Part IV, C of this Request for Application (RFA), eligible applicants who wish to be considered as centers of excellence must provide a brief justification statement at the end of their Project Narratives and within the page limits provided for Project Narratives, describing how they meet the standards of a center of excellence, based on the following criteria:

- (A) The ability of the center of excellence to ensure coordination and cost effectiveness by reducing unnecessarily duplicative efforts regarding research, teaching, and extension in the implementation of the proposed research and/or extension activity outlined in this application;
- (B) In addition to any applicable matching requirements, the ability of the center of excellence to leverage available resources by using public-private partnerships among agricultural industry groups, institutions of higher education, and the Federal Government in the implementation of the proposed research and/or extension activity outlined in this application. Resources leveraged should be commensurate with the size of the award;
- (C) The planned scope and capability of the center of excellence to implement teaching initiatives to increase awareness and effectively disseminate solutions to target audiences through extension activities in the implementation of the proposed research and/or extension activity outlined in this application; and
- (D) The ability or capacity of the center of excellence to increase the economic returns to rural communities by identifying, attracting, and directing funds to high-priority agricultural issues in support of and as a result of the implementation of the proposed research and/or extension activity outlined in this application.

Additionally, where practicable (not required), center of excellence applicants should describe proposed efforts to improve teaching capacity and infrastructure at colleges and universities (including land-grant colleges and universities, cooperating forestry schools, certified Non-Land Grant Colleges of Agriculture (NLGCA) (list of certified NLGCA is available at [NIFA website](#), and schools of veterinary medicine).

c. Field 9. Bibliography & References Cited – PDF Attachment. No Page Limit. Title the attachment as ‘Bibliography & References Cited’ in the document header and save file as ‘BibliographyReferencesCited’.

All work cited in the text should be referenced in this section of the application. All references must be complete; include titles and all co-authors; conform to an acceptable journal format; and be listed in alphabetical order using the last name of the first author or listed by number in the order of citation.

d. Field 10. Facilities & Other Resources – PDF Attachment. No Page Limit. Title the attachment as ‘Facilities & Other Resources’ in the document header and save file as ‘FacilitiesOtherResources’.

e. Field 11. Equipment – PDF Attachment. No Page Limit. Title the attachment as ‘Equipment’ in the document header and save file as ‘Equipment’.

Describe available equipment. Items of nonexpendable equipment necessary to conduct and successfully complete the proposed project should be listed in Field C. of the R&R Budget and described in the Budget Justification (see Part IV, C. 6 below).

f. Field 12. Other Attachments

The following instructions are in addition to those noted in Part V 4.12 of the NIFA Grants.gov Application Guide.

- 1) **Key Personnel Roles – PDF Attachment. 2-Page Limit.** Title the attachment as ‘Key Personnel’ and save file as ‘KeyPersonnel’.

✪ For Integrated Grant Applications – state for key personnel an estimate of the percent of time devoted to research, education, and/or extension activities.

- 2) **Logic Model – PDF Attachment. 2-Page Limit. Required for all Integrated Project applications.** Title the attachment as ‘Logic Model’ and save file as ‘LogicModel’.

Include the elements of a logic model detailing the activities, outputs, and outcomes of the proposed project. The logic model planning process is a tool that should be used to develop your project before writing your application. This information may be provided as a narrative or formatted into a logic model chart. For more information and resources, see [Integrated Programs’ Logic Model Planning Process](#) at NIFA website.

- 3) **Management Plan – PDF Attachment. 3-Page Limit. Required for Integrated Project applications.** Title the attachment as ‘Management Plan’ and save file as ‘ManagementPlan’.

The plan is to be clearly articulated and include an organizational chart, administrative timeline, and a description of how the project will be governed, as well as a strategy to enhance coordination, collaboration, communication, and data sharing and reporting among members of the project team and stakeholder groups. The plan must also address how the project will be sustained beyond the termination of an award.

The management plan must also include an advisory group of principal stakeholders, partners, and professionals to assess and evaluate the quality, expected measurable outcomes, and potential impacts for the proposed research, education and/or extension. Please include rationale for their role, and how they will function effectively to support the goals and objectives of the project. The plan must demonstrate how partners and stakeholders contribute to project assessment on an annual basis.

- 4) **Data Management Plan (DMP) - PDF Attachment. 2-Page Limit. Required for Integrated Project applications.** Title the attachment as 'Data Management Plan' and save file as 'DataManagementPlan'.

Clearly articulate how the project director (PD) and co-PDs plan to manage and disseminate the data generated by the project. The DMP will be considered during the merit review process (see Part V, B.). **See Part III Section 3.1 of the NIFA Grants.gov Application Guide for NIFA attachment specifications.**

For the guidelines on preparation and inclusion of a DMP in your application, see [Data Management Plan for NIFA-Funded Research, Education and Extension Projects](#) at NIFA website. Also included on the web page are FAQs and information about accessing examples of DMPs. In addition, general guidelines for Data Management Planning for USDA agencies are available at the [National Agricultural Library website](#).

- 5) **Documentation of Collaboration – PDF Attachment. No Page Limit.** Title the attachment as 'Documentation of Collaboration' in the document header and save file as 'Collaboration'.

Evidence, e.g., letter(s) of support, must be provided that the collaborators involved have agreed to render services. The applicant also will be required to provide additional information on consultants and collaborators in the budget portion of the application.

- 6) **Preprints – PDF Attachment. Limited to 2 preprints.** Title the attachment as 'Preprints' in the document header and save file as 'Preprints'.

Preprints related to the Project Narrative are allowed if they are directly germane to the proposed project. Information may not be appended to an application to circumvent page limitations prescribed for the Project Narrative. Extraneous materials will not be used during the peer review process. Only manuscripts in press for a peer-reviewed journal will be accepted and must be accompanied by letters of acceptance from the publishing journals. Preprints attached in support of the application must be single-spaced. Each preprint must be identified with the name of the submitting organization, the name(s) of the PD(s), and the title of the application.

- 7) Minority-Serving Institution Documentation – **PDF Attachment.** Title the attachment as ‘Minorityinfo’ in the document header and save file as ‘Minorityinfo’.
 - (a) Letter identifying percentage of applicable minority students.
 - (b) Request for Determination of Status– see Part III, B.
- 8) Representations Regarding Felony Conviction and Tax Delinquent Status for Corporate Applicants – **PDF Attachment.** This is required for corporate applicants. See Part VI, 2 of the NIFA Grants.gov Application Guide for a description of the term, “corporation.”

4. R&R Senior/Key Person Profile (Expanded)

Detailed information related to the questions on this form is available in Part V, 5 of the NIFA Grants.gov Application Guide. This section of the guide includes instructions about the people who require senior/key person profile, and details about the biographical sketch and the current and pending support, including a link to the suggested template for the current and pending support.

A Senior/Key Person Profile must be completed for the PD and each co-PD, senior associate, and other professional personnel, including collaborators playing an active role in the project. Collaborators only providing services or materials should not be listed in the R&R Senior/Key Person Profile. Evidence (letters of support) for this type of collaboration should be provided in the Documentation of Collaboration (see Part IV, C. 3. f. 5).

- a) *Project Role Field* – Complete appropriately.
- b) *Other Project Role Category Field* – Complete appropriately, if applicable.
- c) *Attach Biographical Sketch Field* – **PDF Attachment. 2-Page Limit** (excluding publications listings) per PD, co-PD, senior associate, and other professional personnel. Title the attachment as ‘Biographical Sketch’ in the document header and save file as ‘BiographicalSketch’ followed by the last name of the PD or co-PD such that each biographical sketch file in the application has a distinct file name.

A biographical sketch (vitae) of the PD and each co-PD, senior associate, and other professional personnel must be included. In addition, include:

- 1) Author identifier (ORCID, <https://orcid.org>) of the researcher if available.
- 2) Digital Object Identifier (DOI) of all publications where possible.

If applicable, the application must include a list of data publications or published data products relevant to the proposed project, following recommended data citation format.

- d) The Conflict of Interest list must not be included in the biographical sketch, but it must be provided as a separate document (see Part IV, C. 7. b for more information).
- e) **Attach Current and Pending Support Field – PDF Attachment. No Page Limit.** Title the attachment as ‘Current and Pending Support’ in the document header and save file as ‘CurrentPendingSupport’.

The suggested template for Current and Pending Support is located on the [NIFA Application Support Templates page](#) (“Current & Pending Support” in the attachments list).

Current and Pending Support information is only required for personnel with PD or co-PD indicated as their Project Role on the R&R Senior/Key Person Profile. All applications must contain a list of all Current and Pending Support detailing public or private support (including in-house support) to which personnel identified in the application have committed portions of their time, if the salary support for person(s) involved is included in the budget. Please note that the project being proposed must be included in the pending section of the form. Total project listed for each PD must be indicated as percent effort and not exceeds 100% for concurrent (Current and Pending) projects.

The AFRI program will not fund an application that duplicates or overlaps substantially with other NIFA funding (including non-competitive funds such as Special Grants or Hatch formula funds) or other Federal funding. As an addendum to the Current and Pending Support, provide a brief summary for any completed, current, or pending projects that appear similar to the current application, especially previous National Research Initiative (NRI) or AFRI awards.

5. R&R Personal Data

As noted in Part V, 6 of the NIFA Grants.gov Application Guide, the submission of this information is voluntary and is not a precondition of award. Part V.6 also notes the importance and use of the information.

6. R&R Budget

Detailed information related to the questions on this form is available in Part V, 7 of the NIFA Grants.gov Application Guide.

Matching funds.

If a funded project is commodity-specific and not of national scope, the grant recipients required to match the NIFA funds awarded on a dollar-for-dollar basis from non-federal sources with cash and/or in-kind contributions.

If you conclude that matching funds are not required as specified under Part III, C., Cost Sharing or Matching, you must include an explanation for your conclusion in the Budget Justification. We will consider this justification when determining final matching requirements or if required matching can be waived. NIFA retains the right to make final determinations regarding matching requirements.

For grants that require matching funds as specified under Part III, B, the Budget Justification must list matching sources along with the identification of the entity(ies) providing the match as well as the total dollar amount being pledged. NIFA is no longer requiring written verification of commitments of matching support (a pledge agreement). However, you are still subject to documentation, valuing and reporting requirements, etc. as specified in 2 CFR Part 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (the Uniform Guidance)," 7 CFR 3430, "Competitive and Noncompetitive Non-Formula Federal Assistance Programs – General Award Administrative Provisions," and program-specific regulations, as applicable. In instances where match is required, any resulting award will require the signature of an Authorized Representative. Only when NIFA receives the award signed by the AR will award funds be released and available for drawdown.

You must establish the value of applicant contributions in accordance with applicable cost principles. Refer to 2 CFR Part 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards", for further guidance and other requirements relating to matching and allowable costs.

- a. **Budget Periods.** Applications must contain a budget for each budget period for the entire duration of the proposed project. Annual and cumulative budgets are required.

If a project is funded, beginning in the first year of funding, the Project Director will be required to attend annual investigator meetings for the duration of the award. Reasonable travel expenses should be included as part of the project budget.

- *For Integrated Project Applications* – Projects must budget sufficient resources to carry out the proposed set of research, education, and extension activities that will lead to the desired outcomes. No more than two-thirds of a project's budget may be focused on a single component. Projects that include partnering with eXtension must include financial support for the Community of Practice core functions as well as project-specific activities.

- b. **Field H. Indirect Costs** – See Part V, 7.9 of the NIFA Grants.gov Application Guide

for details. NIFA is prohibited from paying indirect costs exceeding 30 percent of the total Federal funds provided under each award. This limitation is equivalent to 42.857 percent of the total direct costs of an award. See Part IV, E for additional information.

- c. **Field K. Budget Justification – PDF Attachment. No Page Limit.** Title the attachment as ‘BudgetJustification’ in the document header and save file as ‘BudgetJustification’.

All cumulative budget categories, with the exception of Indirect Costs, for which support is requested must be individually listed (with costs) in the same order as the cumulative budget. NOTE: For continuation awards, all budget categories for year one must also be fully justified. If consulting, collaborative, or subcontractual arrangements are included in the application, these arrangements should be fully explained and justified. The rate of pay for any consultant must be included, if known at the time of application. Please include a cost breakdown for the consultant, including the number of days in service, travel, and per diem, as well as the rate of pay. Letters of consent or collaboration and other evidence should be provided in the Documentation of Collaboration (see Part IV, C. 3. f. 5) to show that collaborators have agreed to participate. A proposed statement of work, biographical sketch, and a budget for each arrangement involving the transfer of substantive programmatic work or the provision of financial assistance to a third party must be supplied. In multi-institutional applications, a budget and budget narrative must be included for each institution involved. The lead institution and each participating institution must be identified.

- *For Integrated Project Applications* – Each function should be represented by one or more objectives within the application. Projects must budget sufficient resources to carry out the proposed set of research, education, and extension activities that will lead to the desired outcomes. No more than two-thirds of a project’s budget may be focused on a single component.

d. **Subcontract Arrangements.**

If it will be necessary to enter into a formal subcontract agreement with another institution, then refer to the following items.

- Letters of commitment (including proposed amount of subaward) and statement of work are required to be included in the application for each subaward. Letters of commitment are to be included in Field 12, Other Attachments of the R&R Other Project Information.
- If the cumulative amount for subawards exceeds 50 percent of the total Federal funds requested or in instances where the proposed subaward is to a Federal agency, then the applicant must provide budgetary detail (i.e., budget and budget justification) for each subaward. If this is the case then refer to Part V, 8. of the NIFA Grants.gov Application Guide for instructions on how to include this information as part of the application.

7. Supplemental Information Form

Detailed information related to the questions on this form is available in Part VI, 1 of the NIFA Grants.gov Application Guide.

- a. **Field 2. Program to which you are applying.** Enter the Program (Area Priority) Code Name and the Program (Area Priority) Code for the Program Area Priority to which you are applying from the information provided in the Program Area Descriptions beginning in Part I, C. An application can only be submitted to one program (area priority). Note that accurate entry of the Program (Area Priority) Code Name and Program (Area Priority) Code is extremely important for proper and timely processing of application. Failure to enter this information correctly may result in your application not being retrieved on time for review and subsequently not being considered for funding. If you have a question about which topic area is appropriate for your application, please contact the Program Area Priority Contact.

- b. **Field 8. Conflict of Interest List.** See Part VI, 1.8 of the NIFA Grants.gov Application Guide for further instructions and a link to the suggested template.

A Conflict of Interest List is required for all applications submitted to the AFRI. The Conflict of Interest List should be provided as a separate PDF attachment and not included in the vitae or resume. A Conflict of Interest List must be completed individually for all personnel who have submitted a Biographical Sketch in the R&R Senior/Key Personnel Profile. **Collate all individual Conflict of Interest lists into a single document file.** The lists can only be submitted as a single PDF attachment.

The required template for the Conflict of Interest List is located on the [NIFA Application Support Templates page](#) ("Conflict of Interest List" in the attachments list).